



# **SINGAPORE ALLIED HEALTH CONFERENCE 2021**

**8 & 9 March 2021 | Web Conference**

**Allied Health Professionals:  
Our Role in the Future of Healthcare**

## ***Conference Programme Booklet***

## WELCOME MESSAGE

Dear Colleagues and Friends,

We are most delighted to welcome you to the inaugural virtual Singapore Allied Health Conference on 8<sup>th</sup> and 9<sup>th</sup> March 2021. The conference with the theme “**Allied Health Professionals: Our Role in the Future of Healthcare**” aims to showcase the work of Allied Health Professionals (AHPs), provides a platform for discussions, exchange of ideas and networking, and strives to drive the advancement of AHPs.

Allied Health professions comprise a diverse group of healthcare professionals who may be involved in the diagnosis, assessment, treatment, rehabilitation and/or prevention of diseases or illnesses, to enhance or maintain physical, sensory, psychological, cognitive and/or social functions. They are distinct from medical, nursing, and dental professionals, and play an essential role across the continuum of care, from primary care to ambulatory and acute care, to long term and palliative care. AHPs serve as a critical enabler to support the shift of care from the hospital to the community, and has a significant role to play in preventative care. They are experts in their respective fields, and are key partners within the multidisciplinary team to optimise patient outcomes and provide holistic care.

The Singapore Allied Health Conference offers a two-day programme featuring a strong line-up of distinguished international and local speakers. We are honoured to have Dr Martin Chadwick, Chief Allied Health Professions Officer, New Zealand, to share his insights on allied health leadership and provide a global perspective on the new models of care. Another speaker of note is Adj A/Prof Donna Markham, Chief Allied Health Officer, Victoria, Australia. Along with other distinguished speakers including Singapore's own Chief Allied Health Officer and Chief Pharmacist, the lectures and discussions will broaden and deepen your understanding of the role of Allied Health in the ever changing healthcare landscape of the future.

The conference programme has three focus: People, Path and Patients.

- **People** – AHPs are the very people who deliver care and support the patients; discussion topics around people and the value they bring are addressed in the conference to highlight them as a precious asset within the healthcare system.
- **Path** – This second focal point revolves around the enhancement of processes and service delivery towards the future. You can expect to learn more about new models of care and innovative solutions that facilitate the healthcare transformation journey for AHPs.
- **Patients** – Topics about patients are closest to the hearts of AHPs and will be explored; we will discuss patient centric care and how patients can be supported beyond the hospital walls.

With great excitement, we look forward to welcoming you to the inaugural Singapore Allied Health Conference 2021. Please mark the dates on your calendar and join us at this hallmark event.



**Mr Gabriel Leong Kok Wah**  
Organising Committee  
Chairperson

Head, Radiography  
Changi General Hospital



**Ms Goh Siew Li**  
Scientific Committee  
Chairperson

Head, Speech Language  
Therapy Service  
KK Women's and  
Children's Hospital

## ORGANISING COMMITTEE

### CHAIRPERSON: Mr Gabriel Leong Kok Wah

Head, Radiography  
Changi General Hospital

### MEMBERS:

Ms Hsing Ya Ting	Physiotherapist Singapore General Hospital
Ms Joyce Tan Sock Ling	Principal Medical Laboratory Scientist KK Women's and Children's Hospital
Mr Lim Cheong Cheng	Pharmacist Sengkang General Hospital
Ms Lynn Chong	Medical Social Worker Bright Vision Hospital
Ms Ng Shin Huey	Principal Physiotherapist KK Women's and Children's Hospital
Ms Oh Bee Hian	Senior Radiographer KK Women's and Children's Hospital

## SCIENTIFIC COMMITTEE

### CHAIRPERSON: Ms Goh Siew Li

Head, Speech Language Therapy Service  
KK Women's and Children's Hospital

### MEMBERS:

Ms Adelene Boo Hwee San	Manager, Radiation Oncology National Cancer Centre Singapore
Ms Bandy Goh Qiuling	Clinic Pharmacy Manager SingHealth Polyclinics
Ms Eileen Ng Geok Ling	Senior Radiographer National Neuroscience Institute
Ms Goh Chiang Choo	Master Medical Social Worker Changi General Hospital
Dr Kinjal Doshi	Principal Clinical Psychologist Singapore General Hospital
Ms Yang Zixian	Principal Occupational Therapist Sengkang General Hospital



## ADVISORY COMMITTEE

### CHAIRPERSON: Dr Jasper W.K. Tong

Director, Allied Health  
KK Women's and Children's Hospital  
Deputy Group Director, Allied Health  
SingHealth

### MEMBERS:

Adj A/Prof Camilla Wong	Director, Allied Health Sengkang General Hospital
Prof Celia Tan	Senior Director (Special Projects) SingHealth
A/Prof Lita Chew	Group Director, Allied Health SingHealth
Dr Pua Yong Hao	Chair, Allied Health Research Committee SingHealth
Dr Sylvia Mun	Chair, College of Allied Health SingHealth

## SECRETARIAT

Ms Jeanaline Fan	Manager Group Allied Health, SingHealth
Ms Jane Heng	Executive Group Allied Health, SingHealth
Ms Khasidah Kiman	Associate Executive Group Allied Health, SingHealth

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## KEYNOTE SPEAKER

As the Chief Allied Health Professions Officer at New Zealand's Ministry of Health, Dr Martin Chadwick works closely with the Chief Medical Officer and Chief Nursing Officer to provide transdisciplinary clinical leadership, supporting clinicians, programmes, and projects across the ministry.

Dr Chadwick is currently developing a work programme around what he has identified as the five challenges facing Allied Health, which include demonstrating the value add of the Allied Health professions to population health and the transdisciplinary provision of health care services.

Prior to his appointment in the ministry, he was Executive Director of Allied Health at the Bay of Plenty District Health Board, and before that was director of Allied Health at Counties Manukau District Health Board. Dr Chadwick recently completed his DHSc., examining health workforce change. His M.H.S. is from the University of Indianapolis and he trained as a physiotherapist at Otago Polytechnic.

During his previous time in the USA, Dr Chadwick was certified as an Orthopedic Clinical Specialist. He is passionate about the untapped potential that allied health professions can bring to improving quality of care and promoting health equity at the population level.



**Dr Martin Chadwick**

Chief Allied Health Professions  
Officer, Ministry of Health,  
New Zealand



## SPEAKERS

Dr Bernard Lim is an Organisational Psychologist and the Director for Leadership and Organisational Development at MOH Holdings. He leads a team for the development of effective public healthcare leadership to build future-ready leaders, a culture of engagement and collaboration, and future-proof organisations. Their efforts include conducting grounded research to establish the ONE framework for the behaviours, personal qualities and values of effective public healthcare leadership, implementing a sector-wide multi-rater feedback system based on this framework and an executive coaching panel to support leadership development in the sector, as well as providing advisory services to support leadership and organisational development in the sector. Prior to this role, Dr Lim served as the Chief Psychologist at MINDEF/SAF.



**Dr Bernard Lim**

Director, Leadership &  
Organisational Development  
Ministry of Health Holdings

Ms Cherie Tong is currently Head, Department of Dietetics, Sengkang General Hospital and has been practicing in the acute hospital setting for 20 years. She is a registered dietitian (United Kingdom) and a certified Nutrition Support Clinician (United States). She has received her Master in Clinical Nutrition from Rutgers University in the United States in 2013. Her expertise and research interest include surgical nutrition, bariatric surgery, critical care nutrition, enteral and parenteral nutrition. She is passionate in promoting advanced dietetic practices, enhancing quality of care through innovation and quality improvement, advocating for trans-disciplinary practice and integrated care, fostering inter-professional education and nurturing future ready allied health professionals. She also actively contributes to the profession through workgroups in SingHealth Group Allied Health, SingHealth Dietetics Committee and Ministry of Health Dietetics Panel.



**Ms Cherie Tong**

Head, Dietetics  
Sengkang General Hospital

## SPEAKERS

Adj A/Prof Camilla Wong has 25 years of experience in healthcare and is currently Director, Allied Health, Sengkang General Hospital (SKH) and Chief Pharmacist at the Ministry of Health (MOH).

At SKH, Adj A/Prof Wong has been integral in the planning of the infrastructure, processes and services not only for Allied Health services but the hospital as a whole. She is a member of a number of SKH committees including the Medical Board and IT Steering Committee, and as part of the SKH Senior Management team, serves as a catalyst for collaborative partnerships between the various departments and SKH stakeholders.

Adj A/Prof Wong has played an integral role in the development of career pathways and competency frameworks for the pharmacists and Allied Health professionals both cluster-wide and nationally. She has been a role model and mentor to pharmacists and other healthcare professionals, with many helming leadership and headship positions.

Recognised as a leader in healthcare, she has been appointed to numerous committees spanning a variety of portfolios including, the SHS Allied Health Council, One Rehabilitation Workgroup, Institute of Patient Safety and Quality and Patient Experience Council, and the Singapore Pharmacy Council, MOH Pharmacist Specialist Accreditation Board and Drug Advisory Committee, and HSA Product Vigilance Advisory Committee.

As Chief Pharmacist, MOH, Adj A/Prof Wong oversees the National Pharmacy Strategy which spans over 19 initiatives, encompassing pharmaceutical care excellence, developing a confident pharmacy workforce, re-designing the supply chain, and information and technology enablement.

She is a past president of the Pharmaceutical Society of Singapore (PSS) and has received a number of awards including the PSS's Professor Lucy Wan, Outstanding Pharmacist of the Year Award, Federation of Asian Pharmaceutical Associations Ishidate Award for Hospital Pharmacy, Group CEO SingHealth Excellence Award for Allied Health and the Singapore National Day Awards, Long Service and Commendation Medals.



**Adj A/Prof Camilla Wong**

Chief Pharmacist,  
Ministry of Health  
Singapore  
Director, Allied Health  
Sengkang General Hospital



## SPEAKERS

Adj Prof Celia Tan was awarded the Colombo Plan Scholarship to study Physiotherapy in New Zealand in 1979. Upon her graduation, she quickly developed a passion for clinical capacity building and service expansion to meet the increasing healthcare needs of her patients and fellow medical colleagues. In her 37 years of experience in the healthcare sector, she has started new clinical services, educational institutes and research projects in SGH and in SingHealth.

After her PhD studies in 2003, Adj Prof Tan developed an interest in innovative robotics and rehabilitation research that has seen her embark on many innovative device collaborations with engineering lecturers and students from various academic institutions. She was appointed Core Lead for the Bioengineering research platform in SGH in 2013, and is PI for MOH Ageless Grant for robotic ultrasound scanning and another study to use computer games as home exercise to prevent frailty in 2017/18.

A strategic visionary and administrative leader, Adj Prof Tan established satellite rehabilitation services (Rehab Associates) in the community polyclinics to bring rehabilitation closer to the patient's home in 2002. The following year, she started the first postgraduate Allied Health training institute at SGH – the Postgraduate Allied Health Institute (PGAHI). In 2007, she pioneered an interdisciplinary SGH Lifestyle Improvement and Fitness Centre (LIFE) with the Heads of Endocrine and Behavioural Medicine Departments. Celia established the SingHealth Group Allied Health office in 2011, started the biomedical skills training and research laboratory to support allied health and medical research in robotics and movement science in 2013 and College of AH (CAH) in 2017.

Adj Prof Tan is currently the Senior Director, Special Projects at SingHealth, after stepping down from her role as the first Group Director of Allied Health, SingHealth, where she served for 9 years. She is also actively involved in teaching; she is currently an Adjunct Professor with Curtin University, Australia and London South Bank University, UK. In Asia, she is a member of the Physiotherapy Steering Committee, University of Health Science, Cambodia and past Physiotherapy External Examiner with Universiti Tunku Abdul Rahman, Malaysia.

She has participated in numerous voluntary medical missions projects to provide education and research collaboration for countries in the region, including Australia, Cambodia, China, India, Laos, Myanmar, Mongolia, Nepal, Papua New Guinea and Sri Lanka. She also volunteers as a Singapore Specialist Volunteer Overseas Team Leader with Singapore International Foundation (SIF) and Temasek Foundation, and is also the co-Core Lead for Capacity Building with the SingHealth Duke-NUS Global Health Institute. In recognition of her work in Cambodia, Adj Prof Tan was honoured with the Monisaraphorn Thipadin Award from the Prime Minister of Cambodia, Hun Sen and the Global Citizen Award from the SIF in 2019.



Adj Prof Celia Tan

Senior Director (Special Projects)  
SingHealth

## SPEAKERS

Ms Chen Mee Kuan is an outpatient pharmacist at KK Women's and Children's Hospital. As a dermatology-trained pharmacist, Ms Chen works closely with KKH Dermatology Service to ensure optimal patient care. She provides counselling and performs follow-up consults for paediatric eczema patients with the utilization of an institutional-based collaborative prescribing agreement. She is also actively involved in mentoring and teaching polytechnic students, pharmacy technicians and pre-registration pharmacists.



Ms Chen Mee Kuan

Pharmacist, KK Women's and Children's Hospital

Ms Christine Ong is a Senior Principal Dietitian at KK Women's and Children's Hospital with more than 20 years of experience. Christine was conferred Master of Science in Nutrition and Dietetics from Flinders University of South Australia in 1996. She has special interest in ketogenic diet for epilepsy as well as inborn errors of metabolism.

Christine has also been invited as speaker in various conferences locally as well as abroad. In 2018, she was awarded the Tan Cheng Lim (TCL) Research and Education Fund Grant for a project titled "Metabolic Calculator (protein, amino acid, energy, emergency regime)"



Ms Christine Ong

Senior Principal Dietitian  
KK Women's and Children's Hospital

## SPEAKERS

Adj A/Prof Donna Markham is the Chief Allied Health Officer for Victoria and the Chief Allied Health Officer for the State-wide Equipment Programme.

As the Chief Allied Health Officer for Safer Care Victoria, the lead agency for quality and safety, Adj A/Prof Markham is committed to identifying opportunities for Allied Health to demonstrate their unique role and contribution, by leading quality and safety reforms. In addition to her responsibilities, she is the Executive Sponsor for the Voluntary Assisted Dying Review Board. As a qualified Occupational Therapist, she has worked in the healthcare sector for approximately 17 years.

Adj A/Prof Markham is recognised as one of Victoria's leaders in allied health and has led many significant allied health reforms, workforce development changes and research projects and publications. She also led the implementation of the Allied Health Credentialing, Competency and Capability Framework. Formerly the Chief Allied Health Officer at Monash Health, she has worked in both public and private health in a variety of senior management and leadership roles and was honoured to become a finalist for the Telstra Victorian Young Business Women's Award in 2014.

Adj A/Prof Markham is a graduate of the Leadership Victoria Williamson Community Leadership Programme and the Australia Institute of Company Directors. She is a mum of two boys and advocates for the important role women play both at home and in the workplace, particularly in executive leadership.

Ms Esther Lim graduated from the National University of Singapore with a degree in Social Work. She obtained her Master in Evidence-Based Social Intervention from the University of Oxford. Ms Lim joined SGH in 1995. She is a registered social worker, educator and family therapist.

In her current role in the Regional Health System for SGH Campus, SingHealth, she oversees the strategic implementation of community integration initiatives. She champions the adaptation of ESTHER Network in Singapore to drive person-centred care within and across the health and social sectors.

She oversee Staff Engagement and Talent Development in her role as Deputy Group Director to enhance the attraction, retention, recognition and well-being of Allied Health Professionals (AHP), as well as institute a robust leadership development and succession plan to realise the potentials of the diverse talent within the AHP community.



Adj A/Prof Donna Markham

Chief Allied Health Officer,  
Safer Care Victoria  
Victoria, Australia



Ms Esther Lim Li Ping

Deputy Group Director, Allied  
Health  
SingHealth  
Deputy Director, Population  
Health & Integrated Care  
Office, Regional Health System  
for SGH Campus  
Master Medical Social Worker  
Singapore General Hospital

## SPEAKERS

Ms Goh Siew Li is the Head of Service, Speech Language Therapy Service at KK Women's and Children's Hospital. She has been practicing in the area of Paediatric Speech Therapy for over 10 years. In 2013, she received her Master in Neuroscience of Language from University of Reading. Her wealth of experience includes early intervention, speech sound disorders, stuttering, acquired communication disorder and paediatric dysphagia. Her diverse clinical experience with children stems from her work in the community and acute medical settings as well as her experience as a specialist volunteer with Singapore International Foundation.

Passionate about Speech Therapy, Ms Goh engages in education activities as an Associate Lecturer at Ngee Ann Polytechnic. She is also a clinical educator for student speech therapists and provides research supervision for students from NUS and UCL. Her research interest includes the use of technology in the area of speech therapy, acquired communication disorders and paediatric dysphagia. She has also clinched innovation awards (GEM award, Allied Health Innovative Practice award and Asian Hospital Management Award) for the use of use of technology in speech therapy. She is an active member the workgroups of Ministry of Education and Ministry of Health.



**Ms Goh Siew Li**

Head, Speech Language  
Therapy Service  
KK Women's and Children's  
Hospital

Dr Goh Soon Noi is the co-editor of a recent publication entitled "Medical Social Work in Singapore: Context and Practice" and authors of chapters on historical development of medical social work and geriatric social work. She chairs SingHealth Allied Health EBP committee and is Principal Investigators of many researches related to social work practice and elderly.



**Dr Goh Soon Noi**

Head, Medical Social Services  
Changi General Hospital

## SPEAKERS

Ms Diana Hashim is currently involved in providing inpatient, outpatient and staff counselling services in CGH, and providing counselling services to external organisations. She is also involved in curating and conducting mental health literacy talks and workshops for CGH and external organisations. She is a member of the CGH Peer Support Programme and offers emotional/psychological support to CGH staff through her work with the staff counselling service. She is also a member of the CGH Crisis Support Team which responds to traumatic incidents involving corporate clients. Prior to her work in CGH, she had worked extensively with students with special needs, youth-at-risk and their families.



Ms Haier Diana Binte Hashim

TRaCS Counsellor  
Changi General Hospital

Ms Hayati Haji Suaidi is a sports executive for the Singapore Mountaineering Federation for the week and occasional weekends. Once every month, since late 2017, she spearheads conversational english classes on Saturdays with her volunteers in a school on an island off Batam with 80 students. Ms Suaidi's other passion lies in facilitating; further trained in both inter-ethnicity and inter-faith approaches. She has an extensive caregiving experience with her late mother who was diagnosed with leukaemia and her father who was a stroke patient and suffered a slip disc. She also shares her experiences with other caregivers and patients with the Haematology - Myelodysplastic Syndrome PSG. Joining the SingHealth Patient Advocacy Network in 2018 would be her most recent endeavor; she is also an advocate of experiential learning, on any given platform.



