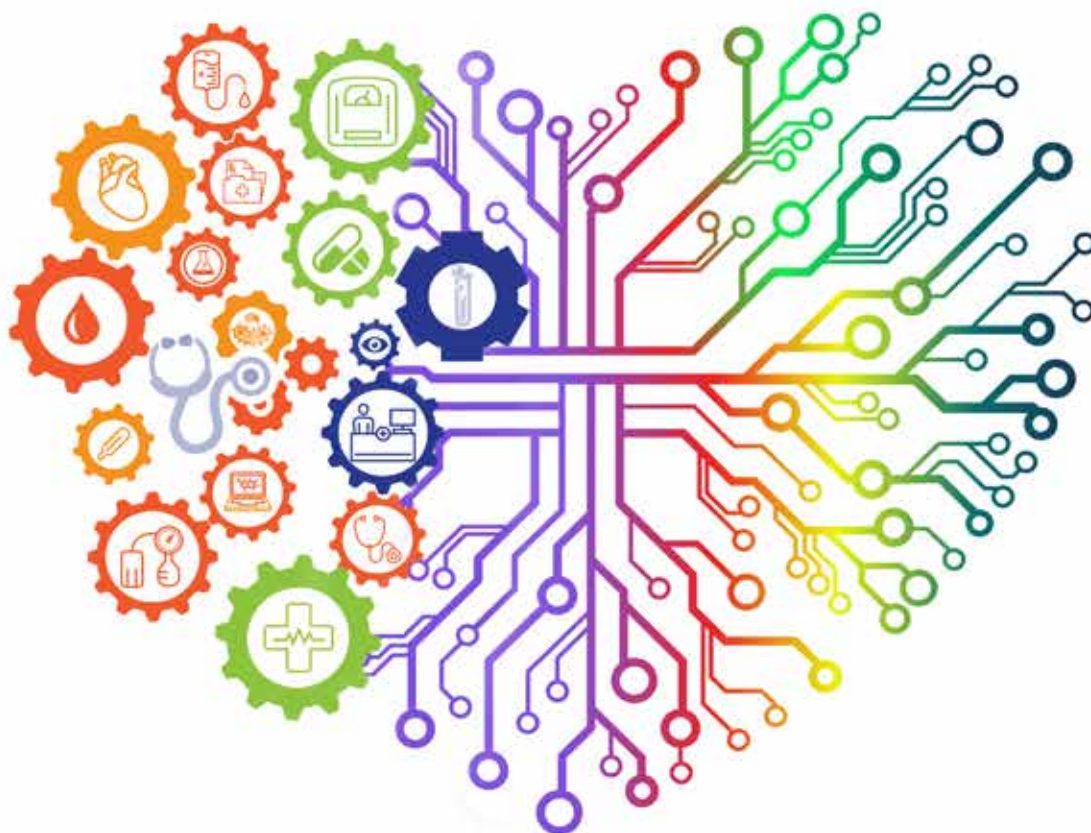
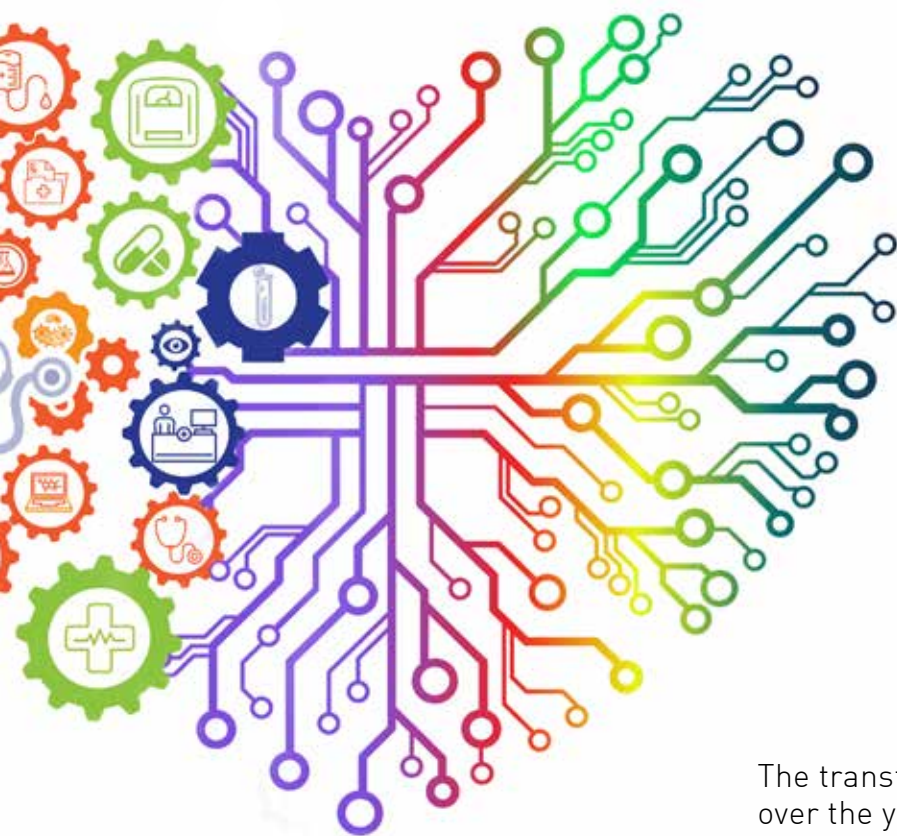




TRANSFORMATION

Shaping the Future of Primary Care

Annual Report FY2018



The transformation of primary healthcare over the years has been catalysed by the ever-changing healthcare ecosystem, spurred in part by technology and innovation.

In line with these changes, the National Healthcare Group Polyclinics (NHGP) continues to reinvent itself by keeping pace and leading the transformation of the primary healthcare sector.

The cover of NHGP's FY2018 Annual Report, hence, depicts cogwheels transforming into electronic circuits, representing NHGP's passion to deliver patient-centred quality primary healthcare through the adoption of intelligent technologies and innovative solutions.

The cogwheels and electronic circuits form a powerful symbol of healthcare — the heart, which is both a vital organ and where care and empathy reside.



OUR VISION

To be the leading health promoting institution that helps advance Family Medicine and transform primary healthcare in Singapore.

OUR MISSION

We will improve health and reduce illness through patient-centred quality primary healthcare that is accessible, seamless, comprehensive, appropriate and cost-effective in an environment of continuous learning and relevant research.

OUR VALUES

Integrity

We are committed to the highest standards of ethical conduct.

Respect

We treat everyone with honesty, decency and fairness.

Compassion

Our paramount concern is the welfare and well-being of our fellow human beings. We sympathise with those struck with illness and suffering and will do our best to help alleviate their condition.

Collegiality

We nurture success by promoting collaboration, participation and trust between individuals and other healthcare organisations, within an environment of sharing and mutual respect.

Professionalism

We are committed to being the best in what we do and achieving the best possible outcome for our patients.

Social Responsibility

We contribute positively to the well-being of the community.



CONTENTS

04

GROUP CEO'S MESSAGE

06

CEO'S MESSAGE

08

NHGP SENIOR
MANAGEMENT

10

CHAPTER 1
STRENGTHENING
PRIMARY CARE CAPACITY

22

CHAPTER 2
ENHANCING
POPULATION HEALTH

34

CHAPTER 3
INVESTING IN
RESEARCH & EDUCATION

52

CHAPTER 4
INNOVATING FOR
BETTER CARE

58

CHAPTER 5
DEVELOPING
OUR PEOPLE

68

APPENDICES

75

SNAPSHOTS OF
PATIENTS ATTENDANCE
AND WORKLOAD
IN FY2018

GROUP CEO'S MESSAGE



“At the Committee of Supply Debate in March 2019, Minister for Health Mr Gan Kim Yong commended the success of NHGP's teamlet care model, and noted that the other polyclinic clusters will also be rolling out team-based care models.”

Much has been said about Singapore's rapidly ageing population and its accompanying challenges, such as the ever-growing demand for healthcare services, escalating costs, and an acute manpower shortage.

In the face of these challenges, the National Healthcare Group (NHG) has identified 'Three Waves' as the main drivers of healthcare costs and utilisation, namely **Frailty, Chronic Diseases, and Poor Lifestyle Habits**. These 'Three Waves' have

been an impetus for our care transformation, as we recognise that healthcare can no longer afford to remain fragmented, facility-centric, doctor-based and illness-centred. Instead, a systemic reform was key to shift the way we deliver care to become integrated, patient-centric, relationship-based and wellness-centred. It was with this in mind that NHG established the 'River of Life' framework, which focuses on preventive care and helping everyone live well at every stage of life.

SUPPORTING THE TRANSFORMATION OF PRIMARY CARE

At the heart of NHG's transformative efforts is primary care. It anchors care in the community, and brings care closer to patients' homes through greater integration and coordination with tertiary, community, mental and social care. With the aim of improving the health of the population in the Central region, the National Healthcare Group Polyclinics (NHGP) has seen breakthroughs in the following areas in the past year, which you will be able to read within the pages of this Annual Report.

Living Well — As part of moving care upstream, NHGP has been actively integrating health promotion and patient activation into its model of care. For example, NHGP systematically stratifies patients' health risks, and guides them towards suitable health screenings or fitness programmes in the community to help prevent or delay the onset of chronic diseases.

Living with Illness — As the first point of contact for managing individuals with chronic diseases, NHGP's teamlet care model is another transformative effort, which had led to greater continuity of care, and improved health outcomes for patients. At the Committee of Supply Debate in March 2019, Minister for Health Mr Gan Kim Yong commended the success of NHGP's teamlet care model, and noted that the other polyclinic clusters will also be rolling out team-based care models. Also, with the introduction of the Primary Care Network (PCN) scheme by NHG in 2017, NHGP and our hospitals have engaged private General Practitioner (GP) clinics to form the Central-North PCN to deliver holistic care through multi-disciplinary teams.

Leaving Well — In order to address patients' end-of-life care needs, NHGP has also begun initiating conversations on Advance Care Planning. This brings greater accessibility and convenience for patients and their family members, allowing them to discuss and complete their end-of-life plans at an early stage, in the community.

THE FUTURE AHEAD

It is clear that the primary care ecosystem has been underpinned by a strong spirit of cooperation and knowledge-sharing in the past year. In the coming years, I look forward to NHGP continuing to work closely with and leveraging key enablers within and beyond NHG to improve the population health of the Central region of Singapore.

The achievements for the year as well as the road ahead would not have been possible without the invaluable guidance and support extended to us. I would hence like to thank our Chairman, Madam Kay Kuok, and the Board of Directors for their astute leadership and support throughout the years. I also wish to thank the Ministry of Health for its direction as we navigate the dynamic healthcare landscape. Lastly, my heartfelt thanks to Associate Professor Chong Phui-Nah, CEO of NHGP & Primary Care, the management team, and all staff for their vision, hard work and dedication in bringing NHGP to greater heights.

Professor Philip Choo
Group Chief Executive Officer
National Healthcare Group

CEO'S MESSAGE



Our journey to shape the future of primary care is far from over. In the year ahead, NHGP will continue its transformative journey and advance Family Medicine to achieve a world-class relationship-based primary care ecosystem.

In response to the increasing prevalence of chronic diseases and Singapore's ageing population, and in line with the National Healthcare Group's (NHG) 'River of Life' framework, the National Healthcare Group Polyclinics (NHGP) continues to pursue innovative and scalable ways to improve the accessibility, comprehensiveness and coordination of care it provides. To this end, NHGP's primary care transformation has seen various infrastructure developments and technological enhancements.

EXPANDING PRIMARY CARE CAPACITY

To cater to the growing demand for healthcare services, NHGP has redeveloped its existing polyclinics and will be managing new polyclinics to better serve the population. In June and November 2018, NHGP celebrated the official openings of the redeveloped Ang Mo Kio and Yishun Polyclinics. Looking ahead, four more polyclinics will be developed by NHGP in Sembawang, Kallang, Khatib and Serangoon.

To boost our primary care capacity, NHGP has collaborated with General Practitioners (GPs) to bring care closer to patients' homes. Since April 2018, NHGP has been growing its Central-North Primary Care Network, and now has more than 40 GPs in this network who are supported by nurses and care facilitators, allowing patients to receive holistic and coordinated care for their chronic conditions.

EMBRACING TECHNOLOGY IN PRIMARY CARE

Technology and digitalisation have played an increasingly important role in NHGP's journey towards shaping the future of primary care. In the past year, enhancements to our systems were made to ensure patients enjoy hassle-free visits to our polyclinics. For instance, our self-checkout kiosks have been enhanced to enable booking of future appointments. This one-stop convenience of making payment and concurrently booking follow-up appointments saves time and improves patients' overall experience.

In addition, patients now have the flexibility to update their particulars at the self-registration kiosks, which will be updated concurrently in the patient management system. These improvements are more than just mere process automations. While they may save time for patients, these improvements underpin NHGP's commitment to create the best possible experience for patients, increase productivity, and achieve sustainability in the long run.

CELEBRATING EXCELLENCE

FY2018 also saw NHGP celebrating many milestones and achievements. For example, our efforts of embarking on and sustaining job redesign to improve service delivery saw us winning the Excellence Award in the Talent Development Category at the Asian Hospital Management Awards (AHMA) in September 2018.

Additionally, the Nephrology Evaluation Management and Optimisation (NEMO) programme, a collaboration between NHGP and the National University Health System, was awarded the ExCEL Innovation Project Award under the Public Sector Transformation Awards (PST) in July 2018.

Apart from our clinical duties, NHGP is proud to have played a part in training the next generation of doctors. Some of our Family Physicians who have mentored the next generation of family physicians were recognised for their contributions by the College of Family Physicians Singapore (CFPS) in May 2019.

LOOKING AHEAD

Our journey to shape the future of primary care is far from over. In the year ahead, NHGP will continue its transformative journey and advance Family Medicine to achieve a world-class relationship-based primary care ecosystem.

How far we have come and how far we will go would not be possible without the staunch support of various parties. Therefore, on behalf of the management team, I would like to convey my appreciation to NHG's Board and the Ministry of Health for the confidence and support, which have enabled us to achieve what we have thus far. I would also like to say "thank you" and extend my heartfelt appreciation to NHGP's senior management members and all staff for their contributions and commitment towards our collective mission of transforming primary care.

Associate Professor Chong Phui-Nah
Chief Executive Officer
National Healthcare Group Polyclinics
& Primary Care

NHGP SENIOR MANAGEMENT



From left:

- Dr Simon Lee**
Chief Operating Officer and
Chief Clinical Informatics
Officer
- Ms Chen Yee Chui**
Chief Nurse, Nursing Services
- Dr Karen Ng**
Director, Clinical Services
- Mr David Kok**
Director, Finance
- Associate Professor
Chong Phui-Nah**
Chief Executive Officer,
NHGP and Primary Care
- Mr Shawn Phua**
Director, Human Resources

From left:

- Dr Tung Yew Cheong**
Director, Quality and
Patient Safety
- Dr Gowri Doraisamy**
Director, Care Integration
- Dr Wee Wei Keong**
Director, Health Promotion
and Preventive Care
- Mr Donald Wai**
Director, Facility Development
and Planning Office
- Ms Noraizah Zainal Abidin**
Deputy Director,
Corporate Communications
- Ms Jaclyn Fam**
Deputy Director,
Corporate Planning



From left:

- Dr David Ng**
Head, Toa Payoh Polyclinic
- Dr Christopher Chong**
Head, Ang Mo Kio Polyclinic
- Dr Kong Jing Wen**
Head, Hougang Polyclinic
- Dr Evan Sim**
Head, Woodlands Polyclinic
- Dr Kwan Pek Yee**
Head, Yishun Polyclinic
- Dr Jonathan Ting**
Head, Geylang Polyclinic

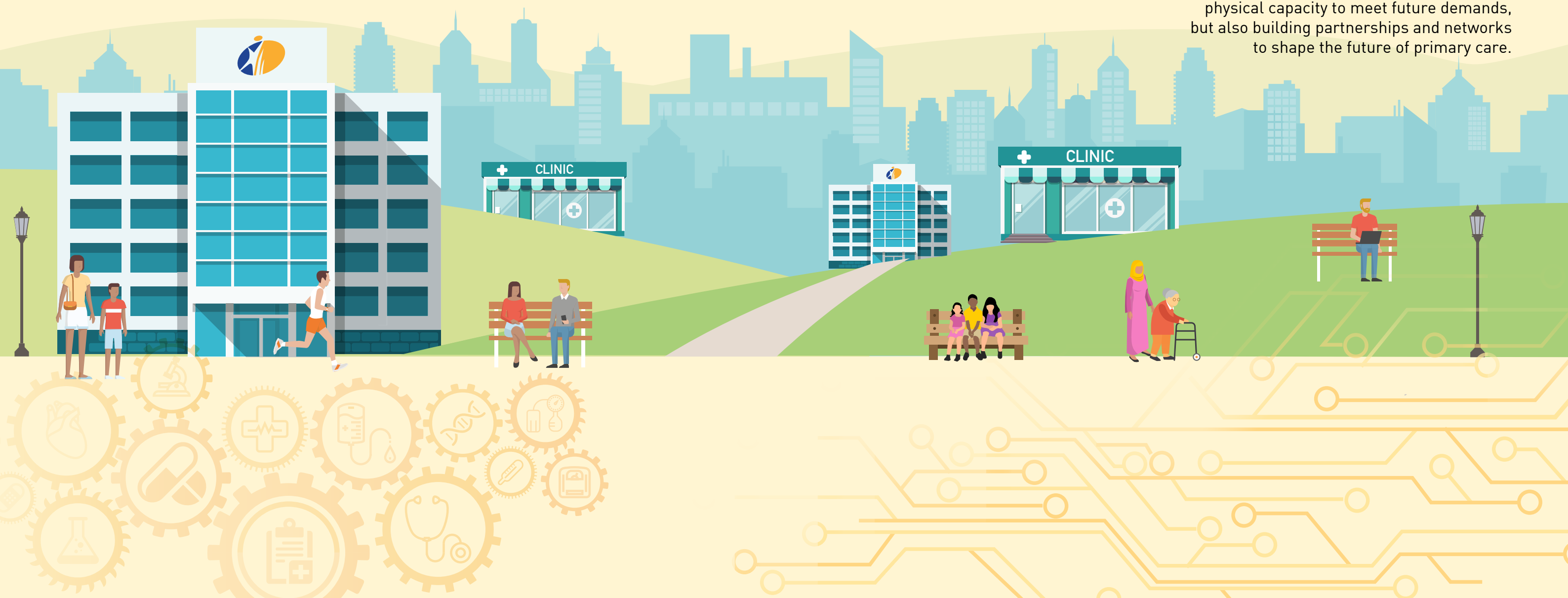


From left:

- Dr Lim Chee Kong**
Deputy Director,
Clinical Services (Manpower)
- Ms Chan Soo Chung**
Executive Director,
NHG Pharmacy
- Dr Irwin Chung**
Director, Primary Care Academy
- Dr Tang Wern Ee**
Head, Clinical Research Unit
- Ms Lim Soh Har**
Executive Director,
NHG Diagnostics
- Mr Kenneth Low**
Director, Dental Services
- Dr Darren Seah**
Director, Family Medicine
Development

CHAPTER 1 STRENGTHENING PRIMARY CARE CAPACITY

As the first line of care in the community, Primary Care is becoming even more crucial as Singapore's population ages, and the prevalence of chronic disease rises. To this end, the National Healthcare Group Polyclinics is not just shoring up physical capacity to meet future demands, but also building partnerships and networks to shape the future of primary care.