Ms Hayati Haji Suaidi

SingHealth Patient Advocacy  
Network Member



## SPEAKERS

Dr Jasper Tong is the current Director of Allied Health, KKH and the Deputy Group Director (Service Innovation & Integration), Group Allied Health, SingHealth. He is passionate about innovating health services delivery in line with the Industry 4.0 transformation. These include the automation of pharmacy services, implementation of telehealth consult platforms, pilot of chatbot and augmented reality in dietetic services, development of artificial intelligence in flat foot assessment, utility of medical technology in sexual health rehabilitation, as well as various predictive analytics, transforming health services to be more seamless and accessible.

Dr Tong is also responsible for integrating and right-siting allied health services so that they are accessible and affordable in the community. He was also involved in the operations planning of allied health services at the community hospitals to ensure a seamless transition for patients after their discharge from the acute hospitals.



**Dr Jasper Tong**

Director, Allied Health  
KK Women's and Children's  
Hospital  
Deputy Group Director, Allied  
Health,  
SingHealth

Mr Joel Tan is an occupational therapist working in the mental health team at CGH. He graduated with a BSc (Hons) in Occupational Therapy from Trinity College Dublin. He has worked with both adults and elderly with medical and psychiatric conditions. His current clinical work focuses on providing interventions for persons with dementia and psychiatric conditions. As part of the CPGP team, Mr Tan also engages in training, case discussions, occupational therapy consultancy services and clinical home visits.



**Mr Joel Tan**

Occupational Therapist  
Changi General Hospital



## SPEAKERS

Mr John Tan is a physiotherapist working in Singapore General Hospital. He is currently chief of education in SGH outpatient physiotherapy, programme director of the musculoskeletal Core Residency Physiotherapy programme in SGH, and Vice-Chair of Rehabilitation Sciences at College of Allied Health. Mr Tan has a keen interest in treating patients with persistent aches and pains.



Mr John Tan Wei Ming

Principal Physiotherapist  
Singapore General Hospital

Mr Khalid Anuar is a Senior Principal Physiotherapist practising at Tan Tock Seng Hospital since 1999. He obtained his Masters in Sports Physiotherapy in 2002. As a Sports Physiotherapist, he was one of the early pioneers in the field in Singapore. He established protocolised care for various musculoskeletal conditions, published numerous papers, conducted specialised workshops and represented the Singapore medical contingent in various international Games coverage. Mr Anuar has held various clinical & leadership roles in Physiotherapy until his appointment as the Head of Foot Care & Limb Design Centre in 2015.

Mr Anuar was awarded a prestigious HMDP-Executive Development Program in 2016 to attend the Stanford-NUS Executive Program in International Management. His current role includes leading the ongoing transformation efforts for Podiatry and Prosthetics & Orthotics Services in strategic planning for new business models & care delivery, job redesign, job up-skilling & clinical role expansion, innovation & adoption of new technologies. The department was awarded the Best Practice Medal in Automation, IT and Robotics category in the National Healthcare Innovation & Productivity 2019 Awards.

Mr Anuar has been a member of TTSH Clinical Board since January 2020. He is also the Assistant Centre Director of the Centre for Allied Health & Pharmacy Excellence (CAPE).



Mr Khalid Anuar

Assistant Centre Director,  
CAPE  
Head, Foot Care & Limb Design  
Centre, Tan Tock Seng  
Hospital

## SPEAKERS

Dr Kinjal Doshi is Principal Clinical Psychologist with Singapore General Hospital with her doctorate training focused on clinical health psychology. She primarily provides clinical and rehabilitation services to patients with neurological conditions and their caregivers. She enjoys working with her fellow allied health professions in conducting inter-professional seminars. She is also involved in research to develop and implement holistic care for patients and their caregivers.



Dr Kinjal Doshi

Principal Clinical Psychologist  
Singapore General Hospital

Dr Lim Eng Kok is currently Director of the Office of Value-Driven Care at SingHealth.

Prior to his appointment at SingHealth, Dr Lim was Director of the Clinical Quality, Performance and Technology Division at the Ministry of Health of Singapore; where he oversaw the introduction of the national Value-Driven Care initiative. In his over 15 years at MOH, Dr Lim held a variety of portfolios ranging from Clinical Benchmarking, Health Technology Assessment, Utilisation Review, Service Management and Healthcare Finance. Before joining MOH, he was the Director of Operations at a private hospital.

Dr Lim obtained his medical degree from the University of Aberdeen, Scotland. He received his Master of Science (with Distinction) in Health Services Management from the London School of Hygiene and Tropical Medicine, University of London.



Dr Lim Eng Kok

Director, Office of Value-Driven  
Care  
SingHealth

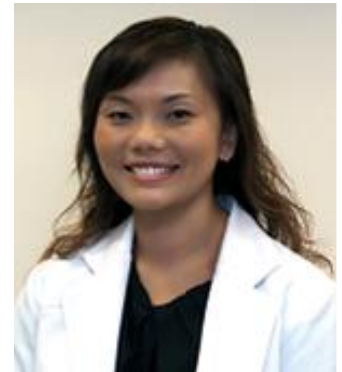
## SPEAKERS

Ms Lim Hong Yee is Director and Head of the Pharmacy Division, Tan Tock Seng Hospital, Singapore. She is also the Director of Centre for Allied Health and Pharmacy Excellence (CAPE), a partner of Centre for Healthcare Innovation (CHI). She holds a Master's in Business Administration, MBA (Specialization in Healthcare Management) from NUS School of Business (2015), Masters in Community Pharmacy from Queens University of Belfast and Bachelor of Pharmacy (Honours) degree from the National University of Singapore, Singapore. She has worked as a hospital pharmacist for the past 20 years with professional interest in quality improvement (six sigma trained) and healthcare innovation.

Ms Lim currently holds several portfolios such as member of National Healthcare Group (NHG) Pharmacy Transformation Steering Committee, TTSH Quality Council, Clinical Board, Drugs and Therapeutics Committee, Collaborative Prescribing Committee, Medication Safety Oversight committee, JCI MMU Chapter Champion, Digital Transformation Council and chair of the TTSH Advanced Practice Framework Supervisors Committee.

She was the recipient of National Day Commendation Award in 2012 and also the National Healthcare Group Clinician Administrator Scholarship Award in the same year.

Over the past years, Ms Lim played a pivotal role in the implementation of Outpatient Pharmacy Automation System (OPAS) in TTSH in 2015 and most recently setting up framework for Advance Practice pharmacists and collaborative prescribing at TTSH. The first batch of collaborative prescribers was officially recognised on the MOH's registry in March 2019. She is currently the treasurer of the 114th PSS Council and is an active member of Pharmaceutical Society of Singapore (PSS) since 2001. She is also the Ex-Officio of both the Hospital Chapter and Infectious Diseases Special Interest Group Workgroup at PSS.



**Ms Lim Hong Yee**

Director, Centre for Allied  
Health and Pharmacy  
Excellence  
Tan Tock Seng Hospital

## SPEAKERS

Dr Lim Shu Fang (Pharm.D., BCPS) is a Senior Clinical Pharmacist at Tan Tock Seng Hospital (TTSH), Singapore. She graduated with a Bachelor of Science (Pharmacy) with Honours and subsequently attained her Doctor of Pharmacy degree at the National University of Singapore. Dr Lim is also a Board Certified Pharmacotherapy Specialist and a licensed Collaborative Prescribing Practitioner.

Dr Lim has a special interest in Endocrinology and leads the pharmacist team of the Integrated Diabetes Care Programme and Clinical Diabetes Educator (CDE) workgroup in TTSH. Collaborating with endocrinologists and healthcare professionals in a team-based model, she is actively involved in reviewing inpatients with diabetes during hospital admission. In the outpatient setting, Dr Lim also conducts clinical review and education as a transdisciplinary CDE during clinic consultation. She endeavours to improve patient-centric care through enhancing clinical services and contributing to education and research.



**Dr Lim Shu Fang**

Senior Clinical Pharmacist,  
Tan Tock Seng Hospital

A/Prof Lita Chew holds concurrent positions as Head of Pharmacy Department, National Cancer Centre Singapore, and Associate Professor, National University of Singapore. A/Prof Chew has practiced in the area of oncology for more than 20 years and she sits in numerous boards and committees. Her practice and research interest include medication management, medication adherence, pharmacy practice and workforce development.

She received her Bachelor of Science in Pharmacy from the National University of Singapore and Masters in Medical Science from the University of Birmingham, United Kingdom. She completed her fellowship training in Pharmacy Practice at the University Illinois Chicago, USA.

An inspiring Pharmacy leader, her work impacts pharmacy practice in Singapore. These includes the setting up of register for specialist pharmacist, establishing training, development and competency framework for pharmacy workforce in Singapore, and navigating the National Pharmacy Strategy, a 10-year plan to transform pharmaceutical landscape in Singapore.



**A/Prof Lita Chew**

Group Director, Allied Health  
SingHealth

## SPEAKERS

Ms Long Chey May is Group Chief Patient Officer, National University Health System and her role is to assist the Chief Executive champion a culture of patient and family-centred care and service excellence in NUHS by working closely with the leadership team in each of the NUHS institutions to assess and communicate initiatives and create change at all levels of the organization.

Ms Long has more than 35 years' experience in the social and health sector. She is also active in discussion forums and supportive of professional activities as Vice Chairperson on the Social Work Accreditation and Advisory Board (SWAAB). Ms Long is a Master Trainer for Applied Suicide Intervention Skills Training (ASIST) and was also the Co-chair of the National Social Work Competency Steering Committee and contributed to the Social Service SkillsFuture Tripartite Taskforce (STT) and Skills Framework development for Social Services. She is also a member of the National Transplant Ethics Panel appointed by Ministry of Health and a member in 2 Clinical/Medical Ethics Committee (JurongHealth Campus/Changi General Hospital). She is also a General Visitor with the Board of Visitors under the Mental Capacity Act since 1 April 2018.

Her continuous contribution effort to the society as a Social Work Leader has earned herself the Outstanding Social Workers Award in 2008 and the Commendation Medal, National Day Award in 2011 and National Day Long Service Award in 2017. She was also given a Friend of MSF Award for her contributions to Ministry of Social and Family Development as a Chairperson for Review Board Committee 4 and for the National Social Work Competency Framework.

Ms Long is also seconded to Ministry of Health since 2010 and was appointed as Deputy Chief Allied Health Officer wef 1 Sep 2020 (0.3 FTE), supporting the Chief Allied Health Officer to oversee Social Health Integration, MSW Development initiatives and programmes, as well as other Allied Health Development Projects. She currently co-chairs the MSW Panel that reviews Professional development and training matters for Medical Social Workers.



**Ms Long Chey May**

Group Chief Patient Officer  
National University Health  
System  
Deputy Chief Allied Health  
Officer, Ministry of Health  
Singapore



## SPEAKERS

Ms Loh Huey Peng is currently the Director of Nursing for Singapore National Eye Centre, concurrent with her appointment as Co-Director, IPSQ. She is also the current co-lead for 2019 SingHealth Strategic Workgroup for Joy at Work.

Trained in Perioperative nursing, Ms Loh is passionate on patient safety and was involved as co-lead for JCI accreditation from 2009 to 2016. Her passion for patient safety led her to explore interest in patient safety training using gaming for operating theatre staff.



**Ms Loh Huey Peng**

Director, Nursing  
Singapore National Eye Centre  
Co-Director, IPSQ (Clinical)  
SingHealth

Ms Lydea Gn is a Senior Speech Therapist with the Speech Language Therapy Service in KK Women's and Children's Hospital. She has worked in a variety of settings, including the community and private practice, locally and overseas over the past 10 years. Ms Gn has experience in early intervention, speech sound disorders and developmental language disorders, and now specialises in neonatal and paediatric feeding and swallowing difficulties. She has been a clinical educator for NUS students and was appointed Singhealth Associate in Education in 2019.

Besides being the head of the telehealth team, Ms Gn spearheaded community engagement sessions for the Service and is currently involved in the Pediatric Integrated Neuro-rehabilitation Service and KIDSTART programme, both of which seek to bridge hospital and community services. Ms Gn is passionate about volunteering and has been a specialist volunteer with Singapore International Foundation and International China Concern. She has also received various awards (Allied Health Innovative Practice Award, Asian Hospital Management Award and Best Allied Health Professional Award) for her work.



**Ms Lydea Gn**

Senior Speech Therapist  
KK Women's and Children's  
Hospital



## SPEAKERS

Mrs Magdalin Cheong is Deputy Director and Head of the Dietetic & Food Services Department, Changi General Hospital (CGH). She has a Master of Public Health (Nutrition) and is a registered Dietitian. She has also completed the PG Diploma in Healthcare Management & Leadership at SMU.

In CGH, Mrs Cheong directs her department's strategy and operations to provide preventive and therapeutic dietetic care and daily nutritional needs of in-patients, as well as patients at St Andrew's Community Hospital. She oversees training for dietetic student interns from local and overseas institutions, and taught in a number of continuing education courses. She has published a book entitled "A Cookbook for Diabetics" and is co-author of "The diabetes companion". She has been involved in various nutrition studies related to older adults, and developed specialised therapeutic diet regimes for patients. Her recent innovation in Textured Modified Diet (TMD) has been commercialised and patented, a first for CGH. Some of her work is presented in recent journals, which she co-authored, in Clinical Nutrition (official Journal of ESPEN) and Nutrients, MDPI.

Beyond her practice at CGH, Mrs Cheong's professional contributions include being co-chair of the Dietetics Panel, MOH; Member, Dietetic and Nutrition Credentials Evaluation Panel, MOH; Industry Advisory Council member, HSS, Singapore Institute of Technology; and Nutrition and Dietetic Strategic Advisory Committee, Flinders University, South Australia.



**Mrs Magdalin Cheong**

Deputy Director & Head,  
Dietetic & Food Services  
Changi General Hospital

Mr Maxmillian Chen is a senior psychologist who has been practising mindfulness regularly for 8 years. He has also completed training by the Oxford Mindfulness Centre in teaching Mindfulness-Based Cognitive Therapy. He has taught multiple mindfulness courses including the Mindful Self-Care course for staff at Sengkang General Hospital. He strongly believes in the use of mindfulness and regular self-care activities in inoculating ourselves against burnout.



**Mr Maxmillian Chen Ruyang**

Psychologist  
Sengkang General Hospital

## SPEAKERS

Ms Marabelle Heng [MSc (S'pore), B.Podiatry (Australia), B.Sc (S'pore)] is principal podiatrist at Singapore General Hospital with 12 years of clinical experience. Marabelle was conferred the degree of Master of Science by research from Nanyang Technological University in 2015. The postgraduate study in foot biomechanics and joint hypermobility assessment was funded by scholarship from SingHealth Talent Development Fund and Ministry of Education Academic Research Fund Tier 1 Grant. She was also a recipient of the Singapore General Hospital Scholarship for Bachelor of Podiatry programme in the University of South Australia.

Ms Heng has been invited as faculty and speaker at various regional and international foot & ankle conferences. Her research interests are in musculoskeletal disorders of the foot with focus on assessment methods. She was awarded the SingHealth Population-based, Unified, Learning System for Enhanced and Sustainable Health (PULSES) Grant funded by the National Medical Research Council in 2018, and the Singapore General Hospital Research Grant in 2020 as principal investigator.

Furthering her research interest in clinical assessment methods, Ms Heng found herself fascinated and riveted in the world of digital health and artificial intelligence. Her goal is to develop digital health assessment tools, with aim of preventative care, early intervention and making health care accessible through self-assessment.

Ms Heng is currently serving her third term as president of Podiatry Association Singapore and contributes to allied health development in the Chief Allied Health Officer's office in the Ministry of Health. Outside of work, Ms Heng enjoys walking in nature and believes in maintaining functional mobility of joints through pilates and exercise.

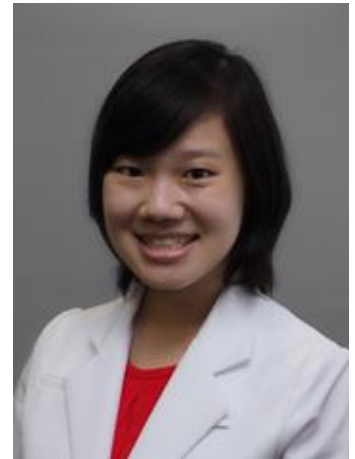


**Ms Marabelle Heng**

Principal Podiatrist  
Singapore General Hospital

## SPEAKERS

Ms Melissa Ho is a Senior Dietitian at Tan Tock Seng Hospital and Clinical Diabetes Educator at Ang Mo Kio Specialist Centre. She has special interest in patients with diabetes, seeing them at clinics and doing education via group sessions, workshops and events. She also teaches Lee Kong Chian medical students about healthy eating for patients having diabetes and other chronic conditions.



Ms Melissa Ho Hui Li

Senior Dietitian  
Tan Tock Seng Hospital

Ms Pearlyn Lee, AThR, believes that the arts have the potential to express what words fail to convey. As an art therapist, Ms Lee focuses on building mental health and wellbeing through the therapeutic qualities of art and mindfulness practices. In 2013, she set up the art therapy service at KK Women's and Children's Hospital, supporting children and young persons experiencing trauma, mental health difficulties, medical concerns and challenging social environments.

Currently, Ms Lee has expanded to work with women in mental health and palliative care, as well as adults in the community. She is registered with the Australian, New Zealand and Asian Creative Arts Therapy Association (ANZACATA), and is a member of the Art Therapy Association of Singapore (ATAS). She received her Master of Art Therapy from La Trobe University (Australia).



Ms Pearlyn Lee

Art Therapist  
KK Women's & Children's  
Hospital

## SPEAKERS

Ms Rafidah Abu Bakar is a Senior Principal Radiographer at the Radiography Department, Division of Radiological Sciences, Singapore General Hospital. She is trained in Ultrasound, and has been in practice in this modality for more than 25 years. She holds the role as the in charge of Radiographers' training and professional development in her department.



**Ms Rafidah Bte Abu Bakar**  
Senior Principal Radiographer,  
Singapore General Hospital

Ms Rena Sivasdas has been a counsellor since 2000. She is a Registered Counsellor and Clinical Supervisor with the Singapore Association for Counselling. Her professional experience involves working therapeutically with pre-marital and marital couples, families with children and teenagers, on mental health disorders and other issues such as traumatic grief and loss. She also has the experience of running therapeutic groups. She is a Somatic Experiencing Practitioner, which is a body based therapy aimed at relieving the symptoms of post-traumatic stress disorder and other physical, psychological and emotional traumatic impacts by focusing on the individual's body sensations. Ms Sivasdas has also received training in Satir Transformational Therapy, which focuses on an individual's life force. In therapy, she focuses on illuminating the individual's strengths and resources.



**Ms Rena Sivasdas**  
TRaCS Principal Counsellor  
Changi General Hospital

Ms Sivasdas has also facilitated talks and trainings on varied topics such as mental health disorders and well-being, stress management, emotional intelligence, resilience, mindfulness and other humanitarian topics. She has the experience of running a support group for stepfamilies for over ten years, which was a niche programme for the growing number of blended families in Singapore. Related to the uniqueness of the stepfamily programme, she has been featured in several magazines such as Her World and in an article in The Straits Times. She has also appeared on Channel New Asia's prime time morning and on several occasions, she has been a guest speaker on FM 93.8 to share on the subject of stepfamilies in Singapore. In 2005, she was also invited for a Tamil programme 'Ethioli' on Vasantham to share on resilience and skills re-training as Singapore recovered from the 2001 recession.

## SPEAKERS

Ms Sharon Downie was appointed Manager of Allied Health Workforce, DHHS in January 2019.

Ms Downie holds a Bachelor of Occupational Therapy and Masters of Public Health, and has significant operational management, quality improvement and project management experience. She is currently commencing a PhD which will examine decision-making frameworks specific to Allied Health advanced and extended scope of practice roles.

Ms Downie has worked for several metropolitan public health services, and has a strong clinical background in acute neurosciences. She is the recipient of several research scholarships pertaining to stroke and neuro-oncology, and has published on her research pertaining to upper limb assessment in the context of acute stroke.

She is a current member of the Occupational Therapy Council (Australia & New Zealand) - National Assessor Panel for Occupational Therapy programme accreditation, and is a past member of the Victorian Clinical Council and Victorian Stroke Clinical Network.



**Ms Sharon Downie**

Manager, Allied Health Workforce, Department of Health and Human Services, Victoria, Australia

Mr Steven Siew is a sport science professional with more than 18 years' experience in the health and fitness industry who also has a Masters in Training and Development. With a proven track record in teaching effective classroom learning/workshops, developing effective programmes and implementing successful new programme initiatives, Mr Siew specialises in programme or event management, learning facilitation, curriculum design, exercise prescription and fitness training. He has worked in government's nationwide active ageing programmes, sports / event management for workplaces along with upskilling / reskilling training programmes for vendors and trainers.



**Mr Steven Siew**

Manager, Health Screening and Management, Health Promotion Board



## SPEAKERS

Ms Soh Siok Khoon has been practicing as an occupational therapist at KKH since 2007. Ms Soh graduated with a Bachelor's Degree in Occupational Therapy from the University of Plymouth and the University of Exeter in the United Kingdom, and subsequently completed a Masters Degree in Occupational Therapy from the University of Southern California, United States of America. She is certified in administering and interpreting the Sensory Integration and Praxis Tests (SIPT), and in the use of Neurodevelopmental Treatment in children with cerebral palsy and other neuromotor disorders. Ms Soh is experienced in treating children from birth to 18 years of age with a variety of diagnoses including developmental, neurological, and orthopaedic hand conditions. In addition to working with children in outpatient clinics, Ms Soh has also conducted several workshops for parents, teachers, and other members of the public on various topics such as Sensory Processing Difficulties, and Attention and Self-regulation.

Since 2011, Ms Soh has been overseeing the occupational therapy services at the Rehabilitation Centre, KKH. She is also active in professional activities and is a member of the Ministry of Health's Occupational Therapy Panel. Ms Soh is the current SingHealth Professional Lead for Occupational Therapy, and a member of the SingHealth Allied Health Council. She is also a member of the Ministry of Health's Occupational Therapy Curriculum Review Working Committee, Allied Health Professions Council's Credential Committee for Occupational Therapy, Allied Health Professions Council's Curriculum and Organisations Review Committee for Occupational Therapy, and Allied Health Professions Council's Complaints Panel. In her various roles, Ms Soh has contributed towards initiatives such as the development of the Skills Framework for Occupational Therapy, development and review of the SingHealth Career Development Pathway for Occupational Therapy, and the review of occupational therapy training programmes.

As the co-lead for the SingHealth Allied Health Patient Experience Workstream, Ms Soh has been co-leading the review of identified allied health professions' patient experience performance, and the review of patient experience survey questions relevant to allied health. She is also the Principal Investigator of a research study looking at improving attention levels in children, and the Co-Investigator of a study exploring teachers' expectations of handwriting in students.



**Ms Soh Siok Khoon**

Head, Occupational Therapy  
Service  
KK Women's and Children's  
Hospital



## SPEAKERS

Ms Susan Niam is the first Chief Allied Health Officer in the Ministry of Health (MOH) and holds a concurrent appointment as the Registrar of the Allied Health Professions Council that regulates the practice of 5 allied health professional groups.

At MOH, Ms Niam currently provides professional leadership and oversight in facilitating the development and deployment of models of care to catalyse more effective care transition to the most appropriate settings. She also provides professional input concerning allied health workforce and professional capabilities development. Prior to her appointment in MOH in 2018, Ms Niam was the Chairperson of Allied Health Services and Pharmacy Division at Tan Tock Seng Hospital for 9 years, where she led 13 diverse allied health professional groups. Susan is an active volunteer in several community organisations for more than 20 years.



**Ms Susan Niam**

Chief Allied Health Officer,  
Ministry of Health  
Singapore

Dr Sylvia Mun is the Deputy Director, Allied Health Office in KKH, in charge of Education, Research & Professional Development (ERPD). She is the Co-Chair for Wellness360 Council in KKH, which spearhead and guide the programmes to improve the total wellness of all KKH staff. She is also currently the Chair of College of Allied Health. A social worker by training, she has deep passion and interest in igniting, rekindling and stoking the passion of Allied Health Professionals.



**Dr Sylvia Mun**

Deputy Director, Allied Health  
KK Women's and Children's  
Hospital

## SPEAKERS

Ms Tan Bee Yee obtained her BSc with Honours in Physiotherapy from King's College, University of London, UK in 1994. She then joined Singapore General Hospital (SGH) as a physiotherapist, developing an interest in cardiopulmonary physiotherapy over the years, in particular in ICU and peri-operative care. She went on to pursue a Master of Health Service Management degree with Flinders University, South Australia. Having risen to the position of a Senior Principal Physiotherapist after 15 years of service at SGH, she was appointed head of department in 2009, with about 200 staff.

In 2017, Ms Tan joined the new SingHealth Community Hospitals to lead the Allied Health services. In this position, she is responsible for managing and setting up the Rehabilitation, Pharmacy, Dietetic and Medical Social Services for Bright Vision Hospital, Sengkang and Outram Community Hospitals, with an eventual staff strength of about 470. In October 2020, Ms Tan took on the Academic and Professional Development portfolio at SingHealth Group Allied Health as one of its Deputy Group Directors. Bee Yee also sits on various SingHealth and MOH committees/workgroups, as well as serving as Honorary Treasurer in the Singapore Physiotherapy Association Executive Council from 2014 to 2016.



**Ms Tan Bee Yee**

Deputy Group Director  
(Academic & Professional  
Development), Allied Health,  
SingHealth  
Director, Allied Health,  
SingHealth Community  
Hospitals

Ms Tanuja Nair has been with KK Women's and Children's Hospital (KKH) since 2007 as a Child Life Therapist and works with children and their families. She is a certified Child Life Specialist and Children's Recreational Teacher. As a Child Life Therapist, she works closely with medical, nursing and allied health professionals to support children, adolescents and families through various challenging and complex hospital experiences.

Ms Nair is a recipient of the 2020 National Day Efficiency Medal and was also the recipient of the 2018 GCEO Excellence Awards: Outstanding Allied Health Professional. She was also a recipient of the 2017 Singapore Health Services Quality You Shine Team Award and the 2016 Singapore Health Services Quality Star Award. Ms Nair continues to work alongside her team to advocate for and champion the needs of paediatric patients and their families.



**Ms Tanuja Nair**

Head, Child Life, Art and Music  
Therapy Programmes Service  
KK Women's and Children's  
Hospital

## SPEAKERS

Since 2004, Mrs Tan Huang Shuo Mei spent 15 years in SingHealth first as Director, Communications, SGH, and after two years, took on the concurrent role of the clusters' communications portfolio. She had oversight of the SingHealth Group Communications, Marketing Communications, Office of Patient Experience and Development (Philanthropy) till she went into semi-retirement in September 2019.

Today, Mrs Tan works part-time, overseeing the newly set-up SingHealth Staff Care Centre set up in April 2020 to enable accessibility of mental health resources for healthcare professionals.

For five years as Chief Executive Officer of the Singapore Cord Blood Bank, Mrs Tan led the management team to transform the public cord blood bank into Asia's first community bank providing donor mothers the additional option of family banking for purpose of deferred donation, and secured government funding for the organisation.

Mrs Tan is also co-Advisor (along with Group Chief Nurse and Group Director, SingHealth Institute of Patient Safety & Quality) of SingHealth Patient Advocacy Network (SPAN) which was launched officially in February 2019. She oversees directly the engagement and growth of the Network which has a modest membership of about 30. SPAN is directly connected to the bigger circle of SingHealth's over 40 Patient Support Groups and executes some initiatives through them.

### Community/Voluntary Commitments

- (a) Licensed Marriage Solemniser / Deputy Registrar of Marriages (since 2003)
- (b) Advisor, Buddhist Youth Network (since 2016)
- (c) Member, Community Chest Branding Advisory Panel
- (d) Chairman, Brahm Centre (since September 2020)



Mrs Tan Huang Shuo Mei

Senior Director, Special Projects, SingHealth

## SPEAKERS

Dr Vanessa Mok completed her medical degree and intercalated Bachelor of Science in Psychology and Psychiatry at Imperial College London. She completed her Psychiatry specialty training in Singapore and obtained a Master of Medicine, Psychiatry and is a Member of the Royal College of Psychiatrists, United Kingdom.

Dr Mok is a Consultant Psychiatrist at Changi General Hospital (CGH), Singapore. She has a special interest in geriatric psychiatry, mood and anxiety disorders and medical education. She is the Project Director of the Community Psychogeriatric Program and the Service Chief at CGH for the SingHealth Duke-NUS Memory and Cognitive Disorder Centre. She also completed a six-month observership with the Geriatric Psychiatry Service under the Department of Psychiatry and Behavioral Health at Mount Sinai Beth Israel Medical Centre, New York, during which she had the opportunity to work closely with their neurostimulation specialists providing both inpatient and outpatient electroconvulsive therapy.



**Dr Vanessa Mok**

Programme Director,  
Community Psychogeriatric  
Programme, Changi General  
Hospital

Ms Wang Yu Hsuan joined Montfort Care in April 2017 and is currently the Director of its Eldercare Services. She works closely with various professionals and community stakeholders on the journey of evolving community social services delivery model. Montfort Care aims to improve the outcome of social work intervention through innovative integrated care delivery. After a three-year R&D assignment with United Way Taiwan, she moved to Singapore and joined the National Council of Social Service. Prior to joining Montfort Care, Ms Wang had worked at the Marine Parade Family Service Centre for six years and subsequently led a senior care centre at Tsao Foundation for two years.

Ms Wang received her degree in Social Work in Taiwan and her Masters in Welfare Issues in Social Policy at University of Manchester (UK) in 2003.



**Ms Wang Yu Hsuan**

Director, Montfort Care

## SPEAKERS

Ms Yeoh Ting Ting graduated from the Department of Pharmacy, University of Singapore in 2002, after which she did her pre- registration pharmacist training in the Singapore General Hospital (SGH). She worked in the Inpatient Pharmacy in SGH from 2003 to 2008 and has been looking after patients from various disciplines e.g. Orthopaedic, Neurology, and Oncology. She then moved on to work in the Oncology Pharmacy at the National Cancer Centre Singapore.

Ms Yeoh's special interest is in Geriatric Oncology and has pioneered the Medication Therapy Management (MTM) Service for Elderly Cancer Patients in 2009. The MTM team in the NCCS is currently providing this service to elderly cancer patients receiving treatment in the Ambulatory Treatment Unit and the Specialist Outpatient Clinic. Her research interests includes area of (i) the relationship between the treatment of comorbidity and cancer therapy; (ii) supportive care for elderly cancer patients; as well as (iii) predicting chemotherapy toxicity profile of elderly cancer patients. Besides her involvement in the MTM service.

Ms Yeoh also holds the training and education portfolio in the NCCS. Her educational and research interest areas include educational environment in the workplace-based setting and teaching empathy to healthcare professionals.



**Ms Yeoh Ting Ting**

Specialist Pharmacist  
National Cancer Centre  
Singapore

Ms Yong Limin is currently with MOH Holdings Healthcare Manpower Division developing Allied Health Professionals manpower strategies and solutions for both health & social care sectors. She has worked in many health and social care settings, including acute tertiary hospitals, community hospitals, home care services, nursing homes, senior care centres and senior activity centres.

Her clinical and research interests are in older adults' health, geriatric rehabilitation and falls prevention. In 2009, she was awarded the Health Manpower Development Plan fellowship to undergo specialised training in geriatric rehabilitation and falls prevention in Australia. She is a strong advocate for inter-professional collaboration in clinical care, education and research.



**Ms Yong Limin**

Senior Principal Physiotherapist  
Healthcare Manpower Division  
MOH Holdings



## SPEAKERS

Ms Zenne T'ng is a Principal Speech Therapist and currently heading the Speech Therapy Department of Tan Tock Seng Hospital. She obtained her master in Healthcare Profession in Education with Massachusetts General Hospital Institute of Health Profession in 2018. Ms T'ng has established her clinical specialty in intensive care and management of patients with tracheostomy tube and ventilator after receiving the Health Manpower Development Plan award and training with Massachusetts General Hospital and Johns Hopkins Hospital in the U.S.A in 2014.

Ms T'ng has held various clinical and leadership roles in the hospital and beyond the hospital. She has contributed significantly in inter-professional education, quality improvement and healthcare innovation. This is evident as she is one of the active members/ faculty members of TTSH tracheostomy (education) workgroup, ICU committee, TTSH Allied Health Service and Pharmacy Education Taskforce, National Healthcare Group Clinical Practice Improvement Program, and Allied Health Professional Council (ST) at the national level. She was appointed as the Assistant Director of Centre for Allied Health and Pharmacy Excellence (CAPE) and Centre for Healthcare Innovation (CHI) since 2018 and 2019 respectively.



**Ms Zenne T'ng Kuan Chen**

Assistant Centre Director,  
CAPE  
Head of Department, Speech  
Therapy, Tan Tock Seng  
Hospital



## PROGRAMME AT-A-GLANCE

### DAY 1

TIME	PROGRAMME			
0900 – 0930	Opening Ceremony and Welcome Address			
0930 – 1045	Awards Presentation  Keynote: <b>Allied Health Leadership – Who, Why and How?</b> Dr Martin Chadwick, Chief Allied Health Professions Officer, New Zealand			
1045 – 1115	Break, ePoster Viewing			
1115 – 1230	Oral Presentation (Scientific)			
	Beyond Hospital Walls	Future Ready Workforce	Health Services Research	Innovation & Digital Strategies
1230 – 1300	Oral Presentation (Narrative)			
	Beyond Hospital Walls	Future Ready Workforce	Health Services Research	Innovation & Digital Strategies
1300 – 1400	Lunch, ePoster Viewing			
1400 – 1500	Awards Presentation  Plenary: <b>Our Vision for the Future Healthcare Landscape</b> Ms Susan Niam, Chief Allied Health Officer, Singapore Adj A/Prof Camilla Wong, Chief Pharmacist, Singapore			
1500 – 1545	Plenary: <b>Value-Driven Care: The Role of Allied Healthcare Professionals</b> Dr Lim Eng Kok, Director, Office of Value-Driven Care, SingHealth			
1545 – 1615	Break, ePoster Viewing			
1615 – 1715	Awards Presentation  Plenary: <b>Innovating for the Future Allied Health Professional – CAPE</b> Ms Lim Hong Yee, Director, Centre for Allied Health & Pharmacy Excellence			
1715 – 1800	Panel Discussion: <b>Igniting, Rekindling and Stoking the Passion in Allied Health</b> Dr Sylvia Mun, Deputy Director, Allied Health, KKH Ms Loh Huey Peng, Director, Nursing, SNEC Ms Rena Sivadas, Principal Counsellor, TRaCS, CGH Mrs Tan-Huang Shuo Mei, Senior Director (Special Projects), SingHealth			
END OF DAY ONE				

## DAY 2

TIME	PROGRAMME				
0900 – 1015	Awards Presentation  Plenary: <b>Transdisciplinary Working: A Goal for Allied Health</b> Dr Martin Chadwick, Chief Allied Health Professions Officer, New Zealand				
1015 – 1045	Break, ePoster Viewing				
1045 – 1145	Awards Presentation  Plenary: <b>Preparing Allied Health for the 21st Century – Lessons from Victoria, Australia</b> Adj A/Prof Donna Markham, Chief Allied Health Officer, Australia Ms Sharon Downie, Manager, Allied Health Workforce, DHHS, Australia				
1145 – 1245	Lunch, ePoster Viewing				
1245 – 1345	Awards Presentation  Plenary: <b>Patient Centric Care Across the Spectrum of Life</b> Ms Soh Siok Khoon, Head, Occupational Therapy Service, KKH Ms Long Chey May, Group Chief Patient Officer, NUHS Ms Hayati Suaidi, SingHealth Patient Advocacy Network member Ms Tanuja Nair, Principal Child Life Therapist, KKH				
1345 – 1530	Awards Presentation				
	Concurrent Sessions				
	AH Leadership	Future Ready Workforce	Workforce Optimisation	Innovation & Digital Strategies	Beat the Burn
1530 – 1600	Break, ePoster Viewing				
1600 - 1700	Plenary: <b>Supporting the Empowerment of Older Adults in the Community</b> Dr Goh Soon Noi, Head, Medical Social Services, CGH Mrs Magdalin Cheong, Deputy Director & Head, Dietetic & Food Services, CGH Mr Steven Siew, Manager, Health Screening and Management, HPB Ms Wang Yu Hsuan, Director, Montfort Care Ms Yong Limin, Senior Principal Physiotherapist, Healthcare Manpower Division, MOHH				
1700 – 1745	Oral and Poster Award Presentation				
1745 – 1800	Closing				
END OF DAY TWO					

## SYNOPSIS

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**Day 1: 8 March 2021**

**Time: 0930 – 1045hrs**

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**Title: Allied Health Leadership- Who, Why and How?**

**Synopsis:**

This talk aims to address some of the more difficult topics in Allied Health. In Leading Allied Health there is a need to understand how the term came about and what it means in the current context of leading a diverse grouping of health professionals. An even deeper question is why there should be leadership of this health grouping in the first place, why there will be benefit at a population health level. Lastly, any improvement is change. How then can the leadership of Allied Health help to shape services that are more effective and efficient, optimizing the use of resources available to us, and delivering on better health outcomes.