BOOSTING CAPACITY

Capacity enhancements enable NHGP to broaden and improve its services to meet growing primary care needs.



The Ang Mo Kio Polyclinic team with Prime Minister Lee and 'The Tree of Life' quilt piece at the official opening of redeveloped Ang Mo Kio Polyclinic.

REDEVELOPMENT OF ANG MO KIO POLYCLINIC

Ang Mo Kio Polyclinic relocated to a newer and bigger building on 29 January 2018. The move to a larger premises would better serve the needs of a growing and greying population in Ang Mo Kio and its neighbouring estates. Standing six storeys tall, the polyclinic added new services such as physiotherapy and podiatry to provide holistic care to its patients.



Guest-of-Honour Prime Minister Lee (third from the left) officiating the ceremony with Senior Minister of State for Health Dr Lam (second from the left) and representatives from NHG and NHGP.



NHGP's Gallery of Memories, located at Ang Mo Kio Polyclinic Level 2.



Senior citizens from Yio Chu Kang Community Club Zone 3 Residents' Committee performed a social dance item for guests.



Ang Mo Kio Polyclinic is the first polyclinic in Singapore with a wheelchair tilter for dental services. The tilter allows wheelchair users to receive treatment directly from their wheelchairs.

On 30 June 2018, redeveloped Ang Mo Kio Polyclinic celebrated its official opening. Guest-of-Honour Prime Minister Lee Hsien Loong and Senior Minister of State for Health Dr Lam Pin Min graced the event. To mark the redeveloped clinic's official opening, a colourful quilt, jointly created by patients, partners and staff of Ang Mo Kio Polyclinic titled 'The Tree of Life', was unveiled by Prime Minister Lee and Dr Lam, together with Madam Kay Kuok, Chairman of National Healthcare Group (NHG), and Professor Philip Choo, Group CEO of NHG. The quilt is on permanent display at the community plaza at Ang Mo Kio Polyclinic.

Memories. The Gallery displays healthcare artefacts dating as far back as the 1940s, and captures the 200-year history of primary care in Singapore. It also showcases NHGP's efforts to innovate over the years, including the digitisation of patients' medical records, the deployment of tele-health services in primary care, and the transformation of its care delivery model.

Ang Mo Kio Polyclinic has played an integral part in the healthcare landscape of the community since it opened in 1981. We will continue to look at innovative ways to deliver patient-centred care to the community in Ang Mo Kio through the provision of comprehensive services as well as technological improvements to provide a holistic and seamless patient experience.

— Dr Christopher Chong, Family Physician, Associate Consultant and Head of Ang Mo Kio Polyclinic

In conjunction with the official opening of redeveloped Ang Mo Kio Polyclinic, NHGP also opened the Gallery of



Mr Shanmugam with Yishun Polyclinic staff during the official opening of redeveloped Yishun Polyclinic.

REDEVELOPMENT OF YISHUN POLYCLINIC

NHGP opened the doors of its redeveloped seven-storey Yishun Polyclinic on 2 July 2018 with an expanded Women's & Children's Clinic and newly introduced physiotherapy service. Yishun Polyclinic was the second NHG Polyclinic after Ang Mo Kio Polyclinic to be redeveloped and officially opened in 2018.

On 3 November 2018, Yishun Polyclinic celebrated its 20th anniversary in conjunction with its official opening. The event was graced by Guest-of-Honour Mr K Shanmugam, Minister for Home Affairs and Law, and Member of Parliament for Nee Soon GRC.



Guest-of-Honour Mr Shanmugam (centre) officiating the ceremony with advisers of Nee Soon GRC and representatives from NHG and NHGP.



Mr Shanmugam, advisers of Nee Soon GRC, and representatives from MOH, NHG and NHGP with the 'Seasons of Life' art piece put together by NHGP staff, patients and community partners.

A mosaic art piece, titled 'Seasons of Life', was unveiled by Minister Shanmugam, advisers of Nee Soon GRC, and senior management representatives from NHG and NHGP.

The collaborative piece was put together by NHGP staff, patients and community partners using stained glass and commonly used medical items, such as vaccination bottle caps and medicine spoons.

“This art piece celebrates the vibrancy and adaptability of our healthcare ecosystem to support our patients and the community in their different seasons of life.”

— Dr Kwan Pek Yee, Family Physician, Principal Staff and Head of Yishun Polyclinic



Deputy Head of Yishun Polyclinic Dr Lim Ziliang (front row, left) and Head of Yishun Polyclinic Dr Kwan Pek Yee (front row, second from left) leading the clinic tour during the official opening.



Advisers of Sembawang GRC, Grassroots Organisations and representatives from NHGP, SportSG, NEA, NParks and MOH at the groundbreaking ceremony of Bukit Canberra.

EXPANSION OF POLYCLINIC NETWORK

To further strengthen primary care for Singapore's Central region so that patients can be managed in the community and closer to home, the Ministry of Health (MOH) announced the building of new polyclinics.

The new polyclinics to be managed by NHGP will be located in Sembawang, Kallang, Khatib and Serangoon.

Sembawang Polyclinic will be co-located within Bukit Canberra, an upcoming integrated sport and community hub. This will be NHG's first polyclinic sited within a hub. When ready, Bukit Canberra will be jointly managed by Sport Singapore (SportSG), the National Environment Agency (NEA), the National Parks Board (NParks), and MOH.



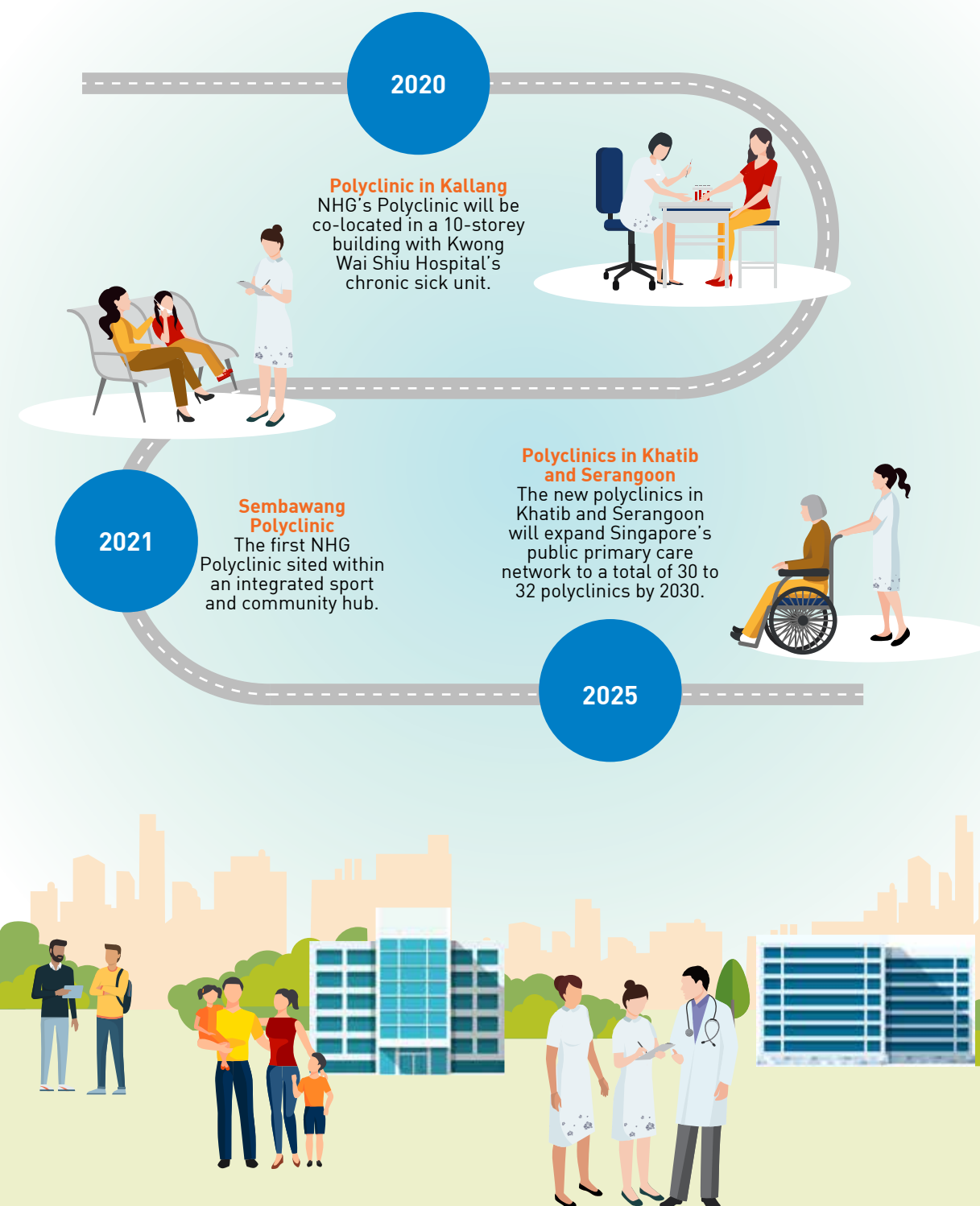
NHGP's booth at the family carnival offered tips on healthy eating.

On 1 July 2018, at a family carnival organised by SportSG, Mr Ong Ye Kung, Minister for Education and Adviser to Sembawang GRC

Grassroots Organisations, officiated the groundbreaking ceremony of Bukit Canberra with advisers of Sembawang GRC.

STRENGTHENING PRIMARY CARE FOR THE CENTRAL REGION OF SINGAPORE

EXPANDING OUR PRIMARY CARE CAPACITY



FORGING PARTNERSHIPS

With the goal of raising the level of holistic care for better health outcomes, NHGP works closely with General Practitioners and Family Medicine Clinics to bring care closer to home.

Piloted by the Ministry of Health (MOH) in 2012, Primary Care Networks (PCNs) bring care closer to patients’ homes. Under this model, networks of General Practitioners (GPs) are supported by nurses and care facilitators. Additionally, patients are able to use the ancillary and support services provided by the PCN. This way, patients can receive holistic and coordinated care for their chronic conditions.

NHGP’s primary care ecosystem operates as a ‘Hub-and-Spoke’ model. NHGP acts as the Primary Care Hub, and the GP Networks (also termed Primary Care Network or PCN) and Family Medicine Clinics (FMCs) are the various spokes. This model increases the overall primary care capacity in the Central region of Singapore, and supports the nation’s long-term healthcare needs.

“The aim of the CN-PCN is to drive better chronic disease management, support earlier intervention and reduce complications.”

— Dr Gowri Doraisamy, Family Physician, Senior Consultant, and Director of Care Integration at NHGP

CENTRAL-NORTH PRIMARY CARE NETWORK GENERAL PRACTITIONERS (AS OF 31 MARCH 2019)			
DOCTOR (LICENSED CLINIC MANAGER)	CLINIC NAME	DOCTOR (LICENSED CLINIC MANAGER)	CLINIC NAME
Ang Mo Kio		Toa Payoh	
Tan Chin Beng Melvyn	AMK Family Clinic	Low Mun Heng Gerard	L & L Family Medicine Clinic
Lim Kim Show	Life Family Clinic	Lee Kong How	E Medical Clinic & Surgery
Raymond Ong	Ong Medical Clinic	Goh Sze Yi	Prudence Family Clinic
Geylang		Goh Bee Teng	B.T. Goh Family Clinic & Surgery
James Cheong		Woodlands	
Chee Weng Sun	C3 Family Clinic @ Aljunied Crescent	Mark Low Chee Wah	Doctors Clinic & Surgery
Hougang		Tan Wen-Hui	SATA Commhealth Woodlands
Eng Soo Kiang	Japan Clinic And Surgery	Mok Boon Rui	Pinnacle Family Clinic (Woodlands)
Loh Wai Leong Jeffrey	Unity Family Medicine Clinic	Nah Kwang Meng	Dr Nah & Lee Family Clinic
Lok Ying Fang	The Family Physician Clinic	Seow En Hao	EH Medical
Sia Chong Ming	Family Care Medical Centre	Sorinder Singh	Woodlands Medical Centre
Ng Suat Tong	Sia & Yeo Hougang Clinic	Goh Chiew Kai	Central 24-Hr Clinic (Woodlands)
Adele Seet Wei Min	Tai Seng Clinic	Heng Kuo Leng John	First Medical Clinic & Surgery
Siew Boon Liong Glenn	Daily Medical Centre	Loh Foo Keong Jeffrey	Lian Clinic
Eugene Ung	Comfort Clinic & Surgery	Yishun	
Cheong Wei Ling	Meridian Medical & Dental Centre	Gideon Hong Eu Gee	Greenlink Medical Clinic
	Sterling Clinic & Surgery	Ong Chee Meng Robert	Central 24-Hr Clinic (Yishun)
		Tan Buay Imm	Sincere Medical & Dental Clinic



■ CN-PCN’s first visionary exercise with its GP members discussing their vision for CN-PCN.

CENTRAL-NORTH
PRIMARY CARE NETWORK

Since April 2018, NHG has been growing its CN-PCN. The network has 30 GPs as at 31 March 2019. As part of this CN-PCN, GPs are supported by ancillary services such as nurse counselling, and diabetic eye and foot screenings, which may not be readily available in their current clinic setting. Suitable NHGP patients with stable hypertension, lipid disorders, diabetes or asthma, and who are also Community Health Assist Scheme (CHAS) holders, can be transferred to CN-PCN GPs so that they can manage their conditions closer to their homes.

The CN-PCN builds on the GPs’ existing infrastructure and established doctor-patient relationships. This strategic collaboration leverages the skill sets and patient engagement of GPs with leadership and clinical governance provided by NHGP.

Beyond offering shared support services to GPs, one of the CN-PCN’s vital roles is to ensure that GPs remain connected to the larger healthcare landscape.

Partner GPs are kept informed of the latest evidence-based clinical guidelines through quarterly Continuing Medical Education

(CME) talks, and are eligible to attend courses at NHGP’s Primary Care Academy.

On 17 November 2018, 24 GPs attended a CME talk covering the management of heart failure in primary care and the latest guidelines on hypertension. The GPs also did a visioning exercise on how they envisioned CN-PCN would be in three to five years’ time, and the roles they hope to play.

A GP retreat was also held on 2 March 2019 to look at ways to overcome the key challenges identified during the visioning exercise.

These efforts to engage GPs in the CN-PCN will go a long way towards improving the way healthcare is delivered. With primary care as the foundation of Singapore's healthcare system, the CN-PCN will serve as a key pillar in NHGP's efforts to bring patient-focused care closer to home.

Since its launch, several programmes have been added to further enhance the reach and impact of the CN-PCN. One of these is to improve diabetes care by making diabetic retinal photography and diabetic foot screening more accessible to patients.

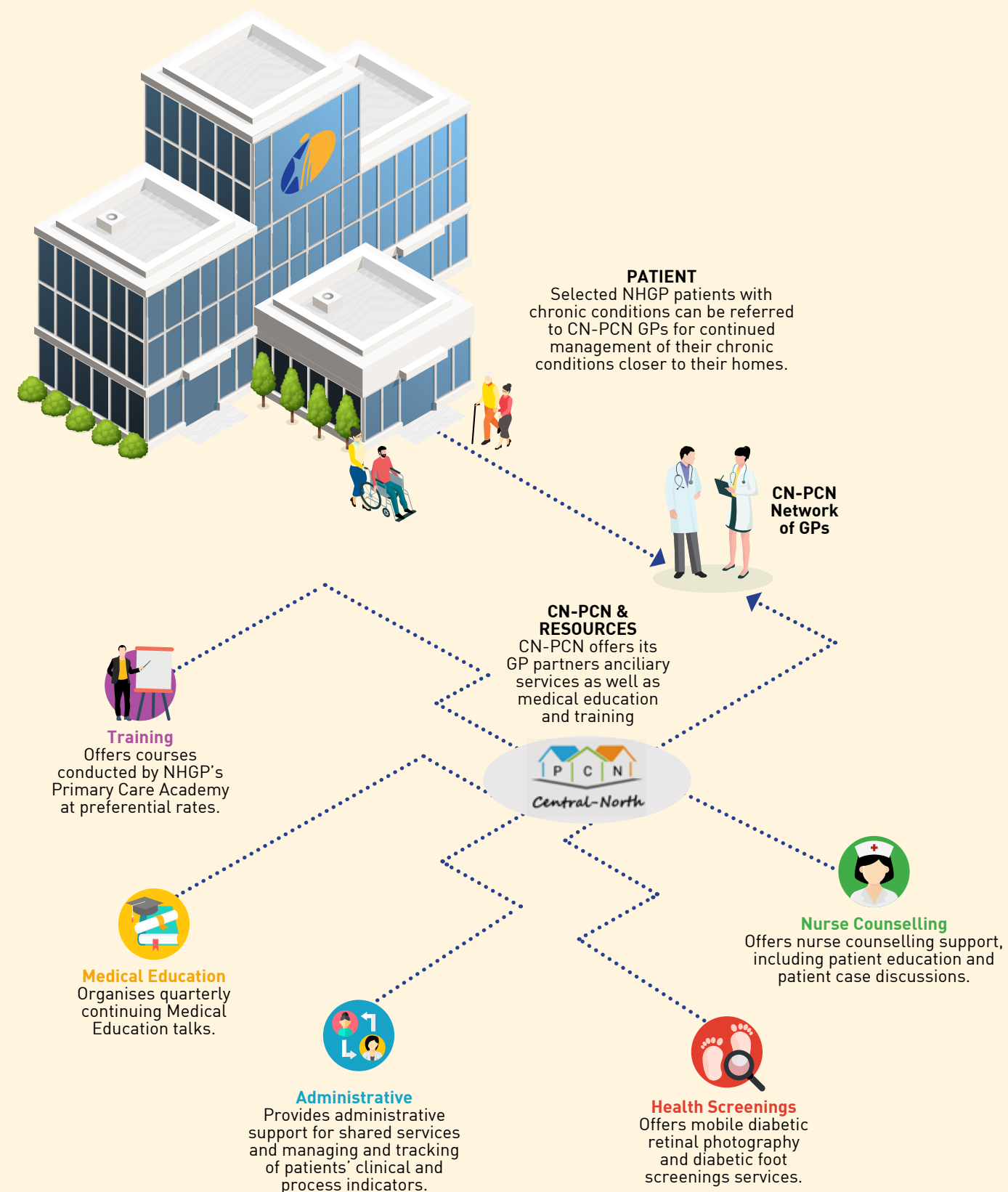


■ CN-PCN's GP members in a discussion on how the vision for CN-PCN could be fine-tuned.



■ One of the activities held for CN-PCN's GPs was a Lunar New Year Lo Hei Luncheon and CME Talk on 16 February 2019.

CENTRAL-NORTH PRIMARY CARE NETWORK FRAMEWORK



Under CN-PCN, NHG extends shared services and resources to GPs to support them in delivering appropriate levels of right-sited care to patients.

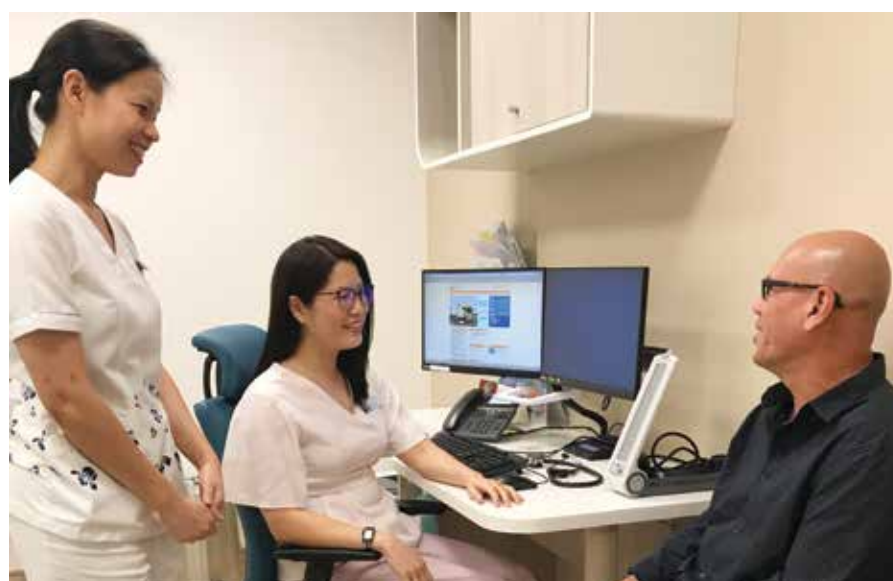
CHAPTER 2 ENHANCING POPULATION HEALTH

The National Healthcare Group Polyclinics (NHGP) is committed to creating and catalysing a health-promoting ecosystem for patients and the community. With the goal of preventing or delaying the onset of chronic diseases, NHGP has designed health promotion into healthcare delivery, to promote self-empowerment of our patients and better population health in the future.



EMPOWERING AND ACTIVATING PATIENTS

With the goal of empowering and activating patients, NHGP has various initiatives to equip patients with the knowledge, skills and confidence to take ownership of their health outcomes.



control, and a higher proportion went for diabetic foot and eye screenings, as well as cancer screenings. Also, fewer patients made visits to the Emergency Department for diabetes- and hypertension-related problems. The study also showed that the teamlet care model resulted in improved care for patients with diabetes that could lead to reduced healthcare resource use.

Apart from managing patients with chronic conditions, the teamlets at Yishun Polyclinic also started seeing patients with dementia from July 2018. Patients with dementia receive care from a dedicated multi-disciplinary team and receive regular assessments, counselling services, and coordinated access to dementia services in the community. Apart from allowing for continuity of care, such an arrangement enables the management of patients with dementia to be anchored within primary care, and minimises the need for the elderly to visit hospital specialist outpatient clinics.

TEAMLET CARE MODEL

NHGP's teamlet care model is anchored on relationship-based healthcare. Dedicated teams known as teamlets — each comprising two family physicians, a care manager, and a care coordinator — are supported by allied health professionals to provide customised and holistic care based on a patient's medical conditions. This model of care allows patients to receive comprehensive, coordinated and continuous care from the same healthcare team so that risks and complications can be identified early and prevented or managed.

First piloted in Toa Payoh Polyclinic in 2015, this care model has now been implemented in all NHG Polyclinics. As at 31 March 2019, NHGP has a total of about 120,000 patients being cared for by its teamlets.

To assess the effectiveness of the care model, a study was conducted from 1 July 2015 to 31 December 2016 involving about 20,000 patients from Ang Mo Kio Polyclinic, Toa Payoh Polyclinic, Woodlands Polyclinic and Yishun Polyclinic. The results of the study, released on 17 August 2018, showed that teamlet patients with diabetes had significantly better diabetes

“In the past, there were no designated doctors or nurses to look after my health. Now, with the teamlet care model, the clinical team is able to better understand my medical history, monitor my health progress closely, and provide the best care plan for me. This gives me the opportunity to work on improving my health together with my healthcare team.”

— Mr Leon Chester Stewart, patient from Ang Mo Kio Polyclinic



■ Patient Service Associate Ms Enrica Kalyani explaining how the chronic care plan works to a patient.

CHRONIC CARE PLAN

Designed to empower and incentivise patients with chronic diseases to better manage their conditions, NHGP's Chronic Care Plan (CCP) was first piloted in Yishun Polyclinic in April 2017. In January 2019, the programme was extended to Ang Mo Kio Polyclinic.

NHGP's CCP offers patients with chronic diseases listed under the Chronic Disease Management Programme (CDMP) an annual treatment plan and a payment option for a year's worth of chronic disease treatment. CCP covers consultations with doctors, nurses and allied health professionals, laboratory tests, diabetic foot screenings as well as diabetic retinopathy screenings.

Patients who meet the care plan targets set by their healthcare team are rewarded with rebates,

which can be used to offset the cost of the following year's plan. As of 31 March 2019, 90 per cent of CCP patients at Yishun Polyclinic received rebates for meeting their care plan targets.

Such targets include good blood sugar control, optimal management of blood pressure or cholesterol levels, and completing annual diabetic foot and retinopathy screenings.

Patients on the Chronic Care Plan are able to:



Achieve health goals with customised care plan



Receive rebates for meeting health goals



Enjoy 5% savings on chronic care services



Skip the payment queue



Senior Podiatrist Nicholas Andrew Hulme assessing a patient with diabetes for foot ulcers.

DM FOOT STEP

NHGP strongly encourages all patients with diabetes to go for annual foot screening at any NHG Polyclinic. With the goal of further reducing the risk of foot ulcers and lower extremity amputation, NHGP piloted the Diabetes Mellitus (DM) Foot Screening & Surveillance, Treatment & Escalation Protocol (STEP) at Yishun Polyclinic in May 2017. As of March 2019, nearly 800 patients have benefited from closer surveillance and prompt management.

The enhanced screening and foot care protocol will be progressively introduced to all NHG Polyclinics by the end of 2020.

The DM Foot STEP team comprises family physicians, diabetic foot screening and foot surveillance nurses, wound care nurses, and podiatrists, all of whom work in close collaboration with hospital specialists from regional hospitals. They teach self-help skills so that patients can prevent and manage their own foot problems through regular foot checks.

“Singapore has one of the highest rates of lower-extremity amputations in the world due to diabetes. Early identification and intervention of those at risk will prevent complications and reduce the number of lower-extremity amputations.”

— Dr Donna Tan, Family Physician, Associate Consultant and Assistant Director, Clinical Services

Patients are also taught to seek treatment early. Through regular foot surveillance, the multi-disciplinary team can promptly detect foot problems and provide early treatment.

ADVANCE CARE PLANNING

In line with MOH's efforts to encourage Advance Care Planning (ACP) conversations earlier and more upstream in patients' care continuum, NHGP piloted its first ACP Clinic in October 2017 at Toa Payoh Polyclinic. The second ACP Clinic started in Ang Mo Kio Polyclinic in June 2018. The ACP programme gives patients and their family members greater accessibility and convenience to discuss and complete their ACP in the community. As of FY2018, NHGP's ACP programme has reached out to almost 800 patients and facilitated more than 150 ACP discussions.

To further raise awareness of the importance of ACP, NHGP partnered final-year students from Nanyang Technological University's (NTU) Wee Kim Wee School of Communication and Information to set up roadshows at Ang Mo Kio Polyclinic in January 2019 and Geylang Polyclinic in February 2019.

TRIM

NHGP launched the Tiered-Risk Interventions for Managing Weight (TRIM) at Ang Mo Kio Polyclinic in June 2018. TRIM enables NHGP's care team to activate patients by systematically identifying those with health risks, and then starting contextualised conversations with them as part of their care. These patients are then referred to NHGP's health promoters in the clinic for health coaching and connected to intervention programmes in NHGP and the community.

A total of 2,020 patients from Ang Mo Kio Polyclinic have been identified and flagged for weight management since the implementation of TRIM.

LIGHTER LIFE

NHGP first launched the six-month risk-stratified weight management programme, Lighter Life, at Ang Mo Kio Polyclinic in October 2018. This programme aims to help eligible NHGP patients with chronic conditions such as diabetes and hypertension to achieve weight loss in a healthy way. The programme equips them to confidently self-manage their conditions with strong peer and community support. Throughout the programme, patients are monitored and coached on areas such as exercise and lifestyle habits by a multi-disciplinary primary care team comprising a family physician, nurse, dietitian, physiotherapist, clinical psychologist, and health experts.



Mdm Saudah Marwan, a patient from Ang Mo Kio Polyclinic, is having her BP taken at one of the Lighter Life sessions.



Patients learn carbohydrate counting in a session that equips them with the skills to eat healthily.

WRITE YOUR OWN MEDICATION LIST!

A medication list helps you and your healthcare provider track your medications and keep you safe.

Name: Tan Kim Long
ID No.: S123XXXXA
Medical Conditions: High Blood Pressure, High Cholesterol
Drug Allergy: N/A (None)

Medications / Supplements

No.	Medication Name & Strength	How to take the medication	Used for
1.	Nifedipine LA 30mg tablet	Take 1 tablet every morning	Blood pressure
2.	Fish Oil evening capsule	Take 2 capsules 3 times a day after food	Heart
3.	Paracetamol 500mg tablet	Take 1 tablet 4 times daily when necessary	Pain / Fever

Example of a Medication Label

Nifedipine LA 30mg Tablets
Take one tablet every morning for blood pressure control.

GAC Clinic: 123 Smith Street S. 5508888
Tan Kim Long S123XXXXA

Sign for Writing a Medication List

- Follow the example on the left to create your medication list.
- Medications may have different formulations e.g. Long-Acting (LA) or Sustained Release (SR). Do write these information into your medication list.
- Ask your doctor or pharmacist if you need help to write your medication list.

Bring along your updated medication list and show it to your doctor or pharmacist at every visit.
Log on to [http://bit.ly/AMKTRIM](#), or scan the QR code to download a blank medication list.

A medication list to help patients keep track of the medicines they are taking.

MEDICATION RECONCILIATION

NHGP together with the National Healthcare Group (NHG) Pharmacy worked on several initiatives to educate patients on their medications.

One such initiative is the Medication Clinic, a pre-consult medication reconciliation service aimed at reducing medication discrepancies during transitions of care. The medication reconciliation service was made available at all NHG Polyclinics in August 2018. At the Medication Clinic, the pharmacist checks and prepares the medication list, which the patient can share with other doctors and pharmacists during medical consults. The pharmacist can also resolve any issue the patient may have regarding medication.

To promote the use of the medication list, NHG Pharmacy launched the 'Know Your Medicines, Get It Right' campaign during National Pharmacy Week 2018 in October. The goal was to create awareness among patients and caregivers about the benefits of keeping an updated medication list.

RIGHT CARE, RIGHT PLACE, RIGHT TIME

In FY2018, NHGP continued its efforts to help patients receive appropriate care in the community and closer to home.

TELE-DERM

An initiative jointly launched by NHGP and the National Skin Centre (NSC) in December 2016, Tele-DERM brings specialist care closer to patients' homes. Through a secure web portal, NHGP Family Physicians discuss skin care cases and treatment options with NSC dermatologists, allowing patients with mild to moderate skin issues to be cared for appropriately in the community. In FY2018, the number of NHGP attendances for dermatology-related conditions averaged nearly 10,000 a month. About 45 per cent of patients who underwent Tele-DERM were treated at NHGP without having to be referred to the NSC.

TELE-ECG

A collaboration between NHGP and Tan Tock Seng Hospital's Cardiology Department, Tele-ECG has helped to improve patient-centred care by right-siting avoidable referrals to the cardiology specialist outpatient clinics (SOCs). As of 31 March 2019, almost 80 per cent of the Tele-ECG cases seen were treated at NHGP without having to be referred to SOCs.

TELE-WOUND MONITORING

Piloted in June 2016 and established at all NHG Polyclinics since June 2017, Tele-Wound Monitoring is a service that allows self-management and remote wound monitoring.

It enables patients to perform wound dressing changes at home while their healing progress is monitored remotely by nurses. Patients send digital wound images to nurses for assessment, and follow-up care is conducted over the phone. In FY2018, there were more than 1,900 Tele-Wound consultations done.

TELE-CONSULTATIONS

The Tele-Consultations Home Monitoring initiative led by NHGP's Nursing Services allows patients to consult Care Managers (nurses trained in chronic disease management) over the phone. These consultations involve helping patients monitor their conditions, advising them on post-insulin titration, assisting on medication refills, and more. Such a service avoids the need for patients to make trips to the polyclinics. In FY2018, more than 11,500 Tele-Consultations were conducted.

HOUGANG FMC HANDOVER

Family Medicine Clinic (FMC) brings together the strengths and experiences of public healthcare providers and the capacity and capabilities of private healthcare. Such collaborations have helped the FMC to provide comprehensive team-based care to manage chronic diseases within the community.

On 13 September 2018, NHG successfully marked the transfer of ownership of Hougang FMC to Silverhope Clinic Pte Ltd.



Representatives from NHG, NHGP and Silverhope Clinic Pte Ltd at the Handover Ceremony.

Hougang FMC was the third and last FMC — after Ang Mo Kio FMC and Unity FMC — that NHG has handed over to private General Practitioner partners after successful collaborations.

During the three years of close collaboration, Hougang Polyclinic has referred about 4,000 patients with chronic diseases to Hougang FMC.

The handover ceremony was graced by Madam Kay Kuok, Chairman of NHG. Also present were Professor Philip Choo, Group CEO of NHG, Associate Professor Chong Phui-Nah, CEO of NHGP and Primary Care, Dr Michael Yee, Director of Silverhope Clinic Pte Ltd, and Dr Victor Teo and Ms Ong Yipin, former directors of Silverhope Clinic Pte Ltd.

MOBILE BMD

To support and promote the importance of bone health, the National Healthcare Group Diagnostics (NHGD) procured and deployed a second Mobile Bone Mineral Densitometry (BMD) in March 2019. The first BMD was introduced in 2012.

The two Mobile BMDs are available at Ang Mo Kio Polyclinic, Geylang Polyclinic, Woodlands Polyclinic and Yishun Polyclinic. This service has brought greater convenience to patients and residents in the community.

NEW HbA1C ANALYSER AND TEST

In diabetes care for patients, HbA1c is used to monitor patients' blood sugar level.

In June 2018, NHGD rolled out new HbA1c analysers at all NHG Polyclinics. Each allows samples to be processed at a rate that is 88 per cent faster than before, thus reducing patients' wait times.

NHGD also introduced the HbA1c variant Point-of-Care-Testing (POCT) at all NHG Polyclinics in October 2018. The test has reduced the turnaround time for results from one week to an hour, bringing about more convenience to patients.



Senior Staff Nurse II Ms Faridah Mohamad Yusoff conducting a Tele-Wound consultation with a patient.



NHGD's Mobile BMD allows patients to have their osteoporosis screening done closer to home.

FROM HEALTHCARE TO HEALTH

To encourage patients to lead healthier lives, NHGP organised many activities to engage and educate the community in FY2018.



■ NHGP staff and participants at a Diabetes Support Group session at Ang Mo Kio Polyclinic.

WORLD DIABETES DAY 2018

As a lead-up to World Diabetes Day 2018, NHGP organised a series of activities to educate patients on the importance of managing diabetes through eating well and staying physically active.

The Ang Mo Kio Polyclinic Diabetes Support Group held a session on 6 October 2018. The session included talks on how to tackle insomnia, its relationship with stress and diabetes, and how sleep problems

can have an impact on diabetes management. The session also included a talk on how to meet diabetes control targets.

On 8 November 2018, a healthy lifestyle event was conducted at Geylang Polyclinic and Yishun Polyclinic. Titled 'Get Up! Get Shoes! Get Fit!', NHGP's podiatrists put up exhibits to educate patients on foot care. NHGP's physiotherapists also conducted an exercise session to combat the negative impact of inactivity on diabetes.

On 10 November 2018, a talk and practical session, titled 'Get Fit, Be Fit and Stay Fit' was conducted at Toa Payoh Polyclinic. Besides sharing the importance of various aspects of fitness in relation to managing diabetes, the event also cleared doubts that the audience had on medications and laboratory results.



■ Dr Wong Mei Yin, Principal Clinical Psychologist, sharing practical strategies to improve sleep quality at the 'Kiss Insomnia Goodnight' talk.

WORLD PODIATRY DAY 2018

To celebrate World Podiatry Day 2018, a fun and interactive booth was set up for patients and staff on 12 April 2018 at Woodlands Polyclinic and Ang Mo Kio Polyclinic. The goal of the celebration was to create awareness of good foot health among patients and staff. Through footcare brochures, posters, foot models and different types of footwear, participants obtained first-hand knowledge of how to take care of their feet.



■ NHGP podiatrists and physiotherapists at the 'Get Up! Get Shoes! Get Fit!' roadshow at Geylang Polyclinic.

WORLD MENTAL HEALTH DAY 2018

In conjunction with World Mental Health Day 2018, NHGP worked with TOUCH Community Services and the Singapore Kindness Movement to deliver talks on mental and physical well-being, with a focus on mental health and diabetes.



■ Ms Soon Jiaying, Senior Clinical Psychologist, delivering the 'Does Kindness Matter? Love Yourself for Better Diabetes Health' talk at TOUCH Home Care @ Ang Mo Kio.

Conducted by NHGP Psychologists, the 'Does Kindness Matter? Love Yourself for Better Diabetes Health' mental health talks were delivered to residents of TOUCH Home Care @ Ang Mo Kio and residents of Ang Mo Kio on 12 and 20 October 2018 respectively. The informative sessions covered the impact of stress and mental health on diabetes, and steps to improve mental and physical well-being through adhering to self-management strategies for depression and diabetes.

WORLD DIETITIANS' DAY 2019

On 16 March 2019, an event titled 'Diabetes Self-management: Because it Matters!' was conducted at Yishun Polyclinic for 50 patients to celebrate World Dietitians' Day 2019. The session covered self-management skills for those with diabetes and pre-diabetes. A patient also shared how she overcame her personal challenges to gain good diabetes control.



■ A patient sharing how she manages her diabetes.



A nurse guiding children on proper hand hygiene.

WORLD HAND HYGIENE DAY 2018

In conjunction with World Hand Hygiene Day 2018, NHGP organised hand hygiene roadshows at all six polyclinics from 8 to 15 May 2018. An activity booth at each clinic was also set up for patients and caregivers to learn the six steps of handwashing.

WORLD KIDNEY DAY 2019

In conjunction with World Kidney Day 2019, NHGP organised a talk titled 'Understanding Chronic Kidney Disease' on 7 March 2019 at Geylang Polyclinic. The talk highlighted the risk factors of kidney disease, tips on kidney protection, and the importance of regular screening and follow-up. Booklets on kidney protection and healthy eating were also distributed to patients.

HEALTH FAIR FOR ANG MO KIO RESIDENTS

NHGP and National Skin Centre co-organised a fundraising health fair on 21 April 2018 to support the Ang Mo Kio Family Service Centre. At the event, NHGP doctors and psychologists gave health talks, and NHGP dietitians hosted a cooking demonstration.



Guest-of-Honour Dr Koh Poh Koon, Member of Parliament for Ang Mo Kio GRC, preparing Rainbow Brown Rice Salad with Senior Dietitian Ms Wong Yuefen.



Dr Karen Ng sharing how NHGP's teamlet care model empowers patients to look after their health better during a media interview on 17 August 2018.

IN THE MEDIA

In FY2018, NHGP leveraged mainstream media to spread messages to the population, covering topics such as chronic disease management and adopting healthier lifestyles.

Media coverage in FY2018 included the following:

- Various media interviewed Dr Karen Ng, Director, Clinical Services, on 17 August 2018. Dr Ng shared how NHGP's teamlet care approach offers patients access to a dedicated team of healthcare professionals.
- Vasantham News interviewed Dr Jaganmohan Raja, Deputy Head of Woodlands Polyclinic, on 18 and 19 June 2018. Dr Raja shared how a heart attack comes about, and how to identify its early symptoms.
- Channel 8 News interviewed Dr Kong Jing Wen, Head of Hougang Polyclinic, on 31 May 2018 on common vaccines, during which Dr Kong reminded viewers to go for influenza vaccination.