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**Day 1: 8 March 2021****Time: 1115 – 1230hrs**

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**Oral Presentation (Scientific) – Beyond Hospital Walls****Presenting Author: Dr Choo Pei Ling, Singapore Institute of Technology****Timed Up and Go (TUG) Reference Values and Predictive Cut-Offs for Fall Risk and Disability in Singaporean Community-Dwelling Adults**

The 'timed up and go' (TUG) test is a simple and widely used test of overall functional mobility. Nonetheless, there is a paucity of TUG normative data among Asians who differ in habitual gait speed and fall risk from Caucasians. The objectives of this study were to determine TUG reference values and optimum cut-offs predicting fall risk and disability for community-dwelling adults. The design was cross-sectional for Study 1- the Yishun Study and longitudinal for Study 2- the Singapore Longitudinal Study. Study 1 comprised 538 non-disabled, community-dwelling adults aged between 21 and 90 years. Study 2 comprised 1356 community-dwelling older adults aged  $\geq 55$  years. Physiological falls risk (PFR) was determined using the Physiological Profile Assessment (PPA) in Study 1. Disability was assessed using the Barthel Index and the Lawton scale in Study 2 at baseline and 3-year follow up in Study 2. In Study 1, mean TUG time for individuals aged 60-74y was 9.80s, shorter than values reported for Caucasians of 12.30s. It was significantly associated with high PFR (OR:1.14, 95%CI 1.03-1.27), 74.0% agreement, Cohen's kappa=0.314, (95%CI 0.238-0.390); AUC=0.85 (95%CI 0.80-0.90), cut-off of 10.2s discriminated high PFR from low PFR with 84.4% sensitivity and 72.6% specificity. In Study 2, threshold for observing significantly increased risk of disability was  $\geq 9.45$ s for prevalent disability (OR: 2.98, 95%CI 1.41-6.78), functional decline (OR: 2.68, 95%CI 1.33-5.80), and incidental disability (OR: 2.25, 95%CI 1.08-4.97). The results show that TUG reference values and cut-offs predicting fall risk and disability for community dwelling older adults in Singapore are consistent with Asian data and differ from Caucasians. In conclusion, TUG could be used to guide development and evaluation of risk screening of adverse health outcomes across the life span in Singapore.

**Presenting Author: Jeslyn Phoen, Changi General Hospital****The Impact Of The Health Peers Programme On Dietary and Exercise Habits in Singapore**

The Ministry of Health Singapore declared War on Diabetes in April 2016. In line with this, Changi General Hospital launched the Health Peers Programme in January 2017. The objective of this community-based initiative is to equip lay persons or "Health Peers" with the skills and knowledge to be peer coaches, allowing them to support residents who are at-risk or diagnosed with diabetes to adopt healthy exercise and dietary habits. The unique aspect of the Health Peers Programme includes a training curriculum developed and delivered by a multi-disciplinary team of healthcare professionals: sports medicine physician, a dietitian and a clinical psychologist. Between 2017 and 2019, 425 individuals were trained as Health Peers. This study aims to determine the impact on dietary and exercise behaviour on residents who received peer coaching. A total of 65 residents were recruited and monitored for two months. The Health Peers conducted the coaching sessions during home visits or at Senior Activity Centres. Residents reported on the frequency of their exercise and dietary habits. Data was collected at baseline, one month into health coaching, and two months into health coaching. Each resident received a total of 4 coaching sessions in the form of phone calls and/or house visits over two months. During the coaching sessions, the Health Peers supported residents by facilitating them to set and achieve their goals to improve their lifestyle habits. 100% of residents reduced their frequency of sweetened drinks of which 49.2% reported that they did not consume sweetened drinks in a week at 2-month compared to 29.2% at baseline. Improvements were also observed in consumption of fruits from baseline to 2-month with 61.5% of residents having fruits daily at 2-month compared to 52.3% at baseline. Self-reported weekly exercise level increased from 72.3% of residents exercising at least once a week at

baseline to 93.8% at 2-month. Average weight of residents also decreased from 63.4kg to 62.8kg. Findings from this study suggest that community-based peer coaching can be effective in improving lifestyle habits and provides evidence for the promising potential of the Health Peers Programme as a community resource in the prevention and management of diabetes.

**Presenting Author: Dr Susheel Joginder Singh, Universiti Kebangsaan Malaysia**

**The Use Of Augmentative and Alternative Communication System by Children with Developmental Disability in the Classroom**

Augmentative and alternative communication (AAC) systems serve as the primary mode of communication for many children with complex communication needs. In Malaysia, more and more children with developmental disability are being introduced to AAC. As attending school is an essential part of these children's life, it is important that they use AAC to communicate in schools. This study aimed to describe the nature of use of AAC by students with developmental disability in the classroom. Six students were observed and six hours of video recordings obtained for each student. The video recordings were transcribed then coded for the presence of a communication event, communication partner involved, student's mode of communication and communication function, and access to the AAC system. The students primarily communicated with gestures despite having an AAC system. It was found that nearly half of the time, the students' AAC system was not within an arm's reach. When student communicated with their AAC system, they mainly interacted with the teachers and the primary function served was behavioural regulation. Contrary to past studies, these students spontaneously initiated almost as many times as they responded. Results from this study indicated that more effort is needed to make sure that students have constant access to and opportunity to use their AAC system.

**Presenting Author: Lee Rui Jia, Sengkang General Hospital**

**Empowering Nurses to Enhance Nutritional Care at Home**

Patients discharged from hospital may face nutritional issues at home including malnutrition, tube feeding problems and poorly managed chronic diseases, which may result in complications and hospital readmissions. In the Sengkang General Hospital (SKH) Hospital-to-Home (H2H) program, Patient Navigators (PN) provide home care support to patients discharged from SKH. SKH Dietetics developed a two-module Nutrition Home Care Training Program (NHCTP) to equip PNs with basic nutritional knowledge to address common nutritional issues at home and escalate suitable patients to dietitians. This study aimed to evaluate the effectiveness of this training program. Nutrition knowledge quizzes were administered to PNs before and after each module to assess the change in the knowledge scores. PNs completed a post-training questionnaire with a 5-point Likert scale to evaluate the program's usefulness (1 = not useful; 5 = very useful), PN's confidence in addressing nutritional issues and identifying patients who require further dietitian input (1 = not confident; 5 = very confident), and reported change in nutritional knowledge (1 = no change in knowledge; 5 = very significant increase in knowledge). Among the 5 PNs who completed the NHCTP, mean knowledge scores improved for each module (1st module: 50% to 85%, 2nd module: 36% to 88%). Overall, PNs found the training useful (mean = 4). They also reported increased knowledge of common nutritional feeds (mean = 3.8), interpreting tube feeding regimen (mean = 3.8), and dietary management of chronic diseases (mean = 3.8). After the training, they were more confident in answering simple nutrition questions from patients (mean=3.8) and escalating suitable patients to dietitians (mean = 4.6). SKH Dietetics NHCTP has shown to improve PN's knowledge and confidence in addressing nutritional issues at home after discharge. With increasing focus on moving care beyond hospitals into the community, extending NHCTP to community partners can ensure seamless nutritional care and patient safety.



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**Day 1: 8 March 2021****Time: 1115 – 1230hrs**

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**Oral Presentation (Scientific) – Future Ready Workforce****Presenting Author: Jeremy Koh, Singapore General Hospital****The Hard Truth About Soft Skills - Exploring the Association between Leadership Competency and Career Advancement**

Globally, employee engagement in healthcare organisations is low, and one of its main determinants is the dimension of career advancement. It may be useful for healthcare organisations to determine the factors of career advancement, so as to guide them to more effectively engage their workforce. Leadership competency is factor that may play a crucial role in influencing the career advancement for employees in healthcare organisations. To our knowledge, a comprehensive analysis on its impact on the perception of career advancement within the healthcare setting has not been conducted. This study aimed to examine the association between leadership competency of healthcare professionals and perceptions of career advancement. An ecological, cross-sectional study was conducted. Poisson generalized-estimating equation models were fitted to estimate the adjusted rate ratios with bootstrap 95% confidence intervals for the associations of the AHEAD items with the number of favourable responses on the career advancement items. In each model, we accounted for clustering by AHD departments and controlled for length of service as a confounder. Statistically significant predictors of perception of career advancement were found, and included skills such as Interpersonal Skills (aRR 1.53 CI 1.12 to 2.96), Motivating (aRR 1.31 CI 1.10 to 2.16), and Mentoring (aRR 1.30 CI 1.08 to 1.13); and values such as Compassion (aRR 1.37 CI 1.17 to 3.40), and Collegiality (aRR 1.31 CI 1.00 to 1.99). Our findings show an association between some components of leadership competency and the perception of career advancement. These results provide initial evidence that apart from hard skills, soft skills may play an equally (or more important) role in influencing the perception of career advancement.

**Presenting Author: Peh Hui Peng, Singapore General Hospital****Telepractice adoption in speech and language therapy during COVID-19: Benefits and challenges**

Past surveys on telepractice show high interest but low uptake of this service delivery mode amongst speech therapists in India and Hong Kong. Yet the underlying barriers and clinicians' experiences in adopting telepractice are not well understood. The COVID-19 pandemic has accelerated the adoption of telepractice in allied health services over in-person sessions, especially during the Circuit Breaker (CB) period. Our study aims to understand the perceived value, barriers and benefits of telepractice by Speech Therapists (STs) in Singapore, particularly during their transition to conform with CB restrictions. We conducted a cross-sectional survey of STs in Singapore through convenience sampling. Survey responses were electronically captured and analysed using descriptive statistics. Responses to open-ended questions were thematically analysed. Among the 114 STs practising in Singapore who completed the survey, 67.5% provided telepractice services during CB period. Of these, 72.7% reported changes in their use of telepractice due to CB restrictions, including starting telepractice, increasing the frequency and range of caseload in telepractice. There was an increase in STs providing telepractice services in most practice areas, most markedly in the areas of developmental language (+122.2%) and social communication disorder (+104.8%). Key perceived benefits of telepractice were: 1. Easy access to services (94.7%), 2. Timely continuity of care (79.8%), 3. Increased frequency of therapy (69.3%), and 4. Client participation within a familiar environment (69.3%). Operational advantages included ease of scheduling sessions (43.9%) and time efficiency (42.1%). Majority of STs (76.3%) believed

that in-person therapy is of better overall quality. 82.5% felt in-person visits were more appropriate for their clients, with 95.6% regarding their clients (e.g. young children, those with swallowing difficulties) unsuitable for telepractice. Other perceived barriers were clients' lack of access to technology, therapists' lack of resources, and clients' and therapists' lack of understanding and negative opinion of the efficacy of telepractice. While telepractice ensures continuity of care where in-person care is disrupted, barriers exist in its application across all areas of speech therapy practice. Adequate support must be provided for speech therapists and their clients to ensure that quality of care is maintained despite the change in therapy delivery mode.

**Presenting Author: Tan Li Li, Singapore Polytechnic**

**Work-Based Learning (WBL) Model To Develop Self-Directed Learning Skills in Optometry Education – An Evaluation**

**Introduction.** This paper evaluated the effectiveness of work-based learning (WBL) model to develop self-directed learning skills in optometry education. **Methods.** 'WBL cohort 1' in Academic year (AY) 1819S1 (n = 20) and 'WBL cohort 2' in AY1920S1 (n = 65) were studied and compared with a 'traditional cohort' (n = 42). The following were investigated: (i) student survey (SS); (ii) focus group interview (FGI); (iii) adjunct lecturer survey and (iv) final module score (FMS) in four core modules. **Results.** Through SS, > 60% reported that WBL enabled them to be self-directed learners and > 80% felt that it helped to develop useful optometry skills and knowledge. Through FGI, 83% of the 'WBL cohort 1' and 54% of the 'WBL cohort 2' reported that it trained them to be self-directed learners. More than 60% of the adjunct lecturers surveyed reported that WBL had exhibited good interpersonal skills, critical thinking and good traits of an independent optometrist. However, these were not as clearly evident when the cohort size was increased. Based on academic performance (with FMS as an indicator), WBL produced variable results in the four core modules surveyed, with WBL cohorts 1 and 2 performing differently. **Conclusion.** WBL model was able to develop self-directed learners and professional dispositions as well as generic employability skills. To scale WBL for larger cohorts, considerations must be given to faculty and resource availability, which it demands. **Keywords:** Work-based learning, self-directed learning, optometry, workplace.

**Presenting Author: Yap Ai, National University Hospital****Effectiveness of Therapy Support Associates (TSA) in providing Rehabilitation for patients who underwent Total Knee Replacement (TKR) surgery in National University Hospital**

There is a projected disproportionate increase in the demand for Physiotherapy as Singapore's population greys. Therapist Support Associate(s) (TSA) may reduce this demand by seeing these cases independently, following instructions from the Physiotherapist (PT). We examined the effectiveness of including a TSA in the outpatient post-operative care of patients who had undergone Total Knee Replacement (TKR). 48 patients participated in this randomised controlled trial. The control group received physiotherapy as usual. For participants allocated to the TSA group, PT-in-charge assessed and treated on the first session and then after every two sessions with the TSA. TSA supervised two sessions based on the PT's plan. Patients were seen weekly in both groups. The study was concluded by the 12th week following the first visit. Outcomes measures were taken on the first session and by the 12th week by a blinded assessor. The outcome measures were: active and passive knee range-of-movement (ROM), Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), Patient Specific Functional Scale (PSFS) for sit-to-stand and 10-minute walking. Statistical analysis on the outcome measures was performed using repeated measures ANOVA. There was no difference in the outcomes measures between Control & TSA groups except for passive extension ROM. Patients in the control group achieved greater improvement in passive extension range, 5.5 degree compared to 0.8 degree ( $p = 0.024$ ). In conclusion, the introduction of TSA to post-operative Physiotherapy care of patients who had undergone TKR did not adversely affect patient recovery as demonstrated by the similar outcomes of the WOMAC, PSFS for sit-to-stand and 10-minute walking. Active and passive flexion ROM and active extension ROM were also similar. A greater emphasis by the treating PT to the TSA on passive knee extension may help ameliorate the difference in the passive range achieved. Therefore, the inclusion of TSA in patient care should be considered. This would expand the capacity of PTs to treat more patients while freeing up PT resources for more complex cases.

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**Day 1: 8 March 2021****Time: 1115 – 1230hrs**

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**Oral Presentation (Scientific) – Health Services Research****Presenting Author: Jasly Koo, KK Women's and Children's Hospital****Impact of a standardised nutrition protocol on malnutrition rate in newly diagnosed children with cancer**

Malnutrition in children with cancer, defined as weight loss of > 5% in the first 6 months post-diagnosis, is related to higher mortality and infection rate. Serial nutritional assessments throughout treatment are recommended to prevent malnutrition but consensus is lacking in terms of intervention timing and frequency. Hence, this study aimed to evaluate the impact of a standardised nutrition protocol on reducing malnutrition rate compared to a historical cohort. This was a pre-post study of newly-diagnosed children with cancer (2 to 17 years old) in January to December 2015 (control group, n=53) and March 2017 to April 2019 (intervention group, n=61). The control group received ad-hoc dietetic interventions based on medical assessments. The intervention group received a standardised nutrition protocol, which comprised of malnutrition assessment using Subjective Global Nutrition Assessment by dietitian at diagnosis, tiered dietetic intervention based on nutritional status and regular time-point reviews. Proactive malnutrition screening upon admissions were also conducted by nurses who flag up high-risk patients for timely interventions. Data on demographics, diagnosis and treatment modalities were obtained. Primary outcome was incidence of malnutrition at 6 months post-diagnosis. Analyses were conducted using descriptive and logistic regression. Both groups did not differ significantly in terms of age at diagnosis, gender, treatment modality and baseline body mass index Z-score. A higher proportion of patients in the intervention group received oral nutritional supplements on advice of dietitian (pre: 11/39 (28.2%), post: 14/59 (76.3%),  $p < 0.05$ ). The proportion of patients with malnutrition at 6 months post-diagnosis was significantly lower in the intervention [11/59 (18.6%)] than control group [16/39 (41.0 %),  $p = 0.021$ ]. After adjusting for age, treatment modalities and cancer type, the intervention group had a significantly lower risk of malnutrition at 6 months (adjusted odds ratio: 0.30 (95% CI: 0.12 to 0.79),  $p = 0.014$ ). The results demonstrated that a standardised nutrition protocol reduced malnutrition rate. The early malnutrition assessment individualised the intensity of our interventions to optimise our resources without compromising patient care. Targeted screening facilitated timely intervention and ensured patients' nutritional status is not neglected. Further evaluation is required to determine the most appropriate interval for interventions.

**Presenting Author: Dr Beron Tan, KK Women's and Children's Hospital****The effects of early screening and intervention on psychosocial outcomes in Singaporean children with cancer and their parents**

Research has indicated the need for early monitoring of psychosocial functioning in children with cancer and their parents. A comprehensive psychosocial screening programme for children with cancer in Singapore was developed. This study evaluated the effectiveness of early screening and intervention on psychosocial outcomes in children with cancer and their parents. The programme included psychosocial screenings conducted in the first year of cancer diagnosis at 0-month, and every quarter of the year. Psychological intervention was provided by clinical psychologists to children and parents who were identified as psychologically distress through the screening protocol. This case-controlled study prospectively recruited 62 children and their main caregiving parent into the psychosocial programme; the control group was based on 52 children and parents recruited retrospectively before the programme was implemented. Psychosocial outcomes were based on 1) psychological distress and 2) health-related quality of life (HRQoL) questionnaires collected

at one year following the cancer diagnosis for both prospective and retrospective groups. There were no significant group differences in psychological distress and HRQoL in children with cancer ( $p > .05$ ). Additionally, the HRQoL did not differ significantly for parents in both groups ( $p > .05$ ). Nevertheless, there was a significant difference in psychological distress between parents of both groups,  $\chi^2(1) = 6.73$ ,  $p < .01$ , and the effect size is moderate, Cramér's  $V = .35$ . Specifically, the odds of psychological distress were 11 times greater in parents from the retrospective group compared to parents in the prospective group. Indeed, 31% of the parents in the retrospective group were in psychological distress, compared to 4% of the parents in the prospective group after 1 year into the cancer diagnosis. Early psychosocial screening and intervention in the first year of childhood cancer was effective in reducing psychological distress, particularly for parents. Nevertheless, more targeted support may be required to address the complex psychosocial needs of children with cancer in the early stage of treatment.