Patients and caregivers exercising together at the community plaza at Ang Mo Kio Polyclinic.

HEALTH PROMOTION AND PREVENTIVE CARE

In FY2018, various roadshows to raise awareness of specific diseases, such as cardiovascular diseases, Diabetes Mellitus, and colorectal cancer, were conducted. Through these roadshows, more than 1,200 patients and their family members have learnt to better manage their health.

World Heart Day 2018

In September 2018, NHGP partnered the Singapore Heart Foundation and Singapore Polytechnic (SP) to organise a series of roadshows on heart disease prevention.

Held at all six NHG Polyclinics, the interactive awareness roadshow comprised a board game developed by interns from SP, which was used to teach patients and family members how to eat healthily while dining out.

Colorectal Cancer Awareness Month 2019

Roadshows were conducted at all six polyclinics to raise awareness of colorectal cancer in March 2019. Through posters and interactive activities, patients were educated on lifestyle practices to reduce the risk of colorectal cancer, and learnt skills to identify food products with high dietary fibre.

Health Promotion Efforts

In addition, healthy cooking demonstrations were conducted at the Eat Well cart in Ang Mo Kio Polyclinic and Yishun Polyclinic with the aim of educating patients on the benefits of a healthy diet. In collaboration with the Health Promotion Board, group exercises were also held regularly at Ang Mo Kio Polyclinic's community plaza for patients and their caregivers. NHGP also partnered the National Library Board to launch the Read@NHGP at Ang Mo Kio Polyclinic and Yishun Polyclinic in October and November 2018 respectively. Patients are now able to read curated health-related ebooks on the NLB mobile app while waiting to see the doctor.



Patients getting tips on eating healthily when dining out.

CHAPTER 3 INVESTING IN RESEARCH & EDUCATION

Building research capacity and capability is key to driving innovation and improvement in primary care. Equipping healthcare professionals with the skills and knowledge strengthens the ability to deliver care, and better prepares the National Healthcare Group Polyclinics to meet long-term needs and future challenges.



BUILDING RESEARCH CAPACITY AND CAPABILITY

NHGP recognises the need to cultivate talent in research to contribute to effective clinical practices. Through primary care research, staff have the opportunity to drive innovation and improve care for patients.

PRIMARY CARE FORUM 2018

NHGP held its 11th annual Primary Care Forum on 26 and 27 October 2018. Titled 'Primary Care: Integration & Innovation for the Future', it focused on innovations and improvements that will transform primary care. The 2018 Forum was held in conjunction with the Singapore Health and Biomedical Congress (SHBC). Guest-of-Honour Mr Amrin Amin, Senior Parliamentary Secretary, Ministry of Home Affairs and Ministry of Health, delivered the opening address.

Thought leaders present at the event included Professor Martin Marshall, Professor of Healthcare Improvement from University College London, as well as Professor James Dunbar, Honorary Professor at the Centre for Population Health Research, Deakin University, and Research Advisor to the Australian Health Policy Collaboration, Victoria University.

A General Practitioners (GPs) symposium was held on the second day of the event, during which GPs from across Singapore shared how they managed patients effectively in a primary care setting.



Guest-of-Honour Mr Amrin (centre) and guests speakers, Professor Marshall (second from left) and Professor Dunbar (second from right) during the Primary Care Forum 2018.



The session on adult vaccinations in the tropics during the Primary Care Forum was given by Dr Barnaby Edward Young, Consultant, National Centre for Infectious Diseases, Tan Tock Seng Hospital.

SINGAPORE PRIMARY CARE SCIENTIFIC RESEARCH COMPETITION

The Singapore Primary Care Scientific Research Competition 2018 was organised in collaboration with the Singapore Health and Biomedical Conference (SHBC) 2018 to provide a platform to showcase as well as to foster a culture of research in primary care. The competition also provided recognition for the research efforts of healthcare professionals working in primary care. For the list of abstracts accepted for the SHBC Scientific Competition 2018, please refer to Appendix A.

The following NHGP winners were announced at the opening ceremony of SHBC 2018 on 25 October 2018.



Winners of the Oral Category: (From left) Dr Lee Eng Sing, Ms Julia Zhu and Dr Wee Wei Keong.

ORAL CATEGORY

Gold Award

Dietary behaviour among polyclinic patients with pre-diabetes

Dr Wee Wei Keong
Director,
Health Promotion &
Preventive Care

Silver Award

Effectiveness of nurse-led wound clinic on clinical outcomes for patient with chronic leg ulcer in primary healthcare: a quasi-experimental study

Ms Julia Zhu
Nurse Clinician II,
Nursing Services

Bronze Award

Concordance between clinical diagnoses for selected chronic conditions in clinical notes and patient-reported conditions

Dr Lee Eng Sing
Family Physician, Senior Consultant
and Deputy Head, Clinical Research
Unit

POSTER CATEGORY

Gold Award

The association between illness perceptions, medication beliefs and adherence to inhaled asthma controller among older adults: a cross-sectional study in primary care

Dr Liu Changwei
Family Physician,
Associate Consultant,
Geylang Polyclinic

Silver Award

The effect of parity and breastfeeding experience on breastfeeding self-efficacy, perception of milk supply and exclusive breastfeeding

Ms Jacqueline Giovanna De Roza
Nurse Clinician I,
Geylang Polyclinic

Bronze Award

Exploring illness perception and symptoms severity as possible correlates of anxiety change expectancy in primary care

Ms Soon Jiaying
Senior Clinical Psychologist,
Clinical Services

POSTER PRESENTATIONS

International Forum on Quality and Safety in Healthcare

Ms Blessy Koottappal Mathew, Nurse Clinician II, Toa Payoh Polyclinic, Ms Wong Yuefen, Senior Dietitian, Ang Mo Kio Polyclinic, and Ms Tan Hue Min, Oral Health Therapist, Toa Payoh Polyclinic, presented their quality and safety improvement projects at the International Forum on Quality and Safety in Healthcare in Amsterdam from 2 to 4 May 2018.

SingHealth Nursing Conference 2018

Another quality improvement project, 'Diabetic Foot Screening Course – A Blended Learning Approach to Reduce Out-of-Clinic Time for Healthcare Professionals in Primary Care', led by Ms Yeoh Hui Ling, Trainer, Primary Care Academy, was put together to allow nurses and trainers to spend more time on patient care. This project won the third prize in the SingHealth Nursing Conference 2018 Poster Category held on 5 April 2018.

IPRAMHO 2019

Ms Goh Ling Jia, Assistant Nurse Clinician, Hougang Polyclinic, and Ms Tan Pek Hoon, Senior Nurse Manager, Yishun Polyclinic, attended the Asia Pacific Diabetes in Pregnancy Conference & Integrated Platform for Research in Advancing Metabolic Health Outcomes of Women and Children (IPRAMHO) International Meeting on 11 January 2019. Their poster, 'Dietary Risk Assessment of the Singapore Child', won the 'Best Poster' award.

HOMER GRANT FY2018

The NHG-HOMER (Health Outcomes and Medical Education Research) Grant FY2018 is a competitive grant that supports health professions education research.

Dr Darren Seah, Family Physician, Consultant and Director of Family Medicine Development, was awarded a grant for his research on the impact of tele-dermatology as a learning tool for Family Medicine Residents to diagnose and manage dermatological problems in primary care.

NHG-LKCMEDICINE CSPP FY2018

A joint programme between NHG and LKCMedicine, the NHG-LKCMedicine Clinician-Scientist Preparatory Programme (CSPP) exposes clinicians to research opportunities early in their career through research training and project experience. In FY2018, there were two selected programme participants – Dr Vivek Bansal, Family Physician, Woodlands Polyclinic, and Dr Quek Jing Sheng, NHG Family Medicine Resident.

Dr Vivek's research project studied the uptake and practice of secondary prevention of patients with a previous stroke episode in Singapore's primary care setting. Dr Quek's research project looked at understanding the journeys of patients with asthma who present for nebuliser therapy at a polyclinic.

NMRC CS/CISSP

In FY2018, Dr Lee Eng Sing, Family Physician, Senior Consultant, and Deputy Head of Clinical Research Unit, was awarded the Clinician Scientist/Clinician Investigator Salary Support Programme (CS/CISSP) by the National Medical Research Council (NMRC).

In this research collaboration, Dr Lee works with researchers from the Institute of Mental Health to validate the World Health Organization Disability Assessment Schedule 2.0 among those with mental and physical illness in Singapore.

CONTRIBUTIONS BY NHGP STAFF TO NEW MEDICAL KNOWLEDGE

The following pages highlight the various research programmes undertaken by NHGP staff that

have been published in journals and presented at local and international conferences in FY2018.

Oral and Poster Presentations by NHGP Staff at Local and International Conferences

23RD WORLD ORGANISATION OF NATIONAL COLLEGES, ACADEMIES AND ACADEMIC ASSOCIATIONS OF GENERAL PRACTITIONERS FAMILY PHYSICIANS (WONCA) EUROPE CONFERENCE

May 2018

Adult learners: what every trainer should know about learning styles

Dr Angelia Chua Hwee Ling
Family Physician, Consultant,
Yishun Polyclinic

7TH ASIAN CONGRESS OF DIETETICS 2018, HONG KONG

July 2018

Can nutrition booths change perception, readiness to change and knowledge on fruit and vegetables consumption? – Experience from the Polyclinics

Ms Chan Sau Ling
Dietitian,
Yishun Polyclinic

PRIMARY HEALTH CARE RESEARCH CONFERENCE, MELBOURNE, AUSTRALIA

August 2018

Impact of advanced practice nurse-led intervention on knowledge and safe practices for Muslim patients with Diabetes Mellitus during Ramadan in the primary care setting

Ms Michelle Lee Cai Feng
Assistant Nurse Clinician,
Ang Mo Kio Polyclinic

22ND WONCA WORLD CONFERENCE 2018, SEOUL, SOUTH KOREA

October 2018

Patients' Preferences for Dry Powder Inhalers

Dr Tang Wern Ee
Family Physician, Senior Consultant,
Education Director,
Family Medicine Development and
Head, Clinical Research Unit

A Challenge in Managing Difficult Dermatology Case in Primary Care: Scabies Crustosa

Dr Chia Liang Yoong
Resident Physician,
Ang Mo Kio Polyclinic

22ND EAST ASIAN FORUM OF NURSING SCHOLARS (EAFONS) 2019, SINGAPORE

January 2019

Nurses' perception of individual professional development plan in a primary healthcare setting in Singapore: a qualitative study

Ms Keely Lim Xue Qi
Staff Nurse I,
Yishun Polyclinic

ASIA PACIFIC MEDICAL EDUCATION CONFERENCE (APMEC) 2019, SINGAPORE

January 2019

Rolling out the CARPET: preparing a health-literate ready workforce

Dr Predeebha Kannan
Deputy Director,
Primary Care Academy and
Family Medicine Development

Inter-professional education in action: from design to delivery

Dr Dong Lijuan
Assistant Director,
Nursing Services

2ND ASIA PACIFIC DIABETES IN PREGNANCY (APDIP) CONFERENCE & IPRAMHO INTERNATIONAL MEETING 2019, SINGAPORE

January 2019

Dietary Risk Assessment of the Singapore Child (Best Poster Award)

Ms Goh Ling Jia
Assistant Nurse Clinician,
Hougang Polyclinic

Postpartum dietary and physical activity-related beliefs and behaviours among women with recent gestational Diabetes Mellitus: a qualitative study

Dr Teh Kailin
Family Physician, Associate Consultant,
Ang Mo Kio Polyclinic



Dr Amy Khor (in blue jacket), Senior Minister of State, Ministry of Health, listening to Ms Goh Ling Jia explaining her poster at the IPRAMHO International Meeting.

Publications with Contributions by NHGP Staff in Peer-Reviewed Journals

ENDOCRINE RESEARCH April 2018 Excess visceral adiposity is associated with diabetic retinopathy in a multi-ethnic Asian cohort with longstanding Type 2 diabetes. Co-authors Dr Simon Lee Family Physician, Consultant Chief Operating Officer and Chief Clinical Informatics Officer Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit	DIABETES AND VASCULAR DISEASE RESEARCH May 2018 Long-term prospective observation suggests that glomerular hyperfiltration is associated with rapid decline in renal filtration function: a multi-ethnic study. Co-authors Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit Dr Kwan Pek Yee Family Physician, Principal Staff Head, Yishun Polyclinic July 2018 The association of serum creatinine and estimated glomerular filtration rate variability with diabetic retinopathy in Asians with Type 2 diabetes: a nested case-control study. Co-authors Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit Dr Kwan Pek Yee Family Physician, Principal Staff Head, Yishun Polyclinic	ADVANCED SKIN WOUND CARE July 2018 Exploring patient and caregiver perceptions of primary healthcare sector home care for simple acute wounds. First author Ms Goh Ling Jia Assistant Nurse Clinician, Nursing Services Co-author Ms Julia Zhu Nurse Clinician II, Nursing Services	JOURNAL OF FAMILY MEDICINE AND PRIMARY CARE July 2018 A review on interventions to reduce medication discrepancies or errors in primary or ambulatory care setting during care transition from hospital to primary care. First author Dr Kee Kok Wai Family Physician, Associate Consultant Toa Payoh Polyclinic	FAMILY PRACTICE September 2018 Transforming Primary Care – the way forward with the TEAMS2 approach. First author A/Prof Chong Phui-Nah Family Physician, Senior Consultant Chief Executive Officer National Healthcare Group Polyclinics & Primary Care Co-author Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit	DIABETES METABOLISM RESEARCH AND REVIEWS January 2019 Association of diabetes treatment with long-term glycemic patterns in patients with Type 2 Diabetes Mellitus: a prospective cohort study. Co-author Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit
JOURNAL OF MEDICAL INTERNET RESEARCH MEDICAL INFORMATICS June 2018 Validation of a natural language processing algorithm for detecting infectious disease symptoms in primary care Electronic Medical Records in Singapore. Co-author Ms Teo Sok Huang Research Fellow, Clinical Research Unit		INTERNATIONAL JOURNAL OF NEPHROLOGY July 2018 Projecting the burden of Chronic Kidney Disease in a developed country and its implications on public health. Co-author Dr Lim Chee Kong Family Physician, Senior Consultant Deputy Director, Clinical Services	JOURNAL OF DIABETES September 2018 Gain in adiposity over three years is associated with progressive renal decline in multi-ethnic South-East Asians with Type 2 diabetes. Co-authors Dr Simon Lee Family Physician, Consultant Chief Operating Officer and Chief Clinical Informatics Officer Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit Dr Kwan Pek Yee Family Physician, Principal Staff Head, Yishun Polyclinic	JOURNAL OF DIABETES COMPLICATIONS October 2018 PAX4 R192H is associated with younger onset of Type 2 diabetes in East Asians in Singapore. Co-authors Dr Simon Lee Family Physician, Consultant Chief Operating Officer and Chief Clinical Informatics Officer Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit	GAMES FOR HEALTH JOURNAL January 2019 Play and learn with patients – designing and evaluating a serious game to enhance nurses’ inhaler teaching techniques: a randomised controlled trial. Co-author Ms Cindy Lee Nurse Educator I, Nursing Services
		NEPHROLOGY DIALYSIS TRANSPLANT July 2018 Risk of progressive chronic kidney disease in individuals with early-onset Type 2 diabetes: a prospective cohort study. Co-author Dr Tang Wern Ee Family Physician, Senior Consultant Education Director, Family Medicine Development and Head, Clinical Research Unit		INDIAN JOURNAL OF PSYCHOLOGICAL MEDICINE January 2019 Illness perception of anxiety patients in primary care in Singapore. First author Dr Wong Mei Yin Principal Clinical Psychologist Clinical Services	BIOMED CENTRAL PUBLIC HEALTH January 2019 Screen viewing behaviour and sleep duration among children aged two and below. Co-author Dr Angelia Chua Family Physician, Consultant Yishun Polyclinic

LEARNING SESSIONS

In its continuous journey to learn from others and share experiences, NHGP organised and took part in various learning activities both locally and overseas.

OVERSEAS EXPERTS WORKSHOPS

NHGP hosted two overseas experts, Professor Martin Marshall and Professor James Dunbar, from 22 to 24 October 2018. During the sessions, Prof Marshall talked about the healthcare system in the United Kingdom, and implementation research, clinical service redesign and quality improvement in primary care.

Prof Dunbar, on the other hand, shared his expertise in diabetes prevention, and the MAGDA ('Mothers After Gestational Diabetes in Australia') trial and its implications on how to manage gestational diabetes in primary care.



NHGP hosted Prof Marshall (seated, with tie), who shared about the importance and evolution of general practice in the United Kingdom.



NHGP hosted Prof Dunbar (back row, seventh from right), who shared insights on population-based quality-improvement initiatives in diabetes care.

HEALTH MANPOWER DEVELOPMENT PLAN VISITS

Canada

Dr Lim Chee Kong, Family Physician, Senior Consultant, and Deputy Director, Clinical Services, visited St Paul's Hospital, Providence Healthcare from 28 May to 8 June 2018, to learn more about its Kidney Care Clinic (KCC), the longest-running programme of its kind in Canada. KCC's interdisciplinary clinics care for more than 1,200 patients in varying stages of chronic kidney disease. The multi-disciplinary team there supports and educates individuals and families living with kidney disease to delay disease progression.

Australia

Together with NHG, four NHGP staff visited the Australian Capital Territory Health in Canberra, and the Austin Hospital and Frankston Hospital in Melbourne from 9 to 20 July 2018 to learn about Australia's Advance Care Planning (ACP) system. The visit offered insights into the Australian team's efforts to support ACP in hospitals, primary care and the community, and lessons about palliative care services and the residential aged care facilities in Australia.

Dr Low Kang Yih, Family Physician, Associate Consultant, Ang Mo Kio Polyclinic, also visited the Austin Health Hospital in Melbourne and Royal Prince Alfred Hospital in Sydney to learn about their care programmes for obesity and Diabetes Mellitus.

United States of America

In September 2018, a team from NHGP and the National Healthcare Group Pharmacy visited the Mountain View Consulting Group in Seattle, Washington. There, they learnt about interventions that healthcare providers can use to help patients with chronic conditions improve compliance with their disease management regimes and change unhealthy behaviours. One such programme is Real Behaviour Change in Primary Care, which offers 10-minute interventions to help empower patients to manage their chronic health conditions better.

During the visit, the team also had the opportunity to shadow clinic sessions conducted by a group of behavioural health consultants led by Dr Melissa Baker, Behavioural Health Education Program Director.

The team also designed a pre-consult assessment form incorporating behavioural health techniques for primary healthcare providers to facilitate conversations with their patients.

Netherlands and London

Dr Tricia Chang, Family Physician, Associate Consultant, Ang Mo Kio Polyclinic, went on a six-week learning trip to the Netherlands and London from October to November 2018.

In the first half of the trip, Dr Chang visited the University of Maastricht to learn about the health systems and research culture in General Practice in the Netherlands. During the second half of the trip, she was attached to the department of Primary Care and Population Health at the University College London, where she was exposed to the division of eHealth, and saw how they used new information and communication technologies to improve health. Dr Chang also attended a women's health module for medical students and visited General Practitioners to learn about their Quality and Outcomes framework.



NHGP team with Dr Baker (left) during their visit to the Mountain View Consulting Group.



NHGP and NHG staff at the Claire Holland House during the visit on ACP.



Dr Evan Sim (seated front row, centre), Family Physician, Principal Staff and Head of Woodlands Polyclinic, and his clinical team hosted delegates from Thailand's Ministry of Health.



Wound Care Nurse Clinician Ms Julia Zhu (third from right) led the visit by Prof Thng (far right), Executive Director, Skin Research Institute of Singapore, and Prof Harding (second from right), Medical Director, Welsh Wound Innovation Centre, to Hougang Polyclinic.

VISITS TO NHGP

Visit to Woodlands Polyclinic

On 30 August 2018, Woodlands Polyclinic hosted Thailand's Ministry of Health, comprising personnel from the Health Workforce Development, College of Public Health and Nursing, and Primary Health Care Centres. The delegates toured Woodlands Polyclinic and discussed Singapore's healthcare and primary care system.

Visits to Hougang Polyclinic

On 16 August 2018, Hougang Polyclinic hosted a group of 35 senior officers from Vietnam who were on a study trip to learn about the primary healthcare system in Singapore.

Hougang Polyclinic also hosted Professor Keith Harding and Associate Professor Steven Thng on 22 March 2019. They discussed NHGP's wound management framework, on-going training for staff on wound management, and methods employed to care for patients with wounds, especially chronic wounds.

Visits to Yishun Polyclinic

Between September 2018 and March 2019, Yishun Polyclinic hosted several visits. These included Tan Tock Seng Hospital, SingHealth Polyclinics, National Skin Centre, and Singapore Armed Forces (Regional Medical Centre Project Team). During these visits, the Yishun team shared the operational workflows as well as learning points from the setting up of the new clinic. On 29 November 2018, Minister Khaw Boon Wan, Coordinating Minister for Infrastructure and Minister for Transport, toured the new Yishun Polyclinic to learn about NHGP's use of innovative technology to improve productivity.



Minister Khaw (fourth from right) paid a visit to Yishun Polyclinic to experience the new clinic setting.



SHiNe participants' visit to Ang Mo Kio Polyclinic.

Visits to Ang Mo Kio Polyclinic

The newly redeveloped Ang Mo Kio Polyclinic hosted a number of visits by healthcare partners and ministers.

On 5 June 2018, NHGP hosted the Singapore Healthcare Improvement Network (SHiNe) learning series at Ang Mo Kio Polyclinic for participants from various healthcare institutions.

SHiNe is an umbrella group comprising members of healthcare organisations. SHiNe members are committed to delivering better care and lower healthcare cost to patients.



■ Senior Minister of State Mr Tong (centre) and representatives from the Ministry of Health (MOH) visited Ang Mo Kio Polyclinic.



■ Mr Amrin Amin (eighth from left), Dr Amy Khor (centre) and NHGP senior management hosted foreign delegates at Ang Mo Kio Polyclinic for the Ministerial Conference on Diabetes.

Apart from giving an overview of the polyclinic, participants were brought on a clinic tour to learn about NHGP's teamlet care model, as well as the use of technology in enhancing a patient's journey.

Mr Edwin Tong, Senior Minister of State for Law and Health, and Minister Khaw Boon Wan, visited Ang Mo Kio Polyclinic on 7 and 25 September 2018 respectively. Apart from learning about NHGP's teamlet care model, Minister Khaw also visited the Gallery of Memories to learn about the history of primary care in Singapore.

Additionally, a team of Health Ministries and Non-Government Organisations delegates from various countries visited Ang Mo Kio Polyclinic on 27 November 2018 as part of the Ministry of Health's inaugural Ministerial Conference on Diabetes. The delegates were given a tour, which focused on NHGP's efforts in supporting diabetes intervention and its teamlet care model.

TRAINING OPPORTUNITIES

NHGP's Primary Care Academy (PCA) conducted several workshops in FY2018, including the following workshop for NHGP's clinicians. For the full list of workshops conducted, please refer to Appendix B.

Child Development Masterclass

On 18 August 2018, PCA conducted a Masterclass in Child Development for NHGP's clinicians. The course covered topics such as the use of strategies and therapies to address a child's unique needs; use of techniques to assess a child's growth development, including communication milestones; and recommendations to parents to promote healthy development in infants and young children.

PCA TRAINING ACCREDITATION AND OUTREACH

In July 2018, NHGP's PCA was re-accredited as a recognised training provider under the Agency for Integrated Care (AIC) Caregivers Training Grant. One of the courses approved and funded by AIC is the quarterly Care of the Elderly course, which equips caregivers with the skills and knowledge of caring for the elderly in the community.

In September 2018, NHGP's PCA was also re-accredited as a life support training centre. PCA was also accredited as a Basic Cardiac Life Support (BCLS) and Automated External Defibrillator (AED) instructor training centre in September 2018.

These new accreditations enable PCA to build internal capability, develop a pool of qualified life support instructors, and run training courses and workshops.

PCA also partnered the National Silver Academy (NSA) to offer courses for seniors (Singaporeans and Singapore Permanent Residents aged 50 and above), who can enjoy NSA subsidies for eligible courses. PCA participated in NSA roadshows to showcase the Academy's public courses and workshops, providing opportunities for lifelong learning.

NKF SYMPOSIUM

At the National Kidney Foundation Symposium, held on 24 October 2018, Dr Irwin Chung, Director, PCA, presented the topic 'Tapestry of Care for the Chronically Ill in the Community'. He touched on the full spectrum of healthcare services and healthcare offered by NHGP, including initiatives on population and community health. A PCA booth was also set up to share information on numerous community-related training programmes with participants from various community services, healthcare institutions, and voluntary welfare and social service organisations.



■ Ms Angeline Yeo (right), Training Consultant, PCA, teaching participants Bed Bathing techniques for immobile family members during the Care of the Elderly course.

NURTURING THE NEXT GENERATION

NHGP runs comprehensive teaching and learning programmes to develop the next generation of medical professionals to ensure holistic, patient-centred care.

STUDENT ASSISTANTSHIP PROGRAMME

Fifty-one students from LKCMedicine's first Student Assistantship Programme (SAP) in Family Medicine were posted to Ang Mo Kio Polyclinic, Hougang Polyclinic, Toa Payoh Polyclinic, Woodlands Polyclinic and Yishun Polyclinic for three weeks between February and April 2018.

Under the SAP, these final-year LKCMedicine students worked with clinic teams and were closely supervised by their clinical teachers. Mini-projects that looked at various aspects of care delivery at the polyclinics were conducted. These included patient's perceptions of their illnesses, knowledge and satisfaction of services to improve patient experiences and clinical care.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES

To ensure its healthcare professionals are kept up to date and upskilled, NHGP organises medical forums every two months. These research forums also provide a platform for research presentations and discussions. For the list of medical forums conducted in FY2018, please refer to Appendix C.



■ LKCMedicine students posing for a group photo with their NHGP educators.

ACHIEVING PROFESSIONAL STANDARDS

To keep pace with the increasingly complex healthcare landscape, NHGP embraces lifelong learning as a way to continue to deliver the best evidence-based care for patients, and to support staff in their professional learning and growth.

FAMILY MEDICINE CONVOCATION

Organised by the College of Family Physicians (Singapore) [CFPS], the Family Medicine Convocation Ceremony was held on 17 November 2018, during which 41 NHGP doctors were recognised. Five of them attained Fellowships from CFPS, 18 were conferred a Masters of Medicine (MMed) in Family Medicine (FM), and 20 doctors received their Graduate Diploma in FM.

Fellowship College of Family Physicians (Singapore)

Five NHGP doctors completed the 24-month Advanced Training Programme in Family Medicine and passed the summative exit examinations in 2018.

Dr Jonathan Ting
Family Physician, Associate Consultant
Geylang Polyclinic

Dr Liu Chang Wei
Family Physician, Associate Consultant
Geylang Polyclinic

Dr Sim Sai Zhen
Family Physician
Hougang Polyclinic

Dr Kee Kok Wai
Family Physician, Associate Consultant
Toa Payoh Polyclinic

Dr Wan Jinhui
Family Physician, Associate Consultant
Woodlands Polyclinic

Master of Medicine in Family Medicine

Eighteen NHGP doctors passed the Master of Medicine (MMed) in Family Medicine (FM) examinations in November 2018, undergoing either a three-year NHG FM Residency Programme or NHGP Programme B. The respective programmes prepare the doctors for the breadth of exposure to acquire the competencies required to practise as Family Physicians.

Dr Chara Fan
Resident Physician
Ang Mo Kio Polyclinic

Dr Tan Beng Soon
Resident Physician
Ang Mo Kio Polyclinic

Dr Rajni Gupta
Family Physician
Ang Mo Kio Polyclinic

Dr Khong Haojun
Family Physician
Ang Mo Kio Polyclinic

Dr Liu Sha
Resident Physician
Geylang Polyclinic

Dr Gloria Khoo
Resident Physician
Hougang Polyclinic

Dr Ng Chia Hau
Family Physician
Hougang Polyclinic

Dr Afzana Ismail
Resident Physician
Hougang Polyclinic

Dr Lim Hui Ting
Resident Physician
Toa Payoh Polyclinic

Dr Loh Yi Bing
Resident Physician
Toa Payoh Polyclinic

Dr Olivia Chan
Resident Physician
Woodlands Polyclinic

Dr Nurul Azyan
Resident Physician
Woodlands Polyclinic

Dr Candice Lee
Resident Physician
Woodlands Polyclinic

Dr Rasminster Kaur
MOPEX
Woodlands Polyclinic

Dr Rajagopal Ramaswami
Senior Resident Physician
Yishun Polyclinic

Dr Lim Wei Khoon
Resident Physician
Yishun Polyclinic

Dr Keith Tan
Resident Physician
Yishun Polyclinic

Dr Christine Sim
MOPEX
Yishun Polyclinic

Graduate Diploma in Family Medicine

Twenty NHGP doctors passed the Graduate Diploma in Family Medicine (GDFM) examinations in July 2018. The GDFM is a post-graduate training programme that equips family doctors in Singapore with skills to enhance their level of patient care.

Dr Tan Yi Rui
Resident Physician
Ang Mo Kio Polyclinic

Dr Ashis Pandey
Resident Physician
Ang Mo Kio Polyclinic

Dr Terence Peter Lo
Resident Physician
Ang Mo Kio Polyclinic

Dr Chia Liang Yoong
Resident Physician
Ang Mo Kio Polyclinic

Dr Sze Kai Ping
Resident Physician
Geylang Polyclinic

Dr Ang Dun Yong
MOPEX
Geylang Polyclinic

Dr Deepa Govindasamy
Resident Physician
Hougang Polyclinic

Dr Lim Weixin
Resident Physician
Hougang Polyclinic

Dr Krishnapriya Govindasamy
Resident Physician
Hougang Polyclinic

Dr Toh Ying Hui
MOPEX
Hougang Polyclinic

Dr Gregory Kang
MOPEX (SAF)
Toa Payoh Polyclinic

Dr Low Xhu Khie
Resident Physician
Woodlands Polyclinic

Dr Chuah Hui En
Resident Physician
Woodlands Polyclinic

**Dr Wadu Mesthri Nisansala
Dulmini Gamage**
Resident Physician
Woodlands Polyclinic

Dr Teh Kim Khiam
Resident Physician
Yishun Polyclinic

Dr Mogilan S/O Mohan
Resident Physician
Yishun Polyclinic

Dr Santharuby A S Andiappan
Resident Physician
Yishun Polyclinic

Dr Elizabeth Seitoh Yu Ting
Resident Physician
Yishun Polyclinic

Dr Chen Sixian
Resident Physician
Yishun Polyclinic

Dr Trisha Upadhyaya
Resident Physician
Yishun Polyclinic

NHGP BEST FAMILY MEDICINE TRAINERS' AWARD

Dr Kee Kok Wai, Family Physician, Associate Consultant, Toa Payoh Polyclinic, and Dr Jeremy Foo Fung Yee, Family Physician, Associate Consultant, Yishun Polyclinic became the proud recipients of the NHGP Best Family Medicine (FM) Trainers' Award 2018.

The annual award recognises the significant contribution made by these FM Trainers for their initiative, passion and dedication in teaching. The trainers were evaluated by medical undergraduates and FM residents on their presentation content, teaching style, approachability and creativity. Generous with their time and effort in facilitating continuous learning, both doctors are role models in the field of undergraduate and post-graduate medical training.

NHGP NURSING BEST CLINICAL INSTRUCTOR AWARD

Ms Tan Lizin, Senior Staff Nurse, Ang Mo Kio Polyclinic, bagged the NHGP Nursing Best Clinical Instructor Award 2018. This award recognises her outstanding contribution in providing effective clinical teaching to students and newly recruited nurses to help them achieve the desired learning goals.

NUS MEDICINE DEAN'S AWARDS 2018

Dr Steven Chao Chien Chih, Family Physician, Toa Payoh Polyclinic, received the NUS Medicine Dean's Award for Teaching Excellence, and Dr Teo Yi Lyn, Family Physician, Yishun Polyclinic, clinched the Junior Doctor Award.

Both awards were given out during the Appreciation for NUS Medicine Clinical Teachers event held on 20 November 2018. These awards were given based on evaluation by NUS Medicine students throughout the postings in AY 2017/2018. This event was organised by NUS Medicine to appreciate the hard work that their clinical teachers put in for the academic year.

DR WM. VICTOR JOHNSTON AWARD

Dr Lee Eng Sing, Family Physician, Consultant, and Deputy Head of Clinical Research Unit, received the inaugural Dr WM. Victor Johnston Award in Family Medicine given by Schulich School of Medicine and Dentistry at Western University, Canada. This award recognises outstanding students in the Family Medicine Masters and PhD programmes for their academic achievement and research merit.

NHG TEACHING AWARD

NHG Teachers' Day was held on 21 August 2018. The theme for this year's celebration was 'The Magic of Education', to reflect the role of clinical teachers and educators in touching hearts and transforming minds.

NHG TEACHING AWARD FOR JUNIOR DOCTORS 2018

Dr Gabriel Ding
Family Physician
Geylang Polyclinic

Dr Steven Chao
Family Physician
Toa Payoh Polyclinic

Dr Chu Chun Hong
Family Physician
Toa Payoh Polyclinic

Dr Norizuan Rashid
Family Physician
Woodlands Polyclinic



■ NHGP's NHG Teachers' Day award recipients.

NHG TEACHING AWARD FOR SENIOR DOCTORS 2018

Dr Richard Lee
Family Physician, Consultant
Woodlands Polyclinic

NHG TEACHING AWARD FOR ALLIED HEALTH EDUCATORS 2018

Ms Chan Sau Ling
Dietitian
Clinical Services

NHG INTER-PROFESSIONAL TEACHING AWARD 2018

Dr Lim Pui San
Family Physician, Principal Staff
Toa Payoh Polyclinic

NHG TEACHING AWARD FOR NURSING PRECEPTORS 2018

Ms Tan Peck Hoong
Senior Staff Nurse I
Ang Mo Kio Polyclinic

Ms Jessica Zhu
Senior Staff Nurse II
Toa Payoh Polyclinic

Ms Chen Yan
Senior Staff Nurse I
Woodlands Polyclinic

Ms Wan Lili
Senior Staff Nurse I
Yishun Polyclinic

NHG OUTSTANDING NURSE TEACHERS 2018

Ms Nurhabibah Samirah
Senior Staff Nurse I
Ang Mo Kio Polyclinic

Ms Rina Foo
Senior Staff Nurse II
Toa Payoh Polyclinic

Ms Cuadra Christine Simon
Senior Staff Nurse I
Yishun Polyclinic

MOH IN-SERVICE SCHOLARSHIP AND NHGP SCHOLARSHIP

Several NHGP staff received the MOH In-Service Scholarship and NHGP Scholarship in FY2018. These scholarships equip staff with essential competencies and leadership capabilities to meet future healthcare needs.

Ms Hasnah Samad
Staff Nurse
Ang Mo Kio Polyclinic

Ms Magdalene Lee
Senior Staff Nurse
Ang Mo Kio Polyclinic

**Ms Nurhabibah Samirah
Mohd Ghalib**
Senior Staff Nurse
Ang Mo Kio Polyclinic

Ms Wu Liqin
Senior Staff Nurse
Ang Mo Kio Polyclinic

Ms Esther Zhang
Assistant Nurse Clinician
Ang Mo Kio Polyclinic

Ms Tan Chwee Yan
Senior Staff Nurse
Hougang Polyclinic

Ms Aslina Asbil
Senior Assistant Nurse
Nursing Services

Ms Manimekalai
Senior Assistant Nurse
Nursing Services

Ms Nisha Menon
Senior Staff Nurse
Nursing Services

Ms Siok Lai Fong
Principal Assistant Nurse
Nursing Services

Ms Piloppina D/O Savurimuthoo
Senior Assistant Nurse
Nursing Services

Ms Tuty Anida Masuri
Senior Assistant Nurse
Nursing Services

Ms Christine Chern
Nurse Clinician
Toa Payoh Polyclinic

Ms Fiona Hashim
Staff Nurse
Toa Payoh Polyclinic

Ms Tan Pao Ling
Senior Staff Nurse
Toa Payoh Polyclinic

Ms Wang Xiuhong
Senior Staff Nurse
Toa Payoh Polyclinic

Ms Karmini Sechan
Assistant Nurse Clinician
Woodlands Polyclinic

Ms Tang Wing Sze
Senior Staff Nurse
Woodlands Polyclinic

Ms Zuhairah Mohamed Amin
Senior Staff Nurse
Woodlands Polyclinic

Ms Cuadra Christine Simon
Senior Staff Nurse
Yishun Polyclinic

Ms Tan Cheng Gek
Senior Staff Nurse
Yishun Polyclinic

CHAPTER 4 INNOVATING FOR BETTER CARE

Innovation is critical in the pursuit of better care. In the face of challenges, the National Healthcare Group Polyclinics (NHGP) is constantly looking at ways to innovate, optimise care and resources, and leverage technology and science. NHGP's efforts go towards not just improving the care delivery model for today, but also advances its mission to create a world-class and future-ready relationship-based primary care ecosystem.



INNOVATING FOR A FUTURE-READY PRIMARY CARE

In FY2018, NHGP was recognised for its various initiatives to leverage innovation to provide the best care possible for its patients.



Mr Ben Lau, Manager, Operations (left), representing NHGP at the AHMA award ceremony.



Dr Lim and Ms Chong were recognised for their efforts at the PST award ceremony.

AWARDS

AHMA 2018

At the 2018 Asian Hospital Management Awards (AHMA), NHGP's Operations team was conferred the Excellence Award in the Talent Development category. The entry, titled 'Ancillary Staff Talent Management — Job Redesign Initiatives and Core Training Frameworks for Improved Service Delivery of Patient Care', was selected from 451 entries submitted by 123 healthcare institutions throughout Asia.

With the job redesign, ancillary staff gained the capabilities to undertake duties traditionally managed by professionals, including assisting patients to complete the Asthma Control Test and Coronary Risk Screening questionnaires.

PST Awards 2018

Ms Chong Hui Jia, Operations Manager at Ang Mo Kio Polyclinic, was presented the Star Manager Award at the Public Sector Transformation (PST) Awards 2018 ceremony on 4 July 2018. Her selflessness in driving and implementing improvements for better patient care has made Ms Chong well known to all staff at Ang Mo Kio Polyclinic.

In addition to the Star Manager Award, the Nephrology Evaluation, Management and Optimisation (NEMO) Programme, a collaboration between NHGP and the National University Health System, was also awarded the ExCEL Innovation Project Award.

The programme, of which Dr Lim Chee Kong, Family Physician, Senior Consultant, and Deputy Director of Clinical Services, was Co-Director, was recognised for its significant contributions in delaying the progression of diabetic kidney disease in Singapore.

Since April 2017, the NEMO Programme has evolved into the national Holistic Approach to Lowering and Tracking Chronic Kidney Disease (HALT-CKD) Programme, and has been implemented across all polyclinics in Singapore.