**Presenting Author: Muhammad Isa Bin Mohd Musa, National Heart Centre Singapore**  
Effects of the Enhanced Recovery after Thoracic Surgery Pathway on Post-Operative Outcomes

Enhanced recovery after surgery (ERAS) pathways have shown to be effective in reducing hospital length of stay (LOS) and postoperative complication rates. Early mobilization is also recommended as it has been reported to be safe and feasible. In National Heart Centre Singapore (NHCS), the physiotherapists and doctors have initiated the Enhanced Recovery after Thoracic Surgery (ERATS) pathway where we target to improve patients' outcomes – reduction in LOS, pain, and complications and enhance early recovery. Based on a selection criteria, suitable patients recruited into this pathway will be mobilized on post-operation day (POD) 0. The aim of this service audit is to evaluate the feasibility of early mobilization on POD 0 in NHCS and study the effects of the ERATS pathway on post-operative outcomes. 75 patients who had thoracic surgeries done from June 2020 to September 2020 were analyzed, of which 21 were recruited under the ERATS pathway. Quality of recovery was measured using the Quality of Recovery–15 Questionnaire (QoR-15) on POD 1 and before discharge. The number of days required for a patient to achieve functional independence (FI) i.e. where patient is able to perform bed mobility and ambulation tasks without assistance, was also recorded. LOS, 30-day readmission rates and any adverse events during physiotherapy sessions on POD 0 were other outcomes that were tracked. The physiotherapists successfully mobilized 86% of the ERATS patients on POD 0. Three patients did not mobilize due to giddiness and pain symptoms. Zero adverse events were recorded. Patients on the ERATS pathway had a 14% shorter LOS and required 18% less time to achieve FI than those who were not. A 2% higher improvement in QoR-15 score was observed in patients on the ERATS pathway. Four thoracic surgery patients were readmitted within 30 days, of which only one was under ERATS pathway. Early mobilization on POD 0 in patients undergoing uncomplicated thoracic surgery is safe and feasible. The ERATS pathway demonstrated improvements in postoperative outcomes. However sample size is small and will require further evaluation.



**Presenting Author: Nadiah Binte Mohamed Rahim, National Heart Centre Singapore****Frailty Assessment in patients undergoing Transcatheter Aortic Valve Implantation (TAVI)**

The presence of frailty is often associated with poor outcomes and functional recovery after a surgery. The aim of the study is to analyze the prevalence of frailty, by assessing physical frailty score, functional independence, gait speed, hand grip strength, cognitive function and quality of life (QoL) prior to TAVI implantation and whether the six domains improved after surgery. This is a retrospective review of patients referred for frailty assessment as part of TAVI workup from April 2016 and April 2018. Frailty assessments were conducted by physiotherapists at baseline and 3-months post TAVI. Physical frailty was assessed using the Clinical Frailty Scale (CFS). Functional dependence was measured using the Katz Index and Lawton Brody Scale. Gait speed using the 5 Metre Walk Test (5MWT) and hand grip strength were used as outcome measures for physical functioning. Cognitive function was assessed using the Mini - Mental State Examination (MSSE) questionnaire. To assess QoL, patients were asked to self-rate their health. Frailty cut-off scores for each domain were also defined. Chi-square test was used for comparison between baseline and 3-months frailty scores. Post TAVI, all patients received multidisciplinary care, including inpatient physiotherapy rehabilitation, as well as, advice on activity and exercise guidelines prior to discharge. Fifty-four patients had both baseline and 3-months frailty assessments performed. Gait speed ( $\chi^2 = 6.834$ ,  $p < 0.009$ ) and self-rated health questionnaire ( $\chi^2 = 17.28$ ,  $p = 0$ ) were found to be statistically significant. At baseline, 54.9% were considered frail based on their 5 MWT results and only 7.4 % rated their health as very good and excellent. In contrast, at 3 months post TAVI, the percentages improved to 35.2 % and 22.2% respectively. Based on the self-rated health questionnaire, 86.3% of the patients rated their QoL to be at least somewhat better as compared to before TAVI implantation. Aside from handgrip strength, there were improvement for the other five domains after TAVI implantation. Significant improvements were found in gait speed and self-rating of health. This provides meaningful information with respect to interdisciplinary care management aim at improving physical, cognitive, functional independence and quality of life.

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**Day 1: 8 March 2021****Time: 1115 – 1230hrs**

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**Oral Presentation (Scientific) – Innovation & Digital Strategies****Presenting Author: Lim Su Lin, National University Hospital**Effect of a Diabetes Lifestyle Intervention using Technology Empowerment (D'LITE) in Individuals with Type 2 Diabetes: A Randomized Clinical Trial

Introduction: Lifestyle interventions are effective in diabetes management, with smartphones gaining popularity as a delivery mode. However, limited evidence from randomised clinical trials (RCTs) exists regarding the effectiveness of smartphone-based interventions among overweight or obese Asians with type 2 diabetes. The objective of the study was to compare the effects of a culturally adapted smartphone-based intervention with usual care on weight and metabolic outcomes.

Methods: Adults with Type 2 Diabetes and body mass index  $\geq 23$  kg/m<sup>2</sup> were randomised to control group of standard care (diet and lifestyle advice) or intervention group (diet and lifestyle advice + Nutritionist Buddy Diabetes app, a form of virtual care). Body weight, HbA1c, fasting blood glucose, food diary and diabetes medication information were collected at baseline and 6 months.

Results: Of the 305 adults screened, a total of 204 patients (105 control, 99 intervention) were recruited for the study. The intervention group experienced significantly greater weight loss (3.6 kg vs 1.2 kg;  $p < 0.001$ ), percentage of weight loss (4.3% vs 1.4%;  $p < 0.001$ ), reduction in HbA1c (0.7% vs 0.3%;  $p < 0.001$ ) and fasting blood glucose (0.8 mmol/L vs 0.1 mmol/L;  $p = 0.001$ ), compared to the control group. Among participants with HbA1c  $\geq 8\%$ , the intervention led to a greater HbA1c reduction (1.8% vs 1.0%,  $p = 0.001$ ). A significantly greater proportion of intervention participants had their diabetes medications reduced compared to control participants (23.3% vs 5.4%,  $p = 0.02$ ). The changes in medications led to a reduction in annual costs of both diabetes medications in the intervention group, and an increase in annual costs of medications in the control group, with significant differences between groups. The intervention group had greater reductions in calorie, carbohydrate and sugar intake at 6-month compared to the control group ( $p < 0.001$  for all).

Conclusions and Implications: A smartphone-based lifestyle intervention was more effective in achieving weight and glycemic reductions among Asians with type 2 diabetes compared to usual care, indicating a potential for smartphone use in intervention delivery. This modality of intervention is potentially scalable to serve the larger population.

**Presenting Author: Dr Lim Rou Wei, Singapore General Hospital**Learning how to safely escape from sugary situation

Introduction: Escape room is increasingly used as an innovative educational tool to engage learners in healthcare. The immersive nature of escape room environment allows learners to engage in active learning, utilize teamwork, communication and critical thinking skills to complete tasks within a stipulated timeframe. Education in diabetes management was conventionally delivered using didactic lectures. To reinforce pharmacists' understanding about medication safety and importance of teamwork, communication and critical thinking skills, our faculty developed a low-cost and engaging educational tool on diabetes management using escape room concept.

Methods: In the escape room, pharmacists worked in teams to complete a series of tasks related to medication safety issues in diabetes management, focusing on unsafe practices and preventable medication errors. The scenarios were adapted from actual medication safety cases. Pharmacists investigated the preventable cause(s) of patient's death. They identified practice gaps leading to medication errors, determine appropriate management of hypoglycemia, insulin conversions, titrations and administration. A post-game debrief was

conducted to foster self-reflection and consolidate learning objectives. Pharmacists completed pre- and post-activity assessments on diabetes management and survey using Kirkpatrick evaluation framework.

Results: Thirty-seven pharmacists, with 1 to 5 years of acute care practice, participated and successfully “escape” the room within 60 minutes. For Kirkpatrick Level 1, a median of 98.7% (78.4%–100%) chose “strongly agreed”/“agreed” that the educational game was effective. Compared to conventional teaching, pharmacists found the game an effective way to learn new information and reinforce existing knowledge through their interaction as a team. For Kirkpatrick Level 2, a median of 97.3% (90.2%-100%) chose “strongly agreed”/“agreed” that they learnt skills in critical thinking, clinical practice, communication and teamwork. The top 3 learning points that pharmacists could apply at work were (i) insulin conversion and titration, (ii) insulin administration and (iii) awareness of preventable medication errors. The pre- and post-assessment scores in knowledge on diabetes management were 80% and 90%, respectively. The expenditure for game setup was SGD\$98.00.

Conclusion: The escape room is a low-cost and engaging educational tool that effectively facilitate the training and assessment of pharmacists’ knowledge about preventable medication errors, teamwork, communication and critical thinking skills.

### **Presenting Author: Ng Khim Siong, SingHealth Polyclinics**

#### **Study on the Effectiveness of Musculoskeletal Pain Educational Programme on Pharmacists' and Pharmacy Technicians' Learning**

Introduction: Patients often receive conflicting information about their musculoskeletal (MSK) pain despite their strong desire for clear, consistent and individualised information on this medical condition. An e-lecture on MSK pain which includes pain biology and management strategies was developed to educate healthcare professionals so that consistent information on this medical issue can be conveyed to the patients. This study aimed to evaluate the effectiveness of a single 1-hour e-lecture conducted by an experienced physiotherapist in improving pharmacy staff’s understanding of MSK pain.

Methods: This randomised multi-centre, prospective study was conducted across 8 polyclinics. Pharmacy staff working in the polyclinics were invited to participate in the study. Participants in both the intervention and control groups were asked to complete the validated 12-question Neurophysiology of Pain Questionnaire (NPQ) twice. The intervention group completed the NPQ immediately before and after the e-lecture while the control group completed the NPQ twice at 1 hour apart. The intervention group was also asked to complete a self-developed 5-question survey form to assess their perceived understanding and interest to the e-lecture. The anonymised data collected was analysed using descriptive and inferential statistics.

Results: A total of 64 participants with a mean age of  $36.0 \pm 13.3$  years completed the study. The study found that the control group’s NPQ score prior to and after the lecture were  $6.3 \pm 2.6$  and  $6.3 \pm 2.7$  respectively while that in the intervention group were  $6.3 \pm 2.7$  and  $8.7 \pm 2.4$  respectively. The intervention group’s NPQ score was  $2.4 \pm 0.6$  points higher than the control group, with a 95% CI of 1.2 to 3.6 ( $p=0.00$ ). Participants who attended the e-lecture felt that the lecture was interesting ( $7.8 \pm 1.5$ , out of a total score of 10) and easy to understand ( $7.7 \pm 1.5$ ). They felt they gained new knowledge from the lecture ( $8.0 \pm 1.5$ ). They also find the lecture helped them to understand MSK pain ( $7.9 \pm 1.5$ ) which is useful to their work ( $7.8 \pm 1.6$ ).

Conclusion: The 1-hour e-lecture is effective in improving pharmacy staff’s knowledge on MSK pain.

**Presenting Author: Woon Ee Lin, Singapore General Hospital****Rehabilitation recovery application to support self-monitoring after anterior cruciate ligament reconstruction**

**Introduction:** Following an anterior cruciate ligament reconstruction (ACLR), empowering patients as active agents in their rehabilitation requires them to monitor their recovery in knee flexion range-of-motion, quadriceps strength, and knee self-efficacy. Given the ubiquity of mobile phones, it is advantageous to provide functional recovery curves in the form of a web application which allows patients to gain easy access. A review of the existing literature, however, suggests that trajectory curves of these knee measures remain poorly defined. Thus, this study aimed to (i) describe, in a large ACLR cohort, knee flexion range-of-motion, quadriceps strength, and knee self-efficacy trajectory curves over the initial 6-months post-surgery and (ii) develop a web application that generates the trajectory curves by patient and surgical factors.

**Methods:** A total of 595 patients with unilateral ACLR (mean age, 27 years) participated in this longitudinal study. At 2-, 3-, and 6-months post-surgery, knee flexion range-of-motion, quadriceps strength, and knee self-efficacy were quantified. Sports activity levels were assessed using the Tegner Activity Score at 6-months post-ACLR. Multivariable generalized least squares regression was used to generate trajectory curves for the measures, stratified by patients' Month-6 Tegner score.

**Results:** The various knee measures improved nonlinearly over time, with substantial improvements observed in the first 2 to 4 months post-surgery. In multivariable models, greater knee flexion range-of-motion, quadriceps strength, and knee self-efficacy over time were significantly associated with higher Month-6 Tegner scores (all  $P$  values  $< 0.01$ ). Additionally, receiving a bone-patellar-tendon-bone graft or meniscal repair was associated with lower quadriceps strength trajectories ( $P$ -values  $< 0.001$ ) while female sex was associated with lower knee self-efficacy trajectories ( $P = 0.02$ ). To personalize this information, an interactive website was created (<https://sghpt.shinyapps.io/alpha/>) where trajectory curves can be explored in detail based on individual demographics, anthropometric, and surgical measures.

**Conclusion:** We are amongst the first to present detailed trajectory curves to facilitate post-ACLR functional recovery tracking. We found a graded association between Month-6 Tegner scores and improvements in knee flexion range-of-motion, quadriceps strength, and knee self-efficacy over time. The trajectory curves and web-based application developed from this study could improve patient communication and education, potentially allowing patients to take charge of their rehabilitation.

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**Day 1: 8 March 2021****Time: 1230 – 1300hrs**

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**Oral Presentation (Narrative) – Beyond Hospital Walls****Presenting Author: Candy Chan Hiu Nam, Sengkang General Hospital****Makan Away Frailty - An Innovative Board Game to Empower Singapore Seniors with Nutrition Knowledge to Combat Frailty**

Frailty is a common geriatric syndrome that is preventable and reversible. Good nutrition is one of the key tactics to help combat frailty. Nutrition education delivered via one-way nutrition talks is common but not effective in engagement and empowerment. This traditional approach may not be sustainable, especially in the community setting due to cost, limited manpower, language barriers and diverse motivational and educational levels among seniors. Therefore, the Dietetics Department of Sengkang General Hospital has collaborated with the SingHealth Institute for Patient Safety & Quality since 2018 to design an innovative board game – Makan Away Frailty, targeted at the silver generation to empower them with nutrition knowledge to combat frailty. Makan Away Frailty is an educational board game for seniors to learn the healthy eating principles to combat frailty by incorporating four food groups from My Healthy Plate in their diet with the emphasis of having adequate protein and calcium intake. It comprises of 6 pieces of cardboard with food photos and 104 food cards with recommended serving and calcium content. The 3-phase Design Thinking methodology has been adopted to design the game tailoring to the needs and perspectives of the seniors and the staff from Senior Activity Centres (SACs). Understand Phase: Three ethnographic observations were done at 1 SAC, followed by interviews conducted before and after a nutrition talk with 16 seniors and 3 SAC staff. The key findings related to effective education included 1) peer learning, 2) short sessions 3) pictorial presentations due to fleeting memory, poor hearing, low vision and language barriers, 4) unawareness of habitual unhealthy eating pattern and 5) less confident with modern technologies. Explore Phase: The team held brainstorming sessions to identify potential improvement measures to address the gaps identified in the 'Understand Phase'. A non-digital game-based approach was identified to be effective in stimulating peer learning and social interactions. The Bloom's Taxonomy was applied to divide learning objectives into 2 levels: "remembering" via playing the game and "understanding" via food cards. Test Phase: A prototype was piloted in 3 SACs, followed by interviews with the seniors to validate the concept and design elements. Pre-and post-knowledge quizzes were also conducted to understand the effectiveness of the game in nutrition knowledge empowerment. Based on gathered feedback and quiz results, the prototype was enhanced with improved quality and size of food photos, increased number of common food options and additional trilingual nutritional information. The Design Thinking approach allowed us to develop a senior-centered educational game through the following key elements: visible photo size, food photos instead of graphics to allow real life association, minimal use of words and cognitively challenging experiences to build confidence. These identified elements in this board game allow the multi-racial seniors in Singapore to learn nutrition knowledge to combat frailty in an effective and enjoyable way. Makan Away Frailty is an innovative, engaging, cost-effective and sustainable board game which can be easily applied in the community setting to engage and empower seniors to combat frailty through playing.



**Presenting Author: Jenny Loo Hooi Yin, National University Hospital**The development of community audiology service in Singapore

Community-based audiology service is considered new to the Singapore healthcare landscape. Access to audiology service was traditionally limited to the public healthcare institutions (PHIs), with a mandatory visit to the Ear Nose Throat (ENT) specialists before seeing an audiologist. With the increasing demand for hearing intervention due to our growing aging population with hearing loss, it is inevitable that the wait time for audiology service in PHIs rises quickly. This creates a constant battle to the audiology departments in PHIs to keep patient wait time low, yet not exhausting the team and resources. To curb patient wait time, the only possible solution is to increase service accessibility at the community level. This presentation will share and discuss the development of community audiology service in Singapore in the past 5 years, from building mobile hearing clinic (MHC) to setting up satellite hearing clinic (SHC), championed by the audiology team from the National University Hospital (NUH). Unlike other allied health services, duplicating audiology service outside the hospital comes with hefty cost and unique challenges due to its soundproofing requirement. Hearing assessment requires precision of sound measurement at the ear level in a quiet room that meets international acoustical standard. Therefore, the conceptualisation of MHC in 2015 took a tremendous effort and expertise, by converting a 24-footer long container into a gigantic soundproof booth that is mounted on a truck chassis. Since the provision of MHC, it has benefited more than 12,000 patients island-wide. Although MHC serves the objective of providing high quality hearing assessment and management at the residents door steps, there are considerable non-audiological efforts involved. Securing a safe and spacious carpark, sourcing for electricity power supply from adjacent building, troubleshooting equipment at off-site without ITD support, are some examples that are not commonly encountered by audiologist working in a hospital. Learning a great deal from the operation of MHC over the past few years, the team ventured into a new hearing care delivery model in mid of 2020. The setting up of a SHC without a soundproof booth is a complete novelty. The implementation of hearing test in a non-soundproof booth is a collaborative effort with the NUS Audiology research team, which has enabled the provision of community-based audiology service more easily and cost saving. Although this non-soundproof testing method offers full potential for diagnostic and reliable test value, a subset of patients with specific ear conditions (e.g. impacted ear wax, ear discharge) may deem unsuitable and will require conventional testing method. In a nutshell, there are pros and cons of the different delivery models (MHC versus SHC) for a community-based audiology service in Singapore. Service provider needs to carefully access the population needs and the long term operational cost of each model to provide a sustainable healthcare system in Singapore.