Dr Susan Lim receiving the Minister for Health Award from Minister for Health Mr Gan Kim Yong.

MOH Appreciation & Awards Ceremony 2018

Dr Susan Lim Pui San, Family Physician, Principal Staff, and a member of the Collaborative Prescribing (CP) Standing Committee, was presented the Minister for Health Award 2018 at the Ministry of Health (MOH) Appreciation and Awards Ceremony on 7 November 2018. This award is the highest accolade conferred by MOH.

Dr Lim's work in the committee has been critical in developing practice standards, competencies and educational frameworks for CP. This, in turn, plays a vital role in facilitating care transformation for community and hospital care, and will enable service innovation and continuity through team-based care.

INNOVATIONS

Self-Help Blood Pressure Monitoring Machine

In March 2019, NHGP installed self-help blood pressure monitoring machines at Ang Mo Kio Polyclinic. Such machines allow patients to take their own blood pressure readings easily.

Patients can do so by donning a cuff and pressing a button. With these machines, staff previously deployed to man the blood pressure counter can now assist patients who may have more urgent needs. More importantly, it empowers patients with the know-how to take and self-monitor their readings at home. The self-help blood pressure machines will be progressively rolled out to all NHG Polyclinics in FY2019.

Enhanced Self-Checkout Kiosks

NHGP introduced enhanced self-checkout kiosks at Yishun Polyclinic in July 2018. These kiosks accept a variety of payment modes, including cash, Apple Pay and Samsung Pay. The kiosks are also equipped with smart routing logic, which allows patients to book future appointments. This one-stop convenience of making payment and follow-up appointments saves up to 10 minutes from the overall wait time. These enhanced self-checkout kiosks have also been made available at Ang Mo Kio Polyclinic, Hougang Polyclinic, Toa Payoh Polyclinic and Woodlands Polyclinic as of March 2019.

Enhanced Self-Registration Kiosks

Since April 2018, patients have been able to use self-registration kiosks to update their own particulars during or prior to registration for a same-day appointment. The new feature gives patients the convenience of updating their particulars at any time. The information entered by patients is updated concurrently and seamlessly into the patient management system for more accurate patient records.



Upon arrival at the polyclinic, patients can register themselves using the Self-Registration Kiosks.

Enhanced Payment Management

In April 2018, the Electronic Polyclinic Outpatient System (ePOS) at NHGP was enhanced to allow for the automated closing of patients' unpaid bills. This includes auto-deduction from applicable schemes, such as the Medical Claims Pro-ration System and MediSave.

The enhancement, together with the introduction of automation and centralisation of the process, has significantly reduced the man hours spent on managing these outstanding bills for greater productivity.

IMPROVING CARE

To ensure a safe environment for staff and patients in the delivery of high-quality care, NHGP places an emphasis on workplace safety and quality.

NHGP QUALITY DAY

NHGP held its NHGP Quality Day 2018 on 21 September 2018. Themed 'Cultivate. Ideate. Innovate', the event aimed to highlight the importance of innovation and encouraged staff to continue the good work of quality improvement. The event also included two insightful sharing sessions by keynote speakers: Mr Peter Ho, CEO of HOPE Technik, and Ms Lim Choon Heong, Head, Agile and Operational Excellence at DBS Bank.

A total of 22 awards were given out during the event. For the list of quality improvement projects completed in FY2018, please refer to Appendix D.

NHG QUALITY DAY

On 19 September 2018, the National Healthcare Group (NHG) celebrated its Quality Day 2018, themed 'Empowering Staff, Celebrating Joy in Improvement'. Eight NHGP staff were awarded the Excellence in Action Award for their service excellence and contribution to improve work practices, while three NHGP patients and caregivers received the Exemplary Patient and Caregiver Award for their inspirational efforts in improving quality of care.



NHGP Quality Award 2018 awardees were applauded for exemplifying quality and care in NHGP.



Deserving awardees from NHGP at the NHG Quality Day.

CSISG 2018

NHGP scored 71.7 points in 2018, an increase from 70.4 points in 2017, in the Customer Satisfaction Index of Singapore (CSISG). The survey, done by the Singapore Management University's Institute of Service Excellence, studies the customer satisfaction level of consumers in Singapore.

MOH PES FY2018

NHGP achieved a composite patient satisfaction score of 89 per cent in MOH's Patient Experience Survey (PES) 2018 with Woodlands Polyclinic attaining the highest score of 93.5 per cent amongst all NHG Polyclinics. Held from July to December 2018, the survey assessed patients' experience at public healthcare institutions and helped identify areas for improvement.

SECURITY PREPAREDNESS

As part of NHGP's efforts for security preparedness, a security exercise was conducted on 1 December 2018 to simulate a state of heightened security at Woodlands Polyclinic. Staff took on roles as security personnel, patients and visitors, and used hand-held detectors and undercarriage mirrors to screen in-bound visitors and vehicles.

WSH ROADSHOWS

To promote Workplace Safety and Health (WSH) awareness among staff, the WSH committee organised roadshows across the six polyclinics and Headquarters from 5 to 22 March 2019. Themed 'Take 5', the roadshows taught staff the five-step approach to examine risks and employ risk-reduction strategies in the work environment.

CSCC EXERCISE

Toa Payoh Polyclinic led in the Casualty Station & Civilian Clinic (CSCC) on 9 March 2019 as part of MOH's Emergency Preparedness Exercise.

Through this exercise, NHGP was able to experience a potential National Emergency situation and learn how to effectively set up the polyclinic to provide medical or psychological support.



NHGP's security preparedness exercise at Woodlands Polyclinic.



NHGP's emergency preparedness exercise at Toa Payoh Polyclinic.

CHAPTER 5 DEVELOPING OUR PEOPLE

The National Healthcare Group Polyclinics' (NHGP's) journey towards care transformation begins with its people. Recognising the role that staff play in propelling the organisation forward in its shared mission, NHGP has in place staff development, appreciation and recognition programmes to motivate and inspire its employees.



CELEBRATING EXCELLENCE

Staff achievements, including the various efforts in innovation and service excellence, are celebrated within NHGP to inspire everyone to greater heights.



A/Prof Chong (right), receiving the award from Mr Sim Beng Khoo, Director, Workplace Health and Outreach Division, Health Promotion Board, at a ceremony on 23 June 2018.

NATIONAL STEPS CHALLENGE 2018

NHGP emerged as winners in the Health and Social Services category, and was ranked sixth nationally in the National Steps Challenge™ Season 3 Corporate Challenge, organised by the Health Promotion Board.

This challenge was part of NHGP's efforts to encourage staff to lead by example. NHGP also held its own 'Walk To Win!' to encourage staff to walk at least 7,500 steps a day. The top team 'walked the talk' by clocking 29,000 steps on average.

COLLEGE OF FAMILY PHYSICIANS SINGAPORE AWARDS

On 19 May 2018, four NHGP staff members were acknowledged for their efforts to provide personal and comprehensive care to patients.

At a celebratory dinner organised by the College of Family Physicians Singapore (CFPS), Associate Professor (A/Prof) Chong Phui-Nah, CEO of NHGP and Primary Care, received the FCFP(S) Appreciation Plaque (Cluster) in appreciation of her continued support of CFPS' training activities in NHGP.

Dr Evan Sim, Family Physician, Principal Staff and Head of Woodlands Polyclinic, received the FCFP(S) Appreciation Plaque (Polyclinic) on behalf of Woodlands Polyclinic. Dr Richard Lee, Family Physician, Consultant, received the FCFP(S) Appreciation Certificate (Organiser) for being the key organiser who helped arrange for the FCFP(S) Clinical Assessments at Woodlands Polyclinic.



A/Prof Chong (right) and Ms Chen Yee Chui, Chief Nurse, NHGP (left), with Nurses' Merit Award 2018 recipients Ms Julia Zhu (second from left) and Ms Christine Chern (second from right).

Lastly, Dr Winnie Soon, Family Physician, Consultant, was given the College Teachers' Award in recognition of her commitment to CFPS for teaching Family Medicine.

NURSES' MERIT AWARD 2018

Two nurses from NHGP, Ms Julia Zhu, Nurse Clinician, and Ms Christine Chern, Assistant Nurse Clinician, were among 100 nurses who received the Nurses' Merit Award on 18 July 2018. Ms Zhu, who specialises in wound management, and Ms Chern, who provides direct care to patients with chronic diseases, have a combined nursing experience of more than 40 years.



To be credible to our patients as primary healthcare professionals, we need to be their role models, walk the talk, and show them that lifestyle change is possible. ■ ■

— Dr Wee Wei Keong, Director of Health Promotion and Prevention Care Department

NATIONAL DAY AWARDS 2018

On 21 November 2018, eight NHGP staff received the National Day Awards.

COMMENDATION MEDAL

Ms Lim Voon Hooi
Assistant Director,
Nursing Services

LONG SERVICE MEDAL

A/Prof Chong Phui-Nah
CEO, NHGP and Primary Care

Ms Faridah Akhbar
Senior Staff Nurse I,
Woodlands Polyclinic

Ms S Sankara Ammal
Senior Staff Nurse II,
Contact Centre

EFFICIENCY MEDAL

Ms Cynthia Wong
Senior Manager,
Human Resource

Ms Jerlynn Goh
Senior Executive,
Human Resource

Ms Fadzilah Hasanbasri
Senior Dental Assistant,
Ang Mo Kio Polyclinic

Ms Rosidah Basri
Patient Care Assistant,
Woodlands Polyclinic

NHG AWARDS 2018

On 11 May 2018, five NHGP staff members and three NHGP teams were recognised for their contributions to public healthcare at the National Healthcare Group (NHG) Awards Ceremony. Several NHGP staff members also received the MOH Health Manpower Development Plan (HMDP) and Strategic Nursing Development Plan (SNDP) awards.

NHG OUTSTANDING CITIZENSHIP AWARD

Dr Tung Yew Cheong
Family Physician,
Senior Consultant
Director, Quality and Patient Safety

NHG YOUNG ACHIEVER AWARD

Dr Christopher Chong
Family Physician,
Associate Consultant
Head of Ang Mo Kio Polyclinic

Dr Valerie Teo
Family Physician,
Associate Consultant
Deputy Head of Ang Mo Kio Polyclinic

Dr Kong Jing Wen
Family Physician,
Associate Consultant
Head of Hougang Polyclinic

Dr Kee Kok Wai
Family Physician,
Associate Consultant
Toa Payoh Polyclinic

NHG DEVELOPMENTAL AWARD

HMDP ADMIN
Ms Sharon Chen
Deputy Director, Operations

Ms Chia Kai Li
Senior Staff Nurse
Ang Mo Kio Polyclinic

HMDP MEDICAL
Dr Lim Chee Kong
Family Physician,
Senior Consultant
Clinical Services

Ms Mohanambal D/O Sundaravelu
Senior Staff Nurse
Hougang Polyclinic

Dr Tricia Chang
Family Physician,
Associate Consultant
Ang Mo Kio Polyclinic

Ms Anita Tan
Senior Nurse Manager
Toa Payoh Polyclinic

Dr Low Kang Yih
Family Physician,
Associate Consultant
Ang Mo Kio Polyclinic

Ms Rajwant Kaur D/O Gurdev Singh Khakh
Senior Staff Nurse
Toa Payoh Polyclinic

Dr Marvin Chan
Family Physician,
Associate Consultant
Hougang Polyclinic

SNDP TEAM-BASED
Ms Xie Shuqin
Assistant Nurse Clinician
Ang Mo Kio Polyclinic

Dr Kee Kok Wai
Family Physician,
Associate Consultant
Toa Payoh Polyclinic

Ms Hamha Mohamed Hamzah
Assistant Nurse Clinician
Hougang Polyclinic

HMDP TEAM-BASED
Dr Winnie Soon
Family Physician,
Consultant
Ang Mo Kio Polyclinic

Ms Palaniammal Vellasamy
Nurse Manager
Toa Payoh Polyclinic

Ms Sheena Ng
Executive
Clinical Services

Ms Chia Gui Kow
Assistant Nurse Clinician
Woodlands Polyclinic

Ms Quek Imm Pin
Senior Nurse Clinician
Yishun Polyclinic

NHG TEAM RECOGNITION AWARD

SILVER The Digital Transformation of Primary Care

The study showed that better data quality and a positive patient experience is derived through the introduction of self-help services and automation. With proper planning and incorporation of proven processes, the proliferation of new technology promises even greater benefits for patients, healthcare staff, and healthcare organisations.



The team behind the 'The Digital Transformation of Primary Care' project, who won the Silver Award at NHG Team Recognition Award.



The team behind the 'DM Foot STEP UP' project, who won the Silver Award at NHG Team Recognition Award.

**SILVER
DM Foot STEP UP
(Foot Screening & Surveillance,
Treatment and Escalation
Protocol for Ulcer Prevention)**
Diabetes Mellitus (DM) Foot STEP promotes proactive self-checks through targeted patient education, sustained foot surveillance, and seamless preventive and early treatment by a multi-disciplinary team. Through regular foot surveillance, the multi-disciplinary team can promptly detect foot problems and provide early treatment.

BRONZE Streamlining of patient journey: AMK THK Hospital Discharge to Primary Care Follow-up at AMK Polyclinic

The modified discharge process looked at initiating arrangement for patients of AMK Thye Hua Kwan (THK) Hospital to have their consultation done in Ang Mo Kio (AMK) Polyclinic and lab investigations done prior to doctor's visit. This way, patient waiting times and clinic visits were reduced. A Pharmacy-led medication reconciliation was also done prior to consult to minimise medication transcription error.



The team behind the 'Streamlining of patient journey: AMK THK Hospital Discharge to Primary Care Follow-up at AMK Polyclinic', who clinched the Bronze Award at NHG Team Recognition Award.

CULTIVATING THE NHGP SPIRIT

With the goal of ensuring that NHGP is future-ready, NHGP regularly engages staff to ensure that they are up-to-date on the latest developments and to strengthen bonds.



A/Prof Chong, CEO of NHGP and Primary Care, addressing Woodlands Polyclinic staff at one of the Townhall sessions conducted.

TOWNHALL SESSIONS

During FY2018 CEO Townhall sessions, A/Prof Chong Phui-Nah, CEO of NHGP and Primary Care, shared NHGP's progress in its primary care transformation journey with staff.

Activities such as mass Zumba workout, Captain's Ball and Telematches fostered inter-polyclinic team bonding and built a culture of active living.

The event saw Woodlands Polyclinic claiming the CEO Challenge Trophy for the second year in a row, while Ang Mo Kio Polyclinic came in second and Headquarters and Geylang Polyclinic tied for third spot.

During such sessions, she gave an overview of the improvements achieved following teamlet empanelment, the successful redevelopment of Ang Mo Kio Polyclinic and Yishun Polyclinic, and right-siting efforts under the Central-North Primary Care Network.

NHGP ACTIVE DAY FY2018

Six hundred staff from NHGP, the National Healthcare Group Diagnostics (NHGD), and the National Healthcare Group Pharmacy (NHGPh) turned up at the OCBC Arena for NHGP's annual Active Day on 23 February 2019.



Woodlands Polyclinic team posing with their CEO Challenge Trophy.



■ NHGP staff at the CSC Run 2018 event.

CORPORATE RUN 2018

On 20 October 2018, a total of 190 NHGP staff took part in the Civil Service Club (CSC) Run 2018 at Gardens by the Bay. The run is part of NHGP's annual Corporate Run activity to encourage staff to be physically active.

NHGP DINNER & DANCE 2018

Close to 1,000 staff from NHGP, NHGD, and NHGPh gathered for NHGP's annual Dinner and Dance event on 24 November 2018. The event's 'Groovy 60s' theme saw staff dressed in colourful retro outfits. Staff and guests enjoyed dynamic performances by NHGP Senior Management members and polyclinic teams. The night ended on a high note for the winning performance teams, and staff who walked away with lucky draw prizes.

The team formed by Ang Mo Kio Polyclinic and Toa Payoh Polyclinic won the Best Clinic Performance at the NHGP Dinner & Dance 2018.



■ NHGP Senior Management members, decked in retro outfits, getting ready for their stage performance.



■ NHGP HQ staff gathered to celebrate the inaugural NHGP Admin Day.

NHGP ADMIN DAY 2018

On 2 May 2018, NHGP celebrated its inaugural Admin Day to celebrate its administrative staff, who are mostly based at Headquarters. NHGP CEO A/Prof Chong thanked administrative staff for their hard work and dedication.

WORLD FAMILY DOCTOR DAY 2018

NHGP celebrated World Family Doctor Day 2018 at various locations on 19 May 2018 to appreciate doctors for their professionalism and commitment in delivering quality primary healthcare.



■ Yishun Polyclinic medical team celebrating World Family Doctor Day 2018.



■ Staff taking part in games using their mobile phones.

OPERATIONS DAY 2018

On 14 July 2018, NHGP's Operations staff gathered to celebrate Operations Day. The event recognises operations staff for their tireless effort in improving patient experience and patient care. In line with the drive towards innovation, the day's programme was powered by electronic gadgets such as mobile registration, live-streaming, mobile games, e-learning, and a mobile lucky draw.

NURSES' DAY CELEBRATION 2018

NHGP CEO A/Prof Chong, clinic heads, and nurses of NHGP came together to celebrate Nurses' Day on 4 August 2018. Themed 'A Fairy Tale!', the event was filled with fun and laughter.



Nurses from Woodlands Polyclinic dressed as angels. Their outfits won them the Best Dressed Award.

NHGP FAMILY APPRECIATION DAY 2018

NHGP held its Family Appreciation Day on 4 December 2018. NHGP CEO A/Prof Chong graced the occasion and presented seven Book Prizes to children of NHGP staff. To recognise the dedication and contributions of family members who made it possible for NHGP staff to focus on their work, seven family members received the 'Stand By Me' Award.



Staff from Yishun Polyclinic celebrated Nurses Day to recognise the contributions that nurses make to improve the health of patients.



A/Prof Chong with staff and their family members who received the 'Stand By Me' Award.

VOLUNTEER APPRECIATION DAY FY2018

On 16 February 2019, some 60 volunteers and staff came together to celebrate the annual Volunteer Appreciation Day organised by NHGP. Held in conjunction with the Lunar New Year festivities, the event was themed 'Our Sunshine' and honoured the selfless contributions and achievements of NHGP's Guiding Hands Volunteers over the past year.

Dr Simon Lee, Chief Operating Officer of NHGP, graced the occasion and presented the iCARE Volunteer Awards 2018 to outstanding volunteers who demonstrated NHGP's CARE attributes of Confidence, Attentiveness, Respect and Empathy. The 'Guiding Hands Long Service' awards were presented to Mr Joseph Ong Ah Yee and Mr Sunny Soo Siong Guan, who have been NHGP volunteers for 12 years. Certificates of Appreciation were also presented to those who had volunteered more than 72 hours in 2018.



Guiding Hands Long Service award recipients Mr Sunny Soo (left) and Mr Joseph Ong (right).

I volunteer in NHGP because I enjoy serving the community at large. Also, it is an avenue where I can learn valuable lessons about how passion, willingness to try, eagerness to learn, and commitment to contribute to society can help each of us excel despite the challenges we may face.

— Mr Sunny Soo, Guiding Hands Volunteer



Staff and volunteers at the Volunteer Appreciation Day event.

APPENDIX A

ABSTRACTS BY NHGP STAFF AND COLLABORATORS FOR SHBC

NO.	ABSTRACT TITLE	AUTHORS
1	Predictors of Depression Outcome Expectancy in Primary Care.	Mr Mah Siew Chung, Ms Shannon Chin, Mr Lim Kok Kwang, Mr Ooi Say Leong, Dr Wong Mei Yin, Ms Soon Jiaying & Mr Yap Chee Khong
2	An Exploration of Possible Correlates of Expectancy of Change for Sleep Difficulties in Primary Care.	Mr Gary Soh, Ms Joyce Lim, Mr Lim Kok Kwang, Mr Ooi Say Leong, Dr Wong Mei Yin, Mr Yap Chee Khong, Ms Soon Jiaying & Mr Mah Siew Chung
3	Illness Identity of Patients with Depressive Symptoms in Primary Care.	Ms Soon Jiaying, Mr Benjamin Low, Mr Lim Kok Kwang, Mr Ooi Say Leong, Dr Wong Mei Yin, Mr Yap Chee Khong & Mr Mah Siew Chung
4	Can Nutrition Booths Change Perception, Readiness to Change and Knowledge on Fruit and Vegetables Consumption? — Experience from the Polyclinics.	Ms Chan Sau Ling
5	Educational Impact of Video-Screening on Healthy Behaviour Changes for Patients in Polyclinics.	Mr Won Tin Chiang & Dr David Ng
6	A Case Series on Family-Centred Care of Post-Stroke Patients with Complex Needs in Primary Care.	Dr Vivek Bansal & Dr Tan En Yu
7	Simplifying Feedback for Improved Learner Reflection.	Dr Jason Chan & Dr Liu Changwei
8	A Cross-Sectional Survey to Assess the Lifestyle Practices of National Healthcare Group Polyclinics (NHGP) Clinicians and Non-Clinicians.	Mr For Wei Chek, Ms Soh Ying Hua & Dr Wee Wei Keong
9	An Audit of Statin Use for Primary Prevention in Elderly Patients Aged 75 and Above in a Government Polyclinic.	Dr Goh Kar Cheng, Dr Ashwin Motha & Dr Tan Jinxuan
10	Patient Feedback on the 'My Challenges Tool' in Counselling Patients with Poorly Controlled Type 2 Diabetes Mellitus.	Ms Nor Shawiyah Haron, Ms Christine Chern, Ms K Nanda Kumari, Ms Arumugam Vasantha, Ms Tan Pao Ling, Ms Ong Hui Chin, Ms Fadzlina Sujak, Dr Ian Koh, Dr David Ng & Ms Rajwant Kaur D/O Gurdev Singh Khakh
11	Accuracy of Home Blood Pressure Devices for Monitoring of Blood Pressure — A Retrospective Review.	Ms K Nanda Kumari, Ms Nor Shawiyah Haron, Ms Christine Chern, Ms Arumugam Vasantha, Ms Rajwant Kaur D/O Gurdev Singh Khakh, Ms Tan Pao Ling, Ms Ong Hui Chin, Ms Juraidah Yusof & Dr David Ng
12	Effectiveness of Medication Reconciliation Service (MRS) in Improving Medication Adherence Among Patients Transiting Their Care from Hospital to Primary Care Setting in Singapore.	Dr Kee Kok Wai, Ms Cheryl Char & Mr Anthony Yip
13	Reflective Experience of Family Medicine Residents Towards Learning and Action Plans: A Quasi-Experimental Study.	Dr Richard Lee & Ms Jiang Yilin
14	Effectiveness of a Team-Building Workshop to Improve Teamlet Functioning in Polyclinics.	Dr David Ng, Dr Lim Ziliang, Ms Angela Lim, Ms Joyce Tan, Ms Yeo Loo See, Ms Wong Theng Theng & Dr Predeebha D/O P N Kannan

NO.	ABSTRACT TITLE	AUTHORS
15	Analysis of Prevalence of Obesity in Patients with Type 2 Diabetes with HbA1c > 9% Followed-up at Woodlands Polyclinic from July 2016 to June 2017.	Dr Jaganmohan Raja Ramasamy, Dr Neesha Maganlal, Dr Evan Sim Ching Sing & Mr Tang Chee Kai
16	The Association Between Multi-Morbidity and Health-Related Quality of Life: A Cross-Sectional Survey in the Singapore Primary Healthcare Setting.	Dr Sim Sai Zhen, Dr Lee Eng Sing, Ms Jiang Yilin, Ms Teo Sok Huang & Ms Kyreen Lee
17	Diagnosing Dementia in Primary Care: Evaluating the Differences in Patient Characteristics Between Those Who are Diagnosed in Primary Care Versus Those Who are Referred for Specialist Assessment.	Dr Valerie Teo, Ms Tan Bee Yan, Dr Victoria Leung, Ms Kim Wu, Dr Teh Kailin, Ms Jiang Yilin & Dr Sabrina Wong
18	Uptake of Hepatitis B Vaccination Amongst the Seronegative Subjects in Primary Care: A Three-Year Observation Study in a Developed Endemic Community.	Dr Jonathan Ting, Dr Tan Ngiap Chuan, Dr Adrian Ee, Ms Eileen Koh & Ms Sankari Usha
19	A Successful Multi-Faceted Strategy to Improve Hand-Hygiene Compliance Rates in NHG Polyclinics.	Ms Nisha Menon, Dr Khong Haojun, Ms Chew Geok Lan, Ms Lily Lang & Dr Christopher Chong
20	Bacterial Contamination on Nursing Attire: A Review.	Ms Goh Ling Jia, Ms Julia Zhu & Ms Nisha Menon
21	Evaluating the Effectiveness of Tepid Sponging in Reducing Fever in Paediatrics: Systematic Review and Meta-Analysis.	Ms Goh Ling Jia, Ms Julia Zhu & Ms Suja Thomas
22	Efficiency of Vision Screening Test Using Snellen Chart for Four-Year-Olds in Singapore.	Ms Goh Ling Jia & Ms June Lim
23	Nurse Triaging in Hougang Polyclinic: Elements for Implementation of a Focused In-Clinic Training Session.	Ms Goh Ling Jia & Ms Sandra Chua
24	Tele-Wound Monitoring Service: Factors Influencing the Uptake in Hougang Polyclinic.	Ms Goh Ling Jia
25	Tele-Wound Monitoring Service for Patients with Low-Risk Non-Infected Wounds: A Retrospective Study in NHGP.	Ms Goh Ling Jia, Ms Julia Zhu & Ms Lim Voon Hooi
26	Developing Workplace Learning in Primary Healthcare Nursing.	Ms Wendy Ong
27	The Effectiveness of Entrusted Professional Activities in Competency-Based Training — Are We Bridging the Gaps?	Ms Yeo Loo See, Ms Goh Ling Jia, Dr Dong Lijuan & Ms Christie Anna D/O Money Samuel
28	Characteristics of Chronic Wounds and Factors Affecting Quality of Life Among Patients with Chronic Wounds in Primary Healthcare.	Ms Julia Zhu, Dr Dong Lijuan, Ms Goh Ling Jia, Mr Masnoon Saiyed, Dr Thirunavukkarasu Sathish, Dr Ram Bajpai & Dr Josip Car
29	Evaluating the Correlation Between the Shoulder Pain and Disability Index and the Bournemouth Questionnaire in Patients with Shoulder Pain: A Pragmatic Randomised Study.	Ms Cindy Soh
30	Factors Affecting Patient Enablement in an Asian Setting: A Mixed-Methods Study.	Dr Jason Chan, Dr Mitesh Shah & Dr Andrew Fang

APPENDIX B

LIST OF PRIMARY CARE ACADEMY WORKSHOPS CONDUCTED IN FY2018

NO.	ABSTRACT TITLE	AUTHORS
31	The Effect of Parity and Breastfeeding Experience on Breastfeeding Self-Efficacy, Perception of Milk Supply and Exclusive Breastfeeding.	Ms Jacqueline Giovanna De Roza, Ms Roslinda Sadon, Ms Fong Mew Keng, Ms Eileen Koh, Ms Stephanie Teo & Ms Ang Bee Leng
32	To Reduce the Percentage of Recurrent Ulceration in Podiatry High-Risk Diabetic Patients, from 10% to 0% Within 12 Months at Yishun Polyclinic.	Mr Nicholas Andrew Hulme
33	Diagnostic Accuracy of Artificial Intelligence in Dermatology: A Scoping Review.	Dr Kong Jing Wen & Dr Eugene Tan
34	Study to Improve the Rate of Smoking Cessation Counselling by Healthcare Staff Given to Smokers Aged 18 Years and Above Who Attended Woodlands Polyclinic from August 2016 to January 2017 to 100%.	Dr Kung Jian Ming, Dr Jaganmohan Raja Ramasamy, Mr Tang Chee Kai & Ms Tan Lay Khim
35	Multi-Pronged Intervention of Percutaneous Injury in Dental Clinics from 2013 to 2017.	Ms Lily Lang
36	The Association Between Illness Perceptions, Medication Beliefs and Adherence to Inhaled Asthma Controller Among Older Adults: A Cross-Sectional Study in Primary Care.	Dr Liu Changwei, Ms Jacqueline De Roza & Dr Tan Ngiap Chuan
37	Analysis of Chronic Kidney Disease and Obesity in Diabetics Aged 40 to 65 Years with HbA1c 9% to 10% in Team-Based Care at Woodlands Polyclinic.	Dr Neesha Maganlal, Dr Jaganmohan Raja Ramasamy, Ms Wong Theng Theng & Ms Jeanette Wong
38	Analysis of the Uptake of PAP Smear Cases in Woodlands Polyclinic Over 2 Years and the Factors Affecting a Consistent Uptake.	Dr Premdhevi Mahalingam Venkatesan & Dr Gabriel C Gonzales
39	Effectiveness of Teaching Medical Leadership in a Polyclinic in Singapore.	Dr David Ng, Dr Tan Khai Wei & Dr Lim Pui San
40	Study of Prevalence of Insulin Therapy in Patients with Type 2 Diabetes with HbA1c > 9% Followed-up at Woodlands Polyclinic from June 2016 to June 2017.	Dr Jaganmohan Raja Ramasamy, Dr Neesha Maganlal, Ms Zuhairah Mohamed Amin & Mr Tang Chee Kai
41	Exploring Illness Perception and Symptoms Severity as Possible Correlates of Anxiety Change Expectancy in Primary Care.	Ms Soon Jiaying, Ms Jerlyn Ang, Mr Lim Kok Kwang, Mr Yap Chee Khong, Dr Wong Mei Yin & Mr Mah Siew Chung
42	The Association Between Multi-morbidity and Healthcare Utilisation: A Cross-Sectional Survey in the Singapore Primary Healthcare Setting.	Dr Sim Sai Zhen, Dr Lee Eng Sing, Ms Jiang Yilin, Ms Teo Sok Huang & Ms Kyreen Lee
43	Positive Predictive Value and Negative Predictive Value of Abbreviated Mental Test Towards the Diagnosis of Dementia in a Primary Care Setting in Singapore.	Dr Yong Yan Zhen, Dr Marvin Chan, Dr Kong Jing Wen, Ms Irene Kong, Ms Sundravelu Mohanambal, Ms Sharon Foo, Ms Yvonne Deborah Tan, Dr Tan Ze Jia & Dr Yao Feng Yuan
44	Caregiver Burden Amongst Caregivers of Patients with Dementia: What are the Associated Factors?	Dr Lim Ziliang, Ms Tan Bee Yan, Ms Jiang Yilin & Dr Sabrina Wong
45	Effectiveness of Nurse-Led Wound Clinic on Clinical Outcomes for Patient with Chronic Leg Ulcer in Primary Healthcare: A Quasi-Experimental Study.	Ms Julia Zhu, Ms Goh Ling Jia & Ms Lim Voon Hooi

MEDICAL KNOWLEDGE
M.Med OSCE Exam Preparation
M.Med Slide Exam Preparation
GDfM OSCE Exam Preparation

INTERPERSONAL COMMUNICATION
Facilitation for Effective Clinic Communication
Enhancing Critical Communication Skills that Matter
Consultation Skills for Primary Care Physicians
Standardised Patient Training
Engaging Patient on Lifestyle Behavioural Change *

PRACTICE-BASED LEARNING
Teaching 101 for Busy Healthcare Professionals
Mentoring — A Guide by the Side
Advancing Ethics and Professionalism in Primary Care
Team-Based Care Training
Care Coordinator’s Training
Masterclass on Tackling Antibiotic Prescription Dilemmas in Primary Care *
Materclass in Child Development
Paediatric Dermatology Workshop
Mindfulness Basics for Primary Healthcare Professionals *
Introduction to Research
Introduction to Qualitative Research in Primary Care
Generating and Making Sense of Qualitative Data: A Step-by-Step Guide *

COURSES FOR THE PUBLIC AND COMMUNITY
General Practitioner’s Assistant Courses — Basic & Advance
Basic First Aid Workshop
Care for the Elderly
CPR + AED
Falls Prevention & Use of Ambulatory Aids for Diagnostics Staff
Public Health Talks

* New

PATIENT CARE / CLINICAL & PROCEDURAL SKILLS
Surgical Procedures for the Primary Healthcare Physician
Management of Joint & Soft-Tissue Conditions in Primary Care
Common Eye Conditions Update and Eye Examination Techniques for Family Physicians
Interpretation of Spirometry Results
Diabetic Foot Screening
Advanced Wound Management Workshop for Registered Nurses & Doctors
Early Childhood Nutrition Workshop
Foundation Chronic Disease Management
BCLS & AED Full Certification
BCLS & AED Re-Certification
BCLS + AED Instructor Course *
Advanced Course on Wound Management for Registered Nurses *
Developmental Assessment *
Foundation Course in Women’s Health *
Advanced Course in Women’s Health *
Diabetic Retinophotography (DRP) for New Nurses *
Family Planning Workshop

SUPPORT FOR CLINICAL DELIVERY
Use of Medical Terminology in Work Activities (WSQ)
Basic Health Parameters for Clinical Ancillary Staff
Urgent Care Awareness & Fall Prevention Workshop
English-Chinese Medical Translation Course
Know the Elderly: Workshop for Frontliners
Understanding Diabetes, Hypertension and Lipid Disorders: Workshop for Frontliners
Geriatric Primer in Community Care
Simplified Use of Medical Terminology
Writing in Plain Language for Patient Education Materials
Train the Trainer for Essential Skills for Clinical Ancillary Staff
Train the Trainer (Annual Skill Competency) *
Service Communications Foundation Course for Frontline Clinic Staff
Healthcare Languaging — Navigating Healthcare *
Discovering Self & Engaging Others for Effective Facilitative Learning *

APPENDIX C

MEDICAL FORUMS AND WORKSHOPS CONDUCTED BY NHGP IN FY2018

DATES	TOPICS	SPEAKERS / TRAINERS
17 May 2018	De-prescribing in the Elderly	Dr Tan Huei Nuo Senior Consultant; Deputy Head of Department, Centre for Geriatric Medicine, Tan Tock Seng Hospital Ms Tan Keng Teng Principal Pharmacist (Clinical), Tan Tock Seng Hospital
19 July 2018	Rethinking So-Called ‘Difficult’ Patients — Tips on Managing Patients and Oneself	Dr Lim Wen Phei Consultant, Psychological Medicine Department, Tan Tock Seng Hospital
20 September 2018	ACP De-Mystified: Initiating End-of-Life Conversation in Primary Care	Dr Wu Huei Yaw Senior Consultant, Department of Palliative Medicine, Tan Tock Seng Hospital Ms Josephine Goh Min Lee Medical Social Worker, National Healthcare Group Polyclinics
15 November 2018	Are You Unbreakable?	Dr Faith Chia Consultant, Department of Rheumatology and Immunology, Tan Tock Seng Hospital
31 January 2019	Have You Taken Your Dose of Exercise Today?	Dr Wang Ming Chang Associate Consultant; Sports & Family Physician, National University Hospital Sports Centre
28 March 2019	Effective Communication Strategies: What Works in a Consult?	Dr Jeremy Foo Family Physician, Associate Consultant, Yishun Polyclinic, National Healthcare Group Polyclinics Dr Teo Yi Lyn Family Physician, Yishun Polyclinic, National Healthcare Group Polyclinics

APPENDIX D

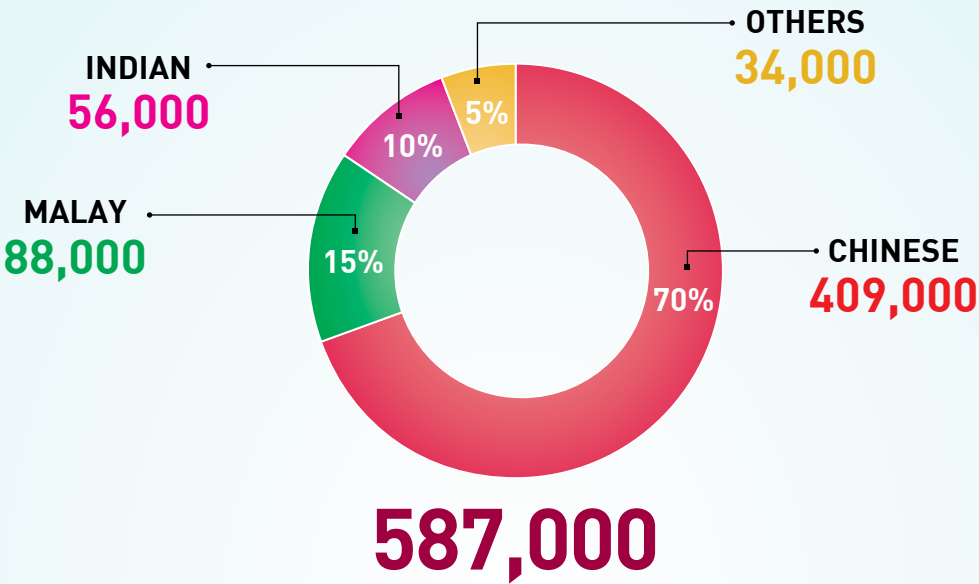
QUALITY IMPROVEMENT PROJECTS COMPLETED IN FY2018

NO.	PROJECT TITLE	CLINIC	PROJECT LEADER/S
1	To Increase Influenza Vaccination Uptake in Children Aged 6 Months to Less Than 3 Years (35 Months) from 2% to 20% in a Period of 6 Months at Ang Mo Kio Polyclinic.	AMK	Ms Li Shen
2	To Reduce Consumable Spending of Masks by 50% for Ang Mo Kio Dental Clinic in 7 Months.	AMK	Ms Suyriati Mohd Isa
3	To Improve the Decentralised Storage of Spacers and Masks in Ang Mo Kio Polyclinic.	AMK	Ms Letchmi Sanggaradas
4	To Increase the Productivity of ATDPS at Pharmacy Services Centre (PSC) by 20% (Part 2).	AMK	Ms Fanny Tan, Ms Goh Chern En & Ms Toh Li Li
5	To Reduce the Number of Ad Hoc Trips Offsite to Replenish Medication Supply by 50%.	AMK	Mr Matthew Lin & Ms Pang Xin Xian
6	To Increase the Percentage of Active Patients Getting Diabetic Foot Screening Within the Preceding 1 Year from 70% to 100% in Geylang Polyclinic Within a Period of 6 Months.	GL	Dr Wang Libin & Ms Jiang Cuifang
7	To Improve the Uptake of Group Education for Patients in Geylang Polyclinic.	GL	Ms Ko Ying Si
8	To Reduce the Waiting Time to Less Than 25 Minutes for at Least 95% of the Patients Collecting Medication in Geylang Polyclinic Pharmacy.	GL	Ms Huang Yufang & Ms Tan Sui Ping
9	To Decrease Nebulisation Rate in Patients With Asthma.	HOU	Ms Elizabeth Chan
10	To Increase the Influenza Vaccine Uptake Rate in Those Aged 65 and Above.	HOU	Dr Lydia Chee
11	To Optimise the Uptake of Pap Smears Among Patients With Chronic Conditions at Hougang Polyclinic.	HOU	Dr Valerie Chiang
12	To Improve the Percentage of Low-Risk Patients Referred to Open Access Oesophagogastroduodenoscopy (OGD).	HOU	Dr Ding Si Yan
13	To Increase Efficiency and Accuracy of the Billing Processes Related to St. Andrew’s Nursing Home by 50% at Hougang NHG Diagnostics Laboratory.	HOU	Ms Janet Teng
14	To Reduce Sunlove Nursing Home’s Residents Visit to Hougang Polyclinic by Doing In-House Blood Taking in 6 Months’ Time (in Collaboration With Sunlove Nursing Home).	HOU	Ms Janet Teng
15	To Reduce Time Taken to Complete Administrative Duties in the Repackaging Process by 70% at Bukit Batok and Hougang Polyclinic Pharmacies — Adopting Best Practices & Innovating.	HOU	Ms Evelyn Soh & Ms Suzanna Leong
16	To Optimise Time Spent in Patient’s Education on Stool Occult Blood Kit Testing in NHG Diagnostics.	HQ	Ms Eileen Lim
17	To Increase Uptake of Cancer Screening (Mammogram, Pap Smear, Fit Tests) in Hougang Polyclinic.	HQ	Ms Jayalakshmy Aarthi
18	To Reduce the Time Between Registration and Laboratory Test for Patients Coming to Toa Payoh Polyclinic With a Memo for Blood Test(s).	TPY	Dr Nasir Jameel Iqbal
19	To Increase the Influenza Vaccine Uptake Rate Among Staff in Toa Payoh Polyclinic.	TPY	Dr Gan Wei Chun