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**Day 1: 8 March 2021****Time: 1230 – 1300hrs**

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**Oral Presentation (Narrative) – Future Ready Workforce****Presenting Author: Koh Sei Keng, Singapore General Hospital****Developing Pharmacists for a VUCA world**

The role of pharmacy and pharmacists in healthcare is evolving as technologies like artificial intelligence (AI) and virtual health drive disruptions and transformative changes. AI and machine learning will create new insights, while robotics and automation will change the way prescriptions are processed, dispensed and delivered. The role of telehealth and virtual healthcare will expand further. This fluid environment is commonly described as VUCA – volatile, uncertain, complex and ambiguous. As the pharmacy continues to use enabling technologies, pharmacists will need to reflect on their roles in the healthcare value chain. In this narrative, we share our journey to build a future ready workforce. In 2019, two separate HMDP visiting expert programmes were conducted to review the workforce development initiatives. The visiting experts engaged with various key stakeholders, performed situational analysis and provided recommendations for strategic planning. Through one of these programmes, the Development Framework for Pharmacists (DFP) was conceived by forming the continuum of competency from foundation to advanced practice. The DFP aimed at facilitating a systematic and harmonized progression to develop pharmacists of enhanced capability in eight key roles – care provider, collaborator, communicator, health advocate, leader, manager, educator and researcher-innovator. Through the DFP, the required competencies underpinning the development of the eight key roles were identified. The multiple roles will enable pharmacists to diversify by acquiring multiple skillsets. This approach allows pharmacists to build resilience and adaptability in the face of the VUCA world. To promote change, we need a vision, on top of developing skills, incentives, resources and action plans. We envisioned an adaptable workforce, with multiple roles and able to provide care wherever patients are. Pharmacists will continue to be recognized as the drug experts, advocate for health and wellbeing of residents, and care providers for patients with chronic or complex diseases. There would also be increasing roles with focus on mental health, promoting behavioral changes through health coaching and addressing the social determinants of health to improve care. The DFP was launched in May 2020 to articulate skill sets for development. Training resources such as the portfolio building and assessment workshops are ongoing to equip pharmacists with the basic skills to embark on the DFP. Stakeholders engagements are ongoing to gather buy-in and to co-create solutions for overcoming challenges faced. The pharmacy career track review will be conducted with key stakeholders' input to ensure alignment of the envisioned roles with appropriate resources allocation. Action plans would be developed upon weighting of priorities across levels. The implementation of DFP requires focused and continued stakeholder engagements with strong support by pharmacy leadership. A person-centric approach is critical to ensure sustainability of efforts towards achieving the objectives of the development framework. The importance of communication tools as sources of truths are key to ensure clarity of the vision and purpose. Finally, effective monitoring parameters needed to be put in place and communicated for tracking of progress.

**Presenting Author: Lim Hui Shan, Singapore Polytechnic****Online Simulation Clinic in Optometric Education during COVID-19 Pandemic**

The Singapore Polytechnic (SP) Diploma in Optometry (DOPT) course aims to produce professionally competent optometrists. The Singapore Polytechnic Optometry Centre (SPOC) is set up to provide the students with the real-world, and application-based training, through seeing patients while under the supervision of a lecturer. Due to COVID-19 pandemic, the circuit breaker measures were imposed from April to June 2020, and all lessons had to be held online. The biggest challenge faced was on how to provide clinical training for students virtually. The clinical training in SPOC was converted into online simulation clinic (OSC), aimed to provide similar training as SPOC through case studies. Case studies with clear learning outcomes were delivered over video conferencing platforms. During each session, a group of 6-8 students will work with one lecturer on a case over two weeks. The role of the lecturer is to facilitate and role-play as the patient. The students work together as one optometrist to see the patient, and they are assigned to one of the following roles: conduct history taking, develop possible diagnoses, identify significant findings, suggest further investigative tests, provide patient management plan and act as the scribe. At the end of each case, students were assigned a topic that is related to the case to research on, to enhance and deepen their learning, and the findings were presented in the following week. A total of 54 students rated 4.02 out of 5 for their overall experience with OSC. 89% of the students felt that OSC was well organized with clear objectives, 97% found the cases manageable and relevant to their work in future, 93% felt engaged during OSC, 96% enjoyed learning from peers during case discussion and benefited from the feedback from lecturers, and 83% found the post-OSC assignment to be beneficial for their learning. The student's performance on communication skills was compared between before implementation of OSC and after implementation of OSC. The students performed better after the implementation of OSC in history taking ( $p < 0.0001$ ) and patient management ( $p = 0.022$ ). The COVID-19 pandemic has led to the development of OSC, an innovative yet effective way to provide communication and problem-solving skills training virtually. The students also found the OSC experience to be very positive, and the activities were engaging, manageable and beneficial to learning. However, there is a need to explore alternative ways to provide hands-on clinical skills virtually. As clinical training in SPOC is a very resource-demanding and patient-dependent programme, OSC has shown the possibility to develop students' communication skills effectively without the need for extra resources and safely amid a pandemic. OSC can be incorporated into the existing clinical training programme at SPOC, which supports the training of hands-on clinical skills, to supplement the communication and problem-solving skills.

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**Day 1: 8 March 2021****Time: 1230 – 1300hrs**

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**Oral Presentation (Narrative) – Health Services Research****Presenting Author: Chong Ai Jia Letty, Singapore General Hospital**Discovering the Unknown; Radiographer Reject Rate Analysis

Radiographs that are rejected by the radiographer without being sent for reporting are called rejected images. The amount of rejected images produced by each radiographer is required to calculate individual radiographer's reject rate. Reject analysis helps guide the education and training of staff, influences department workflow, and reduces patient doses. Reject rate analysis (RRA) relies on the exported logs from the modality workstation, sorted out by the reasons for rejection and normalised by the total number of acquisitions made during the period. However, the modality workstations fail to capture radiographers' initials leading to a large amount of unknown data. This resulted in an incomplete and uncomprehensive RRA. The aim of the quality improvement (QI) project is to decrease the number of unknown data from Singapore General Hospital (SGH) general radiography modality workstations by 90% within 8 months. The root cause of the problem was analysed using the 5 Whys technique. The root cause was attributed to the radiography department not having the expertise to configure the system to gather information on unknown data. Fuji engineer was engaged to configure the workstations to allow the extracted log to contain examination details. A centralized excel spreadsheet using visual basic applications (VBA) was created and the link using IP addresses of the workstations were established. This allowed the data to be extracted remotely through the VBA spreadsheet. The spreadsheet was tested in SGH campus and subsequently extended to other off-campus imaging centres. The extracted raw data can be mapped with the Radiology Information System (RIS) to identify the unknown data, causing a 100% reduction in the number of unknown data seen across the workstations within SGH and other off-campus imaging centres. As data can be extracted remotely, it resulted in zero footsteps needed to extract the data. It also shortened the time taken to extract the data from one week to five minutes. This contributed to an estimated amount of \$20, 607.53 of manpower saving per annum. The ease of data extraction allows the audit process to be much smoother. The data extracted contains other useful information that can be further analyse and develop other training or education strategies for the radiographers' professional development. The framework showed considerable potential in long-term sustainability and can be implemented to other institutions. It can also be adopted by other vendors for the ease of data transfer and identification. The reduction of unknown data lead to an increased accuracy of the radiographers' RRA. This allows identification of training and learning gaps for the radiographers. Targeted training and education of radiographers can be planned to facilitate producing of radiological images of good diagnostic quality. This minimizes unnecessary radiation dose given to patient and value adds to the patient's diagnosis and care.

**Presenting Author: Benjamin Chow, Changi General Hospital**Time-motion analysis for productivity

Background: Changi General Hospital speech therapists (ST) were keen to examine the impact of the following factors on productivity: [1] Validity of referral and [2] actual clinical time utilization. Resolving the issue: A time motion study was embarked to determine the duration to complete specific tasks involved in case management. These tasks include both direct and indirect patient activities. Face to face (F2F) activities are interactions with patients during assessment and therapy. Non-F2F activities include resource preparation and documentation. Data was collected across 15 weeks from inpatient, outpatient and emergency department services. ST had to log each activity on an Excel template using their mobile phones. The data was analysed using data science coding language, R. The results were published on a dashboard, which was subsequently presented to the department. Findings including [1] validating referrals did not significantly affect productivity, contrary to the department's belief. [2] The median duration for F2F activities was a third of the time spent in managing cases. Patient charges may need to be reviewed to reflect this time spent. [3] A breakdown of non-F2F activity identified documentation as a modifiable factor, which could be streamlined to increase efficiency. Lessons learnt: Real time data collection is more accurate than retrospective data. It is more detailed than data binned into 30-minute intervals, which allows for accurate evaluation of time spent. Detailed data was also useful for exploratory data analysis. The collection of real time data was possible using the Excel template. The simplicity and availability of Microsoft Excel highlights the point that it is about selecting the most appropriate technology rather than the trendiest technology. Significance to the department: The project helped removed the negative perception of "time wastage" for inappropriate referrals as this was not shown to be of significance. It also justifies more accurate charging for a better reflection of ST's clinical time utilisation. Additionally, it resulted in streamlining of documentation. A time motion study allows for more accurate workload optimisation and appropriate resource allocation. Real time data entry allows for prediction of trends and more meaningful analysis of operations and workflow.



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**Day 1: 8 March 2021****Time: 1230 – 1300hrs**

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**Oral Presentation (Narrative) – Innovation & Digital Strategies****Presenting Author: Liew Yoke Fun Selina, Changi General Hospital****The Implementation of an Electronic Communication Board (E-board) to streamline workflow processes for breast imaging patients**

Effective communication across different imaging modalities and disciplines is paramount to ensure a streamlined workflow. At our breast imaging department, a prompt and accurate update of patient statuses and waiting time is essential to allow a smooth handover of patients with different imaging requirements. Our multi-disciplinary breast imaging team consists of radiologists, breast surgeons, radiographers, nurses, healthcare assistants and administrative staff. The work processes involve handling of scheduled requests, as well as ad hoc studies requested by the reporting radiologist. As such requests are unpredictable but yet time-sensitive, this complicates routine handling of patients' multiple scheduled appointments. Three main strategies were used to help navigate through the challenges. Firstly, patients were given a "Patient Updating Chit" (PUC) that could be updated whenever a procedure was added or completed. Secondly, a manual communication board in the form of a whiteboard was placed in the radiologists' reporting room, allowing for an overview of the patients' statuses. Thirdly, for additional requests, radiologists filled up a Request Sheet (RS) which would be passed to the radiographers by the healthcare assistant. However, the above-mentioned strategies brought about their own set of challenges. Patients often misplaced their PUCs, or a team member who couldn't leave his/her station would be unable to update the communication board promptly. The delay created confusion among team members. Moreover, the healthcare assistant had to walk back and forth to pass over the RS, on top of her duties of assisting patients in the waiting area. Due to frequent delays and miscommunication despite these efforts, patient complaints were common occurrences and these inadvertently created tension among team members. Eventually, our team came up with the idea of having an Electronic Communication Board (E-board) that could serve all goals of the three above-mentioned strategies with significantly less hiccups. Well thought-out categories, icons and colours were used to highlight important information quickly, and updating could be done remotely with ease. Additionally, our Radiological Information System (RIS) and Queue Management System (One-Queue) also play important roles in patient management. Our E-board enhances their roles as it allows input of important information which were not reflected in these systems. The initial platform for the E-board was on Google Chrome, which we later switched to our hospital internal network platform to heighten cyber security and connection stability. Only healthcare providers who were granted access to the E-board would have the rights to view and edit the document. The implementation of our E-board has greatly improved workflow efficiency and communication. All in all, it has streamlined patient management and elevated overall staff satisfaction. The combined effort of our team members in working towards the common goal of resolving challenges has also brought everyone closer together, igniting the team spirit in our breast imaging department.

**Presenting Author: Kek Tze Ling, National University Hospital****Transforming Audiological Care: From Clinic to Home**

The concept of telehealth has been established for years, but not until recently that it has gained much attention due to the global outbreak of COVID-19 pandemic. Many allied health services have incorporated telehealth as one of the viable options to ensure continual patient care; Audiology is one of them. Teleaudiology comes with its unique challenges that are not met in other allied health services, as its serviced population has hearing impairment. This paper will share 1) the transformation of hearing care services that are typically conducted behind the door of a sound proof room to the patient's home, 2) the benefits of teleaudiology to patients, and 3) professional learning points. The usual hearing care delivery model starts from a diagnostic hearing assessment in a sound proof room, to providing hearing intervention through amplification devices and aural rehabilitation (therapy). It is a procedural intensive clinical service that relies heavily on test equipment. Every session lasts about 60 to 90 minutes depending on the type of procedures. Typically hearing impaired patient's journey involves at least 5 clinical visits before the individual would comfortably be fitted with hearing aid (HA). Hence, the team carefully crafted out procedures (sessions) that can be done remotely through technology, with the aim to reduce patient's visit to hospital, yet maintaining the quality of care. One of the aforementioned procedures that is turned into a telehealth practice is consultation for hearing aid, or known as hearing aid evaluation (HAE). A traditional HAE session involves both counselling and technical hearing aid trial. The counselling part involves explanation on patient's hearing profile and its implication on communication, description on function and limitations of hearing devices. It is important for establishing patient's realistic expectation as well as the commitment required for successful hearing intervention. Hearing aid trial part involves the selection of suitable hearing aid models and on-the-spot trial. Majority of the patients would adopt hearing aids after the trial, but some might be reluctant to proceed due to some personal concerns or having to discuss with family members. With the implementation of tele-HAE, the counseling part is now conducted remotely at the convenience of patient's home, with family members joining the online meeting to better understand patient's hearing needs and care. Only patients who are keen for adopting hearing aids after the teleHAE session will be given an appointment in clinic for hearing aid trial. This process has helped to reduce patient wait time, by not subjecting every individual to go through the same process of 90min traditional HAE session. To further promote teleaudiology, patient's hearing aid package is delivered to their home with remote fine-tuning done through mobile phone apps, which conventionally has to be done in clinic. Teleaudiology has indeed given patients greater access and flexibility to manage their hearing needs. The success of teleaudiology requires much efforts in preparation for the session and a mindset change among the community of audiologists.

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**Day 1: 8 March 2021**

**Time: 1400 – 1500hrs**

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**Title: Our Vision for the Future Healthcare Landscape**

**Synopsis:**

As the healthcare landscape rapidly evolves, it is critical that we remain nimble and adaptive to the changes; keeping status quo is no longer an option. In this session, we will review how our care models, processes, technology and workforce have changed over the years, and how we envision them to be as we capitalise on opportunities and navigate challenges of the future.

**Ms Susan Niam**

Unleashing the Potential of Allied Health Professionals to Deliver Quality Care

Allied health professionals play a crucial role in healthcare. This presentation will discuss the current local Allied Health landscape and the strategies to ensure the delivery of quality services to achieve the optimal value for patients/clients throughout the entire spectrum of care in Singapore. This approach involves gaps analysis, redesign of care/processes/roles to achieve the envisaged models of care as well as holistic allied health education and capabilities.

**Adj A/Prof Camilla Wong**

Singapore Healthcare 2040 – The Pharmacy Chapter

Pharmacy has certainly come a long way since its humble beginnings 116 years ago. It has transformed alongside our evolving healthcare system to one that embraces cutting edge medicine and technology. Over the years, key pharmacy innovations have led to changes in our micro, meso and macro systems leading to high quality and safe delivery of services to patients. How we navigate and map out our journey with key destinations over the next 20 years will be crucial as we brave the challenges of an ageing tsunami with a shrinking population, rapid advancements in medicine, artificial intelligence, ballooning healthcare costs, and the injection of Generation A (alpha) into our workforce.



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**Day 1: 8 March 2021**

**Time: 1500 – 1545hrs**

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**Title: Value-Driven Care: The role of Allied Healthcare Professionals**

**Synopsis:**

As part of the Ministry of Health's "Three Beyonds", all Public Healthcare Institutions in Singapore have begun to ramp up their efforts towards Value-Driven Care (VDC). Popularised in Michael Porter's now landmark article in the 2013 issue of the Harvard Business Review, VDC (also known as Value-Based Healthcare) provides a holistic framework for the evaluation and improvement of patient care.

VDC adopts a patient-focused view of care, relying on both Clinical Outcomes and Cost (hence Value) metrics to provide timely and consistent feedback to all care providers, including Allied Healthcare Professionals.

In this webinar, we reflect on the current state of VDC and learn more about how we can all leverage VDC to enhance Value for our Patients.

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**Day 1: 8 March 2021****Time: 1615 – 1715hrs**

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**Title: Innovating for the future Allied Health Professional – CAPE****Synopsis:**

The Centre for Allied Health and Pharmacy Excellence (CAPE) was launched in May 2019 as a strategic platform to further innovations in Allied Health and Pharmacy professionals. We are part of a group of collaborating centres at the Centre for Healthcare Innovation (CHI), to advance workforce transformation and healthcare innovation. These include Centre for Asian Nursing Studies (CANS), Centre for Health Activation (CHA), Centre for Medical Technologies & Innovations (CMTi), and gAmes for heaLth InnoVAtions cEntre (ALIVE). Through CAPE, we hope to collaborate, co-learn and co-create with partners across the health-social sectors in the few identified key areas of strategic innovation priorities, namely community, trans-disciplinary and tech-enabled care via enablers such as research, information technology system designs, robotics, training and knowledge management.

In addition to the background of CAPE, this sharing will cover a few key initiatives successfully implemented in the strategic innovation priorities of CAPE resulting in workforce transformation, capabilities building and health-social integration. One of the key enablers to the projects implementation will be the availability of CAPE Funds targeted to support innovation projects relating to Community Care, Trans-disciplinary Care, Tech-enabled Care and Community Outreach and Engagement. Join us to explore cross-institutional collaborations to co-create new care models via innovation.

Lastly, knowledge management is a critical component to all innovation beginnings. Find out more about the newly launched CHI Learning & Development (CHILD) system, a knowledge management platform which serves as an open repository for healthcare innovation, improvement and productivity project reports, best practices and learning experiences.



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**Day 1: 8 March 2021**

**Time: 1715 – 1800hrs**

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**Title: Igniting, rekindling and stoking the passion in Allied Health**

**Synopsis:**

The AH workforce is a precious resource in the healthcare system. Their sense of meaning, mastery and morale are pivotal preconditions for quality and effective patient care. Igniting, rekindling and stoking the passion in Allied Health is a panel discussion that aims to address and discuss topics that would support AHPs to ignite and sustain their passion, purpose and pride in their work.





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**Day 2: 9 March 2021**

**Time: 0900 – 1015hrs**

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**Title: Transdisciplinary Working: A Goal for Allied Health**

**Synopsis:**

In modern healthcare there is much to be said as to how we should and could be operating as teams. The aim of this session is to explore in depth different ways of working as a team in healthcare. Specifically it looks at the concept of transdisciplinary practice and why this approach is different. It also looks at whether this approach is detrimental or enhancing to individual professions, and the benefit to patient care.

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**Day 2: 9 March 2021**

**Time: 1045 – 1145hrs**

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**Title: Preparing Allied Health for the 21st Century – Lessons from Victoria, Australia**

**Synopsis:**

Contemporary healthcare practice requires an Allied Health workforce that is appropriately skilled and credentialed to meet both the current demands and emerging challenges of the practice environment, whilst also ensuring the delivery of high quality and safe patient care and services.

Over the past decade, the Department of Health and Human Services - Victoria has undertaken a number of key policy initiatives and projects to support and strengthen the Allied Health workforce across health, aged care, disability, and primary care sectors. This work programme has been overseen by Victoria's Chief Allied Health Officer, and the Department's Manager of Allied Health Workforce.

In the following presentation, the current incumbents of these roles will provide an overview of two foundation work programmes specific to the Allied Health Workforce, providing case studies to demonstrate process implementation and outcomes - the *Allied Health Credentialing, Competency and Capability (CCC) framework* and the *Allied Health Assistant Supervision and Delegation framework*.

New horizons for Allied Health workforce within Victoria will also be discussed, specifically enhanced career pathways for Allied Health clinicians and expansion of Allied Health skill and capacity in the management of complex disability.

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**Day 2: 9 March 2021**

**Time: 1245 – 1345hrs**

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**Title: Patient Centric Care Across the Spectrum of Life**

**Ms Long Chey May**

Patient Centric Care – How can AHPs get there?

Speaker will define Patient Centric Care and share some key elements and examples of how it is done. She will get the audience to reflect and decide if it is a choice for healthcare professionals to make as we transform care. Are you ready for a patient partnership model of care and how can AHPs deliver patient centric care in the new normal?

**Ms Hayati Suaidi**

The Spark of Hope

A personal journey of a caregiver. The challenges, the hopes and the chance to pay it forward.

**Ms Tanuja Nair**

What Matters to Me – Patient Experience from a Child's POV

A hospital visit/ admission can be an overwhelming experience for children. Vulnerable and young patients can experience a sensory overload and this can give rise to feelings of fear and anxiety. Unlike adults, children may not be able to effectively process or express their feelings and thoughts. In KK Women's and Children's Hospital (KK Hospital), the CHAMPs team (Child Life, Art and Music Therapy Programmes) looks at supporting and advocating for the needs of our young patients so that their paediatric hospital experience might be more positive.

During this talk, participants will gain an overview of:

- A child's hospital experience
- KidsDREAM- A child-friendly e-learning initiative by CHAMPs

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**Day 2: 9 March 2021**

**Time: 1345 – 1530hrs**

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**Concurrent Session – AH Leadership**

**Synopsis:**

The term “Allied Health Professionals (AHP)” is commonly used today, but what it entails is still open to a lot of discussion. If we are to galvanise the various allied health professionals to work together and drive for strategic changes in healthcare, there must be strong leadership and unity forged from interprofessional collaborative and strategic partnerships within the AHP.

At the end of the session, you will

- Be aware of the AH leadership structure in Singapore compared with the international AHP community
- Understand the benefits of strong AH leadership to chart the future
- Discuss the capabilities and competencies needed for the AH leaders of the future

Speakers for this session:

1. Dr Martin Chadwick, Chief Allied Health Professions, MOH, New Zealand
2. Ms Susan Niam, Chief Allied Health Officer, MOH, Singapore
3. Prof Celia Tan, Senior Director (Special Projects), SingHealth
4. Dr Bernard Lim, Director, Leadership & Organisational Development, MOHH
5. Ms Esther Lim, Deputy Group Director, Allied Health, SingHealth (Moderator)

**Day 2: 9 March 2021**

**Time: 1345 – 1530hrs**

## **Concurrent Session – Future Ready Workforce**

*Jointly hosted by Centre for Allied Health and Pharmacy Excellence (CAPE) and SingHealth Group Allied Health*

### **Synopsis:**

The future of work involves reimagining the way work gets done, by who, where and what? Healthcare professionals will increasingly work in inter-disciplinary teams, alongside digitalisation and technological transformation. The future hospital is one without walls, where care follows the patient and is also responsible for the health and well-being of the population it serves, working in close collaboration with other health and social partners. Robotics and artificial intelligence solutions will automate some work, replace some traditional roles and augment human effort, challenging us to upskill across roles and settings.

### **Breakout sessions based on strategic innovation priorities:**

Healthcare will evolve from a facility-centric to a person-centric model; from episodes of care to relationships in care; from volume-based model to delivering what patients value. Our healthcare providers will also have to evolve and adapt to the rapidly changing landscape, focusing on community care transition, transdisciplinary care models and tech-enablement to be future ready.

Breakout topics:

#### **1. Community Care**

To successfully adapt to the new realities of population health management, how do we provide seamless delivery of relationship-based care beyond the hospital, in collaboration with the patient, family and community partners?

*Project presentation: Community Psychogeriatric Programme*

*Presenters:*

- *Dr Vanessa Mok, Programme Director, Community Psychogeriatric Programme, CGH*
- *Mr Joel Tan, Occupational Therapist, CGH*

*Facilitators*

- *Ms Karen Kwa, Head, Care & Counselling, TTSH*
- *Ms Teo Kai Ting, Assistant Director, Operations (Allied Health Services & Pharmacy), TTSH*

#### **2. Transdisciplinary Care**

To support new model of care, how do healthcare professionals move beyond discipline specific approach to deliver holistic care to improve patient experience and clinical outcomes?

*Project presentation: A Trans-Disciplinary Diabetes Care Model: The Clinical Diabetes Educator (CDE)*

*Presenters:*

- *Ms Melissa Ho, Senior Dietitian, TTSH*
- *Dr Lim Shu Fang, Senior Clinical Pharmacist, TTSH*

*Facilitators*

- *Ms Zenne T'ng, Assistant Centre Director, CAPE & Head, Speech Therapy, TTSH*
- *Dr Huang Wanping, Head, Psychology, TTSH*
- *Ms Gan Yi Ming, Assistant Director, Allied Health Service (Manpower), TTSH*



### 3. Tech-Enabled Care

To transform our health system and support new model of care, how do we leverage on digital and technology innovation so that our care can be anywhere and anytime?

*Project presentation: ROBotic assisted UltraSonography sysTem (ROBUST)*

*Presenters:*

- *Ms Rafidah Bte Abu Bakar, Senior Principal Radiographer, SGH*

*Facilitators*

- *Mr Khalid Anuar, Assistant Centre Director, CAPE & Head, Foot Care & Limb Design Centre, TTSH*
- *A/Prof Wee Seng Kwee, Senior Principal Physiotherapist, TTSH*

Panel discussion:

Discussion will be focused on workforce skill sets and capabilities relating back to the strategic priorities shared.



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**Day 2: 9 March 2021****Time: 1345 – 1530hrs**

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**Concurrent Session – Workforce Optimisation****Synopsis:**

The Allied Health or AHPs are a diverse group of professionals with great potential to influence the care and support services they provide to patients. Their range of skills spanning and impacting people's lives and organizations make them ideally placed to lead and support transformative change. It is therefore vital that this workforce be optimised to its best effect to address the emerging challenges facing the healthcare system, namely the ageing and growing population. Workforce optimization tools as seen practiced in NHS (National Health Service) England, offer examples of streamlining AHP practice through identifying work quality indicators, activating staff support, job planning and productivity measures, engaging the workforce with a vision for the future. Back home, some institutions have embarked on such a journey, with an ultimate aim to achieve better clinical outcomes, balanced resources and staff retention. The purpose of this segment is to inform and inspire the contribution that AHPs can make directly in supporting the health delivery services through new productivity initiatives, benefitting not only the institutions but also individual AHPs.

Speakers for this session:

1. Adj A/Prof Camilla Wong, Director, Allied Health, Sengkang General Hospital
2. Ms Goh Siew Li, Head, Speech Language Therapy Service, KK Women's and Children's Hospital
3. Ms Cherie Tong, Head, Dietetics, Sengkang General Hospital

**Adj A/Prof Camilla Wong****AHP Workforce Reimagined: Initiatives for Job Optimization and Satisfaction**

In this session, we would like to help you rethink the role of AHPs and how optimizing the potential of this workforce can improve healthcare delivery. We want to elaborate the advantages and challenges of the optimization process within this diverse workforce. We invite attendees to consider and embrace new strategies for the development of job planning and measureable outcomes across multiple AHPs to quantify productivity and efficiency. Discussion will draw experience from the principles and values held by NHS but tailoring to the local context in hope to assist AHPs to embrace changes and face the emerging challenges. Predictably, optimizing AHP workforce forms part of the solution to offset the increasingly costly healthcare and difficult reality of staff retention.

Learning Objectives:

- Briefly share NHS' workforce improvement framework for allied health professionals.
- Help attendees understand what CHtC (Clinical Hours to Contact ratio) is.
- Demonstrate how CHtC can be localised in SingHealth.
- Articulate what a comprehensive AHP department dashboard might look like (the Sweet spot diagram).
- Share the SingHealth Group Allied Health Framework on developing outcome measures.

**Ms Goh Siew Li****Releasing Time for Speech & Language Therapy Care through Job Planning at KK Women's and Children's Hospital**

The Speech & Language Therapy Service in KK Women's and Children's Hospital sought to increase the patient contact time through job planning as demand for services increases. Incoming referrals were reviewed and the high priority identified to release therapists' time to care. Non-patient contact tasks such as staff and policy administration, clinical service management and education, and continuous professional development were also reviewed, streamlined, optimised and allocated. Subsequently, more time were made available from therapists' clinical hours to care for patients in other prioritised outpatient clinics. Therapists were also engaged on the principles of electronic (e)-roster design, which was implemented in 2019. The e-roster ensures and monitors that optimal time was allocated for important non-patient contact activities and high priority patient services. The e-roster facilitated efficient rostering and provided transparency of patient load allocation to all therapists.

To assess the outcomes of these changes, the monthly clinical hours to contact ratio (CHtC) was reviewed. Staff activity was also more closely reviewed via a single week time study in March 2019 to gain greater clarity on staff time utilization. Comparisons using a series of Mann Whitney tests revealed that improvement in 2019 was trending in significance compared to 2016 ( $p = 0.076$ ). We have achieved 6.84% reduction in CHtC in 2019 compared with 2016. An estimate of 1916 clinical hours were released from therapists to care for our patients in 2019. Time-motion study revealed the percentages of time spent by therapists. Whilst there was marginal improvement in amount of time for patient contact within the Service, staff shared numerous concerns about unintended consequences including a compromise in patient outcomes and staff fatigue. Staff also revealed inefficient work processes impeding on work efficiency. Patient outcomes and staff work satisfaction surveys are other important indices that should be considered in the process of improving efficiency in future studies. Careful evaluation of the job is paramount to releasing more time of patient contact so that we can better plan for future manpower needs while continuing to bring quality and value patients.

**Learning Objectives:**

- Understand the background and problem faced by Speech Therapists (ST)
- Learn about ST's components in job planning and the strategy for improvement
- Discover the use of CHtC (Clinical Hours to Contact ratio) as a measurement of change
- Review the outcome of using job planning to optimise work efficiency and other success factors
- Future considerations

**Ms Cherie Tong****Journey to Develop and Utilise a Department Dashboard: Into the Unknown?**

Do you know how well your department is doing and what to improve on? Are you struggling to develop a dashboard to help to understand your department workload? SKH Dietetics will share with you their journey of developing and utilizing their department dashboard: from departure, thunderstorm, discovery, adventure to sunrise.

**Learning Objectives:**

- Share the approach of how they went about developing the variables for the dashboard
- Share the dashboard
- Share how they developed targets for the dashboard
- How they are able to utilise the information from the dashboard

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**Day 2: 9 March 2021****Time: 1345 – 1530hrs**

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**Concurrent Session – Innovation & Digital Strategies****Synopsis:**

Innovation is a necessity for healthcare organisations to reinvent ourselves. As the Industrial 4.0 revolution is underway, AHPs must not stagnate ourselves on how we have delivered care in the previous decades, lest we become obsolete and fail to meet the growing demands for AHP services.

The notion of continuous improvement is indeed extendable to continuous innovation. On the other hand, we need to achieve a quantum leap in delivering AHP care and services by leveraging on digital strategies so that the value impact we bring to patients is maximised.

You will be hearing from some of our AHPs who have dabbled in digitalising their services, using various technologies, to make their services more accessible and delivering greater value to the growing pool of patients' care needs. Bearing in mind that this tract will not provide a blueprint for you to implement strategies wholesale in your department, rather you will glean precious learning points on how to contextualise various digital solutions available in the market for you to reinvent your service and care delivery.

At the end of the session, you will be able to identify some strategies that you might adopt to transform the way you have delivered care. Most importantly, we want you to adopt an open mindset such that you are not averse to the digital transformation of AHP services.

Speakers for this session:

1. Ms Lydea Gn, Senior Speech Therapist, KK Women's and Children's Hospital
2. Ms Chen Mee Kuan, Pharmacist, KK Women's and Children's Hospital
3. Ms Marabelle Heng, Principal Podiatrist, Singapore General Hospital
4. Ms Christine Ong, Senior Principal Dietitian, KK Women's and Children's Hospital
5. Dr Jasper Tong, Deputy Group Director, Allied Health, SingHealth (Moderator)

**Ms Lydea Gn**Telehealth for Speech Language Therapy Service

Speech Language Therapy Service in KK Women's and Children's Hospital started exploring telehealth services in 2016. Since the first telehealth session in early 2017, we have provided over 120 telehealth sessions for more than 50 patients. We started with two clinical domains and have now expanded to 6 domains, including fluency, language, articulation and oromotor therapy. Despite facing internet separation in 2018 and various other hurdles over the years, we constantly strived to overcome them and pushed new frontiers to establish telehealth as an alternative service delivery for our patients.

**Ms Chen Mee Kuan**Utilization of Video-conferencing for Pediatric Eczema Follow-up by Pharmacist

In KKH, following routine pharmacist-led individualized counselling for pediatric patients newly diagnosed with mild to moderate eczema, trained dermatology pharmacists conduct follow-up sessions with these patients and their caregivers to ensure continuity of care. For better access to the service, these follow-up sessions are conducted via telehealth. Utilization of video-conferencing enables the trained pharmacists to assess the patients' current skin condition objectively, and provide timely recommendations on the skincare management. In conjunction with a collaborative prescribing agreement with the dermatologists, the trained

pharmacists can also provide optimization and/or resupply of medications to these patients. For patients with well-controlled eczema and whose caregivers are confident of continuing the management, the trained pharmacists can discharge them to primary care physicians with an open-dated dermatologist appointment.

**Ms Marabelle Heng****Harnessing the Usefulness of Digital Technology, Artificial Intelligence (AI) & Data Capture**

Technology is able to help clinicians improve assessment accuracy and reduce manual tasks. In your work setting, are there manual tasks that can be digitised? Are there tasks that are based on an assessor's clinical experience? Are there human errors & variability in certain clinical tests? Digital technology paves the way for sorting and storing data. Artificial intelligence is able to give feedback on large amount of data, which traditionally requires manual sorting and statistical analyses in parts. In this talk, the speaker will share her perspectives and experience on how to harness digital technology into the clinical space.

**Ms Christine Ong****Development and Trial of AI Metabolic Calculator Chatbot App for Inborn Errors of Metabolism (IEM)**

Dietary management is the cornerstone of treatment for patients with IEM requiring protein restricted diets. As such, these patients require more medical, nursing and dietetics inputs than most other dietetic conditions. Since 2016, parents who are more IT-savvy have been provided with an Excel spread sheet containing a standard database of foods and special metabolic products, as well as the management guidelines for their child's condition, thus empowering them to adjust their child's intake independently. Unfortunately, not all parents are able to adjust their child's diet independently, resulting in patients being on an unnecessarily restricted diet until their next dietetics consultation. Hence, we are testing a hypothesis that an AI driven interactive calculator chatbot App will be easier and more intuitive for caregivers to use than the Excel spreadsheet. The team's journey in developing the AI metabolic calculator chatbot App, and the results of a pilot trial on 3 caregivers will be shared.

**Day 2: 9 March 2021**

**Time: 1345 – 1530hrs**

## **Concurrent Session – Beat the Burn**

### **Synopsis:**

Allied Health Professionals are just as susceptible to burnout and compassion fatigue, much like our colleagues in the medical and nursing field. As such it has been increasingly important for us to recognise its symptoms, learn and apply the recommended strategies to prevent burnout in ourselves and our fellow colleagues.

This workshop consists of two parts: a short lecture and a breakout session.

The short lecture will outline what burnout is in the allied health context:

- how you may recognise signs and symptoms of burnout in yourself and those around you
- causes of burnout and how you may address them
- resources to help yourself and your colleagues

The breakout session will have you work with 10 to 15 other participants:

- learn and experience strategies to manage your stress, build resilience and prevent burnout that may be applicable for you to apply in your own lives.
- experience the activities during the workshop and share their experiences with one another

Speakers for this session:

1. Dr Kinjal Doshi, Principal Clinical Psychologist, SGH & Vice Chair, College of Allied Health
2. Ms Yeoh Ting Ting, Specialist Pharmacist, NCCS & Vice Chair, College of Allied Health
3. Mr John Tan, Principal Physiotherapist, SGH & Vice Chair, College of Allied Health
4. Ms Haier Diana Binte Hashim, TRaCS Counsellor, CGH

Facilitators for the session:

1. Dr Sylvia Mun, Deputy Director, Allied Health, KKH & Chair, College of Allied Health
2. A/Prof Clement Yan, Senior Principal Physiotherapist, SKH & Deputy Chair, College of Allied Health
3. A/Prof Sharon Wong, Senior Manager, Radiation Oncology, NCCS & Deputy Chair, College of Allied Health
4. Ms Cheryl Lim, Senior Principal Embryologist, KKH & Vice Chair, College of Allied Health
5. Mr Chong Choon Ming, Principal Radiographer, CGH & Vice Chair, College of Allied Health
6. Ms Koh Sei Keng, Principal Clinical Pharmacist, SGH & Vice Chair, College of Allied Health
7. Mr Lim Teong Guan, Senior Principal Clinical Pharmacist, SGH & Vice Chair, College of Allied Health
8. Mr Maximillian Chen Ruyang, Psychologist, SKH
9. Ms Pearlyn Lee Peiling, Art Therapist, KKH

**Day 2: 9 March 2021**

**Time: 1600 – 1700hrs**

## **Title: Supporting the Empowerment of Older Adults in the Community**

### **Synopsis:**

“Empowerment’ refers to the process by which people gain control over the factors and decisions that shape their lives. It is the process by which they increase their assets and attributes and build capacities to gain access, partner, network and/or have a voice, in order to gain control.”- World Health Organisation.

Supporting empowerment in older adults in the community means building capacity in them to become active partners of their own care through education and training support. Through the sharing by the various speakers from the different fields (physiotherapy, sport science, dietetics, and social work), it will enlighten us on how the underpinning values such as autonomy, respect, strength, involvement, co-creation is being considered while each initiative is being planned and executed. It takes collaborative efforts of various stakeholders to make ageing in place possible. It definitely takes a “village” for the supporting efforts in the empowerment journey.

Speakers for this session:

1. Ms Yong Limin, Senior Principal Physiotherapist, MOH Holdings
2. Mr Steven Siew, Manager, Health Screening and Management, Health Promotion Board
3. Mrs Magdalin Cheong, Deputy Director & Head, Dietetic & Food Services, Changi General Hospital
4. Ms Wang Yu Hsuan, Director, Montfort Care

### **Ms Yong Limin & Mr Steven Siew**

#### Rolling Good Times – A Safe Falling Programme?

This novel programme aims to help seniors improve their strength, balance and flexibility, as well as equip them with basic safe falling strategies to minimise fall-related injuries. This programme was developed in collaboration with the People’s Association, Ministry of Health and Singapore Physiotherapy Association.

### **Mrs Magdalin Cheong**

#### Nutrition intervention in the community and going the extra mile

The discussion will include what nutrition initiatives can be implemented to encourage and improve dietary intake of older adults with potential nutritional insufficiency or loss of appetite, how these initiatives are provided, how other healthcare professionals and stakeholders in the community are engaged to ensure a multi-disciplinary approach for sustainable empowerment for holistic care and support.

### **Ms Wang Yu Hsuan**

#### More than a Bath

“Good health, good mind, good family, good friends and good community lead to good living” is the tagline of Montfortcare Goodlife! “More than a bath” is a holistic approach that the agency takes to empower the older adults including homebound seniors, age with dignity in the community.



## E-POSTER LISTING

### SCIENTIFIC TRACK:

#### Beyond Hospital Walls

- 019 Community Gardening: Well-Being, and Resilience
- 030 Occupations of community dwelling older adults in Singapore
- 044 Preference Level in Social Activities among Children Aged 6 to 12 Years Old in Malaysia
- 062 Partnering Community Nurses & Pharmacists in Medication Management in the Community
- 067 The Experience of Sudden Vision Loss: Narratives of a Cancer Patient

#### Future Ready Workforce

- 020 Promoting Evidence-Based Practice in Allied Health: Toward a cluster-wide educational approach
- 025 Evaluation of multidisciplinary training in Bangladesh
- 028 Anew Hire Experience
- 039 A Systemic Approach to Preparedness of Social Workers' in the Face of Pandemics
- 052 Does timing matter? The impact of compact versus paced learning in a specialised tertiary hospital pre-registration pharmacist training course
- 057 Social-Distancing at the Workplace and its Impact on Allied Health Professionals in Vulnerable Households
- 061 Therapists' perceptions on the use of mobile phone newsletters and quizzes for Evidence-based Practice knowledge acquisition
- 090 Structured In-house Training Program to Enhance Pharmacy Technicians'(PTs) Drug Knowledge & Dispensing Skills
- 093 Mental Health of AHPs during COVID-19 Social Distancing Measures
- 095 Mentoring in Palliative Medicine in the Time of COVID-19
- 124 Towards zero waste in Pharmacy: Challenges and Opportunities in Singapore

## Health Services Research

- 003 The Role of Occupational Therapists in Palliative Care and the Impact of Culture on Occupational Engagement
- 004 Anxiety Change Expectancy in Primary Care: Predictive Potential of Illness Perception and Symptom Severity
- 005 A Retrospective Study Comparing Asthma Control in Paediatric Patients on Combination Inhaled Corticosteroid/Long-Acting Beta-Agonist Therapy Following Two Different Step-Down Approaches
- 007 Understanding value-based health care (VBHC) in occupational therapy in Singapore: An appreciative inquiry exploration of the patients' and caregivers' perspectives
- 009 Diabetes distress and self-management in primary care in Singapore: Explorations through illness perception
- 010 Clinical Profile of Patients Seen in Singapore Outpatient Rehabilitation Center for Vestibular Rehabilitation
- 011 Review of Documentation of Pharmaceutical Care (PC) Activities by Inpatient Pharmacists in Changi General Hospital
- 013 Impact of cessation of outpatient physical rehabilitation services during COVID-19's Circuit Breaker period – An analysis of the service receiver's perspectives in Singapore
- 015 Dosage Effect of Individual Music Therapy on Whole-Person Care in Adult Inpatient Rehabilitation
- 017 Treatment outcomes of a routine-based approach for children with developmental delay: a preliminary study.
- 018 Using conversation analysis to understand barriers and facilitators in conversations involving bilingual persons with Traumatic Brain Injury: A shift from impairment-based to participation-based approach.
- 021 Parents' perception of a pilot self-regulation group intervention for Kindergarten 2 children
- 023 The impact of music therapy on pain and anxiety in patients with gynaecological cancer undergoing complex intracavitary brachytherapy
- 024 Early Intervention for Functional Outcomes of Childhood Cancer in Singapore: A pilot study
- 033 Relationship Between Screen Time to Ocular Surface Signs and Symptoms from Standard Patient Evaluation of Eye Dryness (SPEED) Questionnaire Among Young Adults: A Preliminary Results
- 035 Empowering caregivers: A positioning poster for burns patients and their family
- 040 Facilitative Interaction Styles Demonstrated by Parents of Children with Autism Spectrum Disorder

- 041 Psycho educating families on illness management and obtaining their support are vital components in the care of patients with mental health issues
- 043 The Level of Preference of Recreational Activities among Primary School Students
- 045 Improving Primary Health Care through Case Management Strategies
- 046 The Level of Preference in Skill-Based Activities among Children Aged 6 to 12 Years Old in Malaysia
- 049 Rx-less Medication Refills
- 051 A Descriptive Pilot Study on the Use of the Falls Risk for Older People in the Community (FROP-Com) Assessment Tool in a Palliative Daycare Setting
- 054 ICU delirium: A systematic review of psychometric properties of assessment tools
- 056 Effectiveness of Ward Activities in Enhancing Patients' Wellness
- 064 Prevalence of malnutrition and associations in elderly patients aged 85 and above in primary care setting
- 069 A pilot study to determine the efficiency of an algorithm-based calculation of Periodic Automatic Replacement (PAR) level in managing medication inventory in hospital pharmacy
- 072 Use of Failure Mode and Effect Analysis (FMEA) to reduce risk of errors in medication delivery service in outpatient oncology pharmacy
- 073 For Medical Social Workers (MSW) and Social Work Associates (SWA) to be more equipped and confident in hygiene preparedness when conducting home visits or escorts.
- 076 Identifying Socioeconomic Factors Associated with Hepatitis C Virus (HCV) Treatment Initiation amongst Patients Who Sought Financial Assistance at the Medical Social Services Department at Changi General Hospital
- 079 Descriptive profile of pre-dialysis patients – an evaluation of interdisciplinary care in nutritional management of CKD
- 080 The Use of Augmentative and Alternative Communication by Children with Complex Communication Needs in Malaysia
- 081 To evaluate the correlation between macular, retinal nerve fiber, foveal and choroidal thickness in young adult Singaporean of Malay and Chinese descent.
- 084 Give Intravenous Bolus Morphine Overdose a BRAKE
- 085 Time course and risk factors for urinary incontinence one-year post-delivery
- 088 Enhancing Patient Safety by Reducing Prescription Errors in Bukit Merah Polyclinic
- 089 The association between pre-operative nutritional status and post-amputation clinical outcomes is questionable

- 091 Management of Unused Medications in Primary Care Patients - Challenges and Opportunities
- 092 Effects of upper limb casting on an adolescent with cerebral palsy: A case study
- 094 A Rapid Review on the Adherence to Evidence-Based Medical Therapy in Peripheral Artery Disease Patients
- 099 Single-Sided Deafness and Asymmetrical Hearing Loss: Cochlear Implant or Bone Conduction Implant?
- 102 Use of Healthcare Failure Mode Effect Analysis (HFMEA) to improve Automatic Tablet Dispensing and Packaging System (ATDPS) Work Process
- 103 Malnutrition amongst patients with acute hip fracture, is it here in Singapore?
- 104 Nutrition Support During Prehabilitation for Geriatric Surgical Patients – Are We Doing Enough?
- 106 Physiotherapists and physical activity in Singapore: knowledge, clinical practice and personal habits - a cross-sectional survey
- 108 Perceptions of a Parent Education Workshop for caregivers of children with feeding difficulties
- 110 Evaluation of Brucella Inactivation Protocol for of Matrix-Assisted Laser Desorption Ionization-Time of Flight Mass Spectrometry based identification using biosafe proxy microorganisms
- 111 Medication Training Program for Single Elderly: Collaboration between Occupational Therapists and Pharmacists
- 112 Emergency Department Clinicians' Perception of an Electronic Radiographer Commenting System in Singapore: Quality, Clinical Impact and User Satisfaction
- 115 Team Eat Safe - Improving consistency of diet textures and improving patient safety
- 117 An evaluation of rehabilitation outcomes for discharged patients from an inpatient psychiatric rehabilitation ward
- 118 Effects of Extracorporeal Shockwave Therapy on Pain and Disability in Individuals with Chronic Lateral Epicondylalgia: A Systematic Review and Meta-Analysis
- 119 Cross-cultural Translation and Psychometric Assessment of the Malay language of the Neck Disability Index Questionnaire in Singapore
- 121 Patient satisfaction with Outpatient Physiotherapy Services in Singapore
- 122 Medication Waste Management: Challenges and Opportunities in Singapore
- 123 A Drug Use Evaluation of Cyclin-Dependent Kinase 4/6 (CDK4/6) Inhibitors in Metastatic Breast Cancer Patients at National Cancer Centre Singapore (NCCS)

- 125 Medical Nutrition Reimbursement in Singapore: Who are the Patients Receiving MediFund Assistance? An Audit of Clinical Outcomes and Issues Pertaining to Reimbursement in a Public Hospital in Singapore.

## Innovation & Digital Strategies

- 006 Reducing the radiation dose to patient in portable X-ray by applying an AI enhancement algorithm
- 012 Virtual Reality Competency Training and Assessment Tool for Processing of Prescriptions and Medication Orders – Pharmacy Staff and Trainees' Perceptions
- 022 Achieving Excellence Through A Paperless Workflow
- 027 Validation of the NUS boothless audiometry protocol
- 034 Enhancing Pharmacy Services through Medication Delivery
- 037 Digitalisation of Ordering Platforms for Medication Delivery Service
- 042 Are You Still Listening to Me? Therapeutic Relationship in Tele-Video Conferencing Psychotherapy
- 053 Development of a low-cost, 3D printed tool for assessing different aspects of hand dexterity
- 055 Patients' Perceptions and Attitude Towards Tele-Dietetics in Primary Healthcare in Singapore
- 063 Telepsychology Deployment during Circuit Breaker in Singapore: A comparative evaluation of treatment effectiveness
- 065 User acceptability of monitoring technology in socially isolated elderly in Singapore
- 070 Identifying barriers to and facilitators of home medication delivery service by patient and caregivers
- 071 Acceptance of telemedicine by cancer patients in an ambulatory care setting
- 074 Comparison of grading outcome between Ophthalmologists and trained technicians using multi-imaging modalities in the Retinal Observation Clinic – New model of care
- 077 Integrating telehealth to facilitate audiological management
- 087 Achieving High Accuracy in Blood Products Ordering With Technology Enhancements
- 096 A Pilot study to validate AMTAS in a Specialist Outpatient Clinic at a public hospital
- 105 Game-based learning in MR safety
- 120 Assessing the usability of a guided home assessment application for home visits



## NARRATIVE TRACK:

### Beyond Hospital Walls

- N005 Building global partnerships: Occupational therapists' experiences in capacity building for special education practitioners
- N006 Collaborative Eyecare: Bringing holistic Eyecare into the Community
- N010 Wagga Book Project - Wagga Learns to Cool Down
- N014 Equipping and Partnering Volunteers through the Neighbours for Active Living Health-Social Integration Programme
- N016 Beyond Hospital Walls - The Road Less Travelled
- N022 KKH Psychosocial and Supportive Care Programme (PSCP)
- N033 Optometrist-Led Functional Screening in the Community
- N038 Eyecare All Around
- N054 Community Health Visitors - A Bridge for KIDS by using a transdisciplinary approach to deliver social-health integrated Care
- N058 Implementation of Primary Care Led Social Prescribing at SingHealth Polyclinics
- N069 Building Bridges: Engaging community speech therapists for continuity of care and collaboration
- N071 First Collaboration with the Community - An Allied Health experience
- N073 A New Podiatry Model of Care in the Community: Educating Community Care Providers to Provide Basic Foot Care and Podiatry Telehealth Video-consultation (VC)

### Future Ready Workforce

- N001 Eye Care for Empowered Community: A Pilot Programme in Singapore
- N004 A lean registration
- N015 ARTpreciate: A novel art as therapy approach to build a future-ready, adaptive and resilient healthcare workforce.
- N021 Extension of Psychiatric Patients' Appointment due to the COVID-19 Pandemic: A Case Manager's Perspective
- N026 Radiographer-led Fluoroscopy Procedures
- N027 Continuous improvement in training program to achieve desired competency level in staff



- N028 Continuing Clinical Education in COVID-19: Experience of the Speech Language Therapy Service, KKH.
- N040 COVID-19 pandemic: Perspectives from a Pulmonary Function Laboratory in Singapore
- N043 Drowning in data, thirsty for knowledge: Upscaling Changi General Hospital Speech Therapists' understanding of data science
- N045 Pilot Study of Work-based Learning in Optometric Education
- N047 SingHealth Polyclinic Staff Support Programme: psycho-emotional support for staff during COVID-19
- N053 Redesigning the role of dietetic technicians in a new care model to manage malnutrition
- N056 Entrustable Professional Activities in Pharmacy Training
- N061 Evolving Role of Social Workers in Early Intervention Settings - Installation of a Functional Outcome Measurement System in Singapore

## Health Services Research

- N013 Low Vision Integrated Model: From Acute to Community
- N017 Safe Dispensing of Medications to Migrant Workers
- N018 Misplacement of the Cochlear Implant Electrodes in the Superior Semi-Circular Canal with No Clinical Symptoms: A Case Study
- N025 Leveraging on Technology to Empower and Educate Patients On Prescribed Medications
- N030 Preliminary Observations on the Suitability of Online Individual Therapy for Adolescents
- N035 Pilot screening process of occupational therapy neuro-developmental outpatient referrals
- N059 Playing catch up: Avoiding potential errors in implantation of intraocular lens and roles of biometry checkers
- N062 Enhancing patient experience in psychosexual rehabilitation
- N063 Innovating Current Practice with latest technology for new hearing care models
- N068 To Improve Patient's Visit Experience at SHP Labs

## Innovation & Digital Strategies

- N002 Teletherapy for Clients with Hearing Loss From Age 0 to 99 years
- N008 Medical Social Workers providing psycho-emotional support beyond SingHealth patients: National CARE Hotline – COVID-19

- N009 The Singapore General Hospital Experience with Clinus® TPN Management System and Pinnacle® Macro- and Micro Compounder
- N019 Physiotherapy follow-up after cardiac events: Video consultation (VC) as an alternative to centre-based session
- N020 Order Reconciliation Manager (ORM): Improving patient safety and efficiency of medication reconciliation through the development and application of an electronic integration tool
- N023 To Improve Awareness of MSW Services and their Accessibility to Needy Patients
- N032 Teletherapy for Patients with Hearing Loss: Enhancing Accessibility, Changing Care and Igniting Creativity
- N034 Electronic Controlled Drug (CD) prescribing: Improving safety and efficiency in the acute hospital setting
- N036 Establishing a fast-access multidisciplinary diabetic foot clinic in Singapore: the DREAM workflow and 2-year pilot outcomes.
- N042 Pre-recorded videos of laboratory processes for student e-learning: a new initiative
- N044 Active Learning through a Game Format: Implementation of an Innovative Nutrition Board Game in Diabetes Training for Healthcare Professionals
- N048 Integrating telehealth by redefining the role of clinic-based Occupational Therapy during COVID-19
- N049 Our tele-nutrition journey to support continuity of dietetic care
- N050 Thought Bubbles Therapy Cards: An Innovative Approach to Working with Thoughts and Feelings
- N052 Improving Dietitian Productivity through Stratified Levels of Care
- N057 Telepractice: Training and coaching of the early intervention professionals in Singapore during COVID-19
- N060 Novel Methods to Minimize Risk of Infection During Developmental and Psychological Assessment Tools: Looking Beyond COVID-19
- N064 Developing an Occupational Therapy Telemedicine Video Consultation Service during COVID-19 for paediatric outpatients
- N065 Rapid adoption of video-consult services for rehabilitation services during COVID-19 – Provider and patient perspectives
- N066 Re-designing Discharge Medicine Counselling For Obstetrics Patients
- N067 Use of available free mobile application to track progress of discharge medication preparation at pharmacy
- N070 Training of Speech Language Student Clinicians in Telerehabilitation: An Impact of COVID-19 Pandemic

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