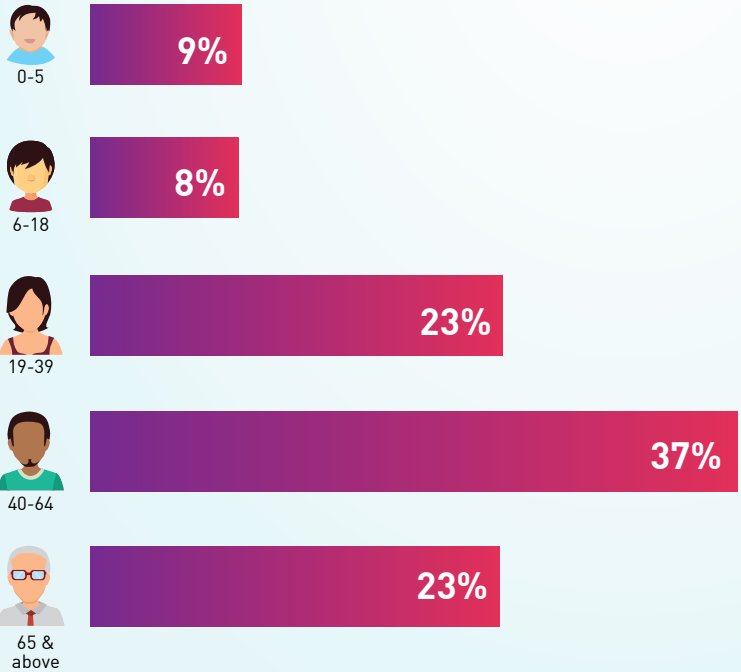
NO.	PROJECT TITLE	CLINIC	PROJECT LEADER/S
20	To Improve Ways on Nurses Handling Routine Assignments in the Dressing Room.	TPY	Ms Wang Xiuhong & Ms Amy Han
21	To Update the Written Asthma Action Plan in Asthma Patients Who Have Been Started on or Had a Change in Dose of Preventers in Toa Payoh Polyclinic.	TPY	Dr Gregory Kang & Dr Vittal Sunil Pawar
22	To Increase the Percentage of Adult Dental Patients (Aged 16 and Above) Discharged With a Set of Bitewings (Taken Within 3 Years) to 100% in 9 Months.	WDL	Ms Serene Zhang
23	To Increase the Actualisation Rate of Diabetic Retinopathy Photography in Type 2 Diabetes.	WDL	Ms Cassandra Kwek
24	To Increase the Uptake of Screening Mammogram in Women Aged 50–69 Years in Woodlands Polyclinic Over 6 Months.	WDL	Dr Moses Tan
25	To Increase Diabetic Foot Screening Rate in Woodlands Polyclinic.	WDL	Ms Renganathan Tharsan
26	To Reduce the Number of Repackaging Near Misses by 50%.	WDL	Mr Al Matriano
27	To Reduce Missed Prescription-Related Interventions at Capturing Counters by 50% from May 2018 to February 2019 in Woodlands Pharmacy.	WDL	Ms June Koh
28	To Reduce the Time From Triage to Bronchodilator Nebulisation for Patients With Mild to Moderate Exacerbation of Asthma Or COPD From 23 Minutes to 10 Minutes Within 6 Months at Woodlands Polyclinic.	WDL	Dr Kung Jian Ming & Ms Jia Shuli
29	To Increase the Percentage of Patients With One Glycaemic Test Ordered Within 6 Months for Patients Newly Diagnosed With Pre-Diabetes in Yishun Teamlets from 58% to 100%.	YIS	Ms Ng Sze Ern & Mr Patrick Ee
30	To Increase the Uptake of the Zarit Burden Interview to Screen for Caregiver Stress in Carers of Patients With Dementia.	YIS	Dr Michelle Ee
31	To Improve the Percentage of Screening for Post-Stroke Depression Using PHQ9 Questionnaire at Yishun Polyclinic.	YIS	Dr Jobina Soh
32	To Improve the Uptake Rate of Influenza Vaccine Among Patient With Diabetes at Yishun Polyclinic.	YIS	Dr Gan Hui Shuang
33	To Improve the Percentage of Pneumococcal Vaccination Uptake in COPD Patients at Yishun Polyclinic.	YIS	Dr Sharlene Seet

SNAPSHOTS OF PATIENTS
ATTENDANCE AND WORKLOAD IN FY2018

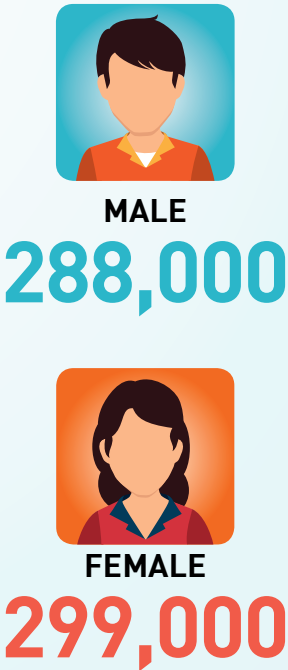
TOTAL NUMBER OF PATIENTS



PATIENTS BY DIFFERENT AGE GROUPS

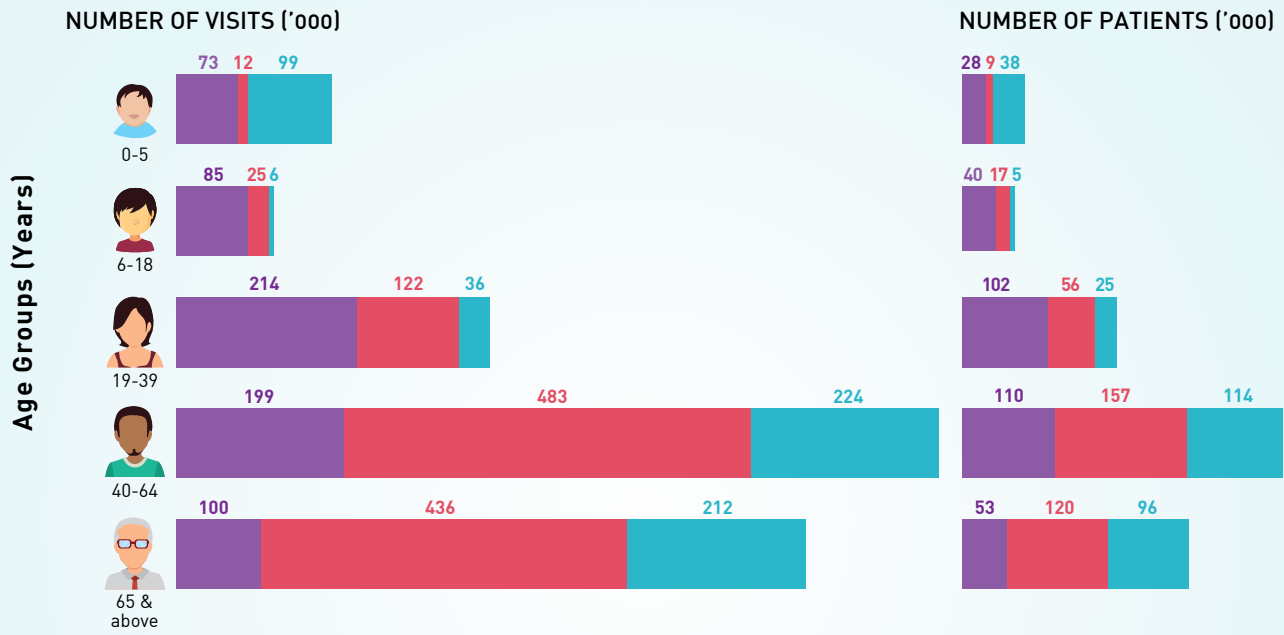


GENDER RATIO
OF PATIENTS

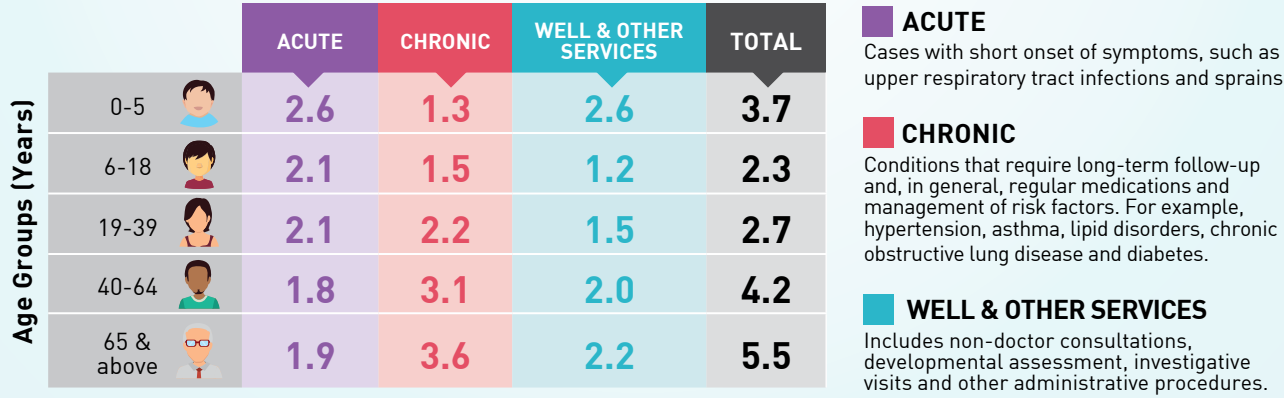


NOTE
As numbers are rounded up for greater clarity, small rounding differences may arise.

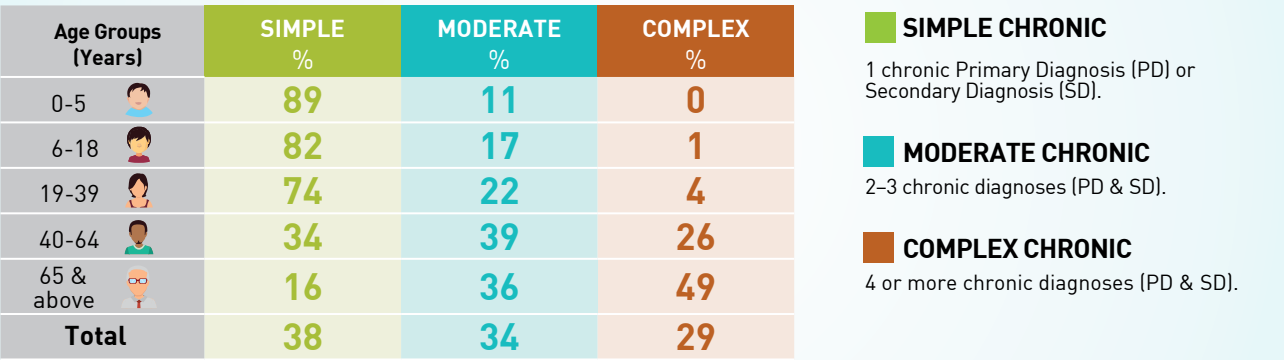
TYPES OF VISIT BY DIFFERENT AGE GROUPS



AVERAGE NUMBER OF VISITS PER PATIENT



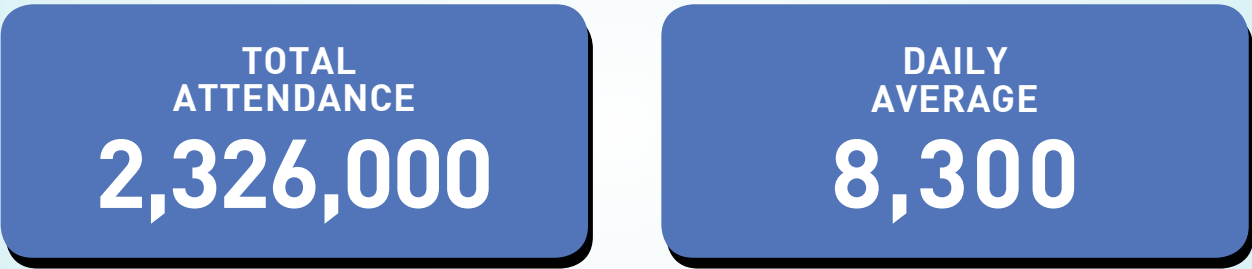
CHRONIC PATIENTS BY AGE GROUP AND COMPLEXITY



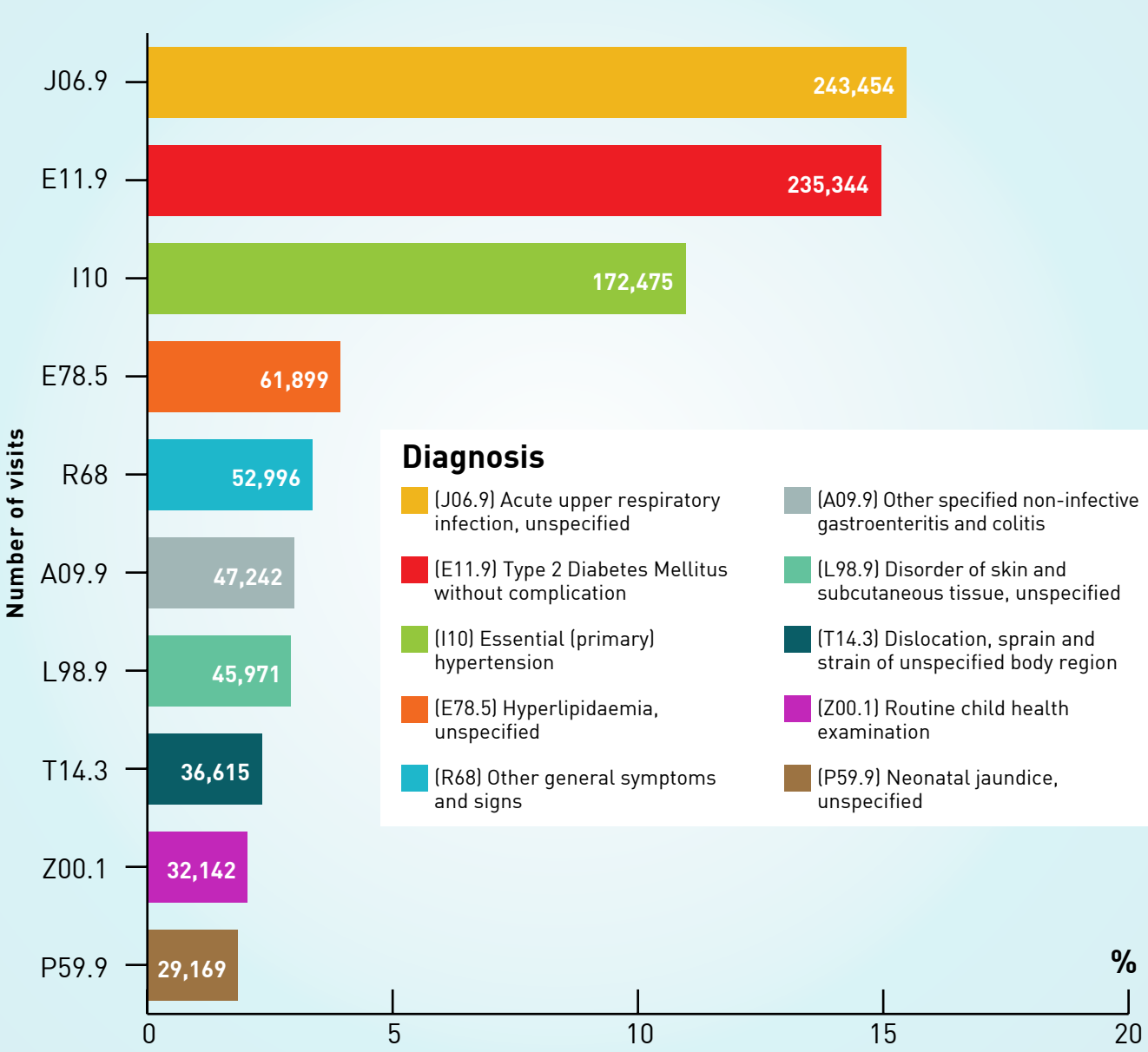
NOTE

As numbers are rounded up for greater clarity, small rounding differences may arise.

ATTENDANCE FIGURES



TOP 10 PRIMARY DIAGNOSES



NOTE

As numbers are rounded up for greater clarity, small rounding differences may arise.

CONSULT WAITING TIME

VISIT TYPE	PERCENTILE	
	50th	95th
Walk-in	10 mins	53 mins
Appointment	7 mins	47 mins

HEADCOUNT

JOB CATEGORY	FY2018
Administrative	167
Allied Health ¹	48
Ancillary	448
Dental ²	99
Medical ²	232
Nursing	284
NHG Diagnostics	305
NHG Pharmacy	208
TOTAL	1,791

NOTE
¹Allied Health category excludes all Pharmacy staff. Pharmacists, pharmacy technicians, pharmacy assistants, pharmacy store keepers, and retail pharmacy staff are subsumed under NHG Pharmacy.
²Medical and Dental categories include Medical Officers and Dental Officers from the Ministry of Health Holdings.

NOTE
As numbers are rounded up for greater clarity, small rounding differences may arise.

SNAPSHOTS OF DENTAL PATIENTS

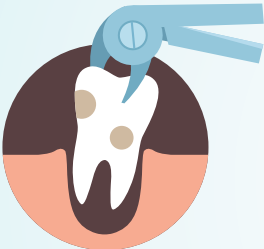
NUMBER OF DENTAL VISITS IN FY2018

136,000

DENTAL CLINIC

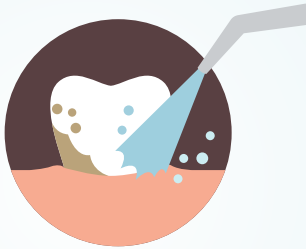


NUMBER OF DENTAL PROCEDURES IN FY2018



66,000

Fillings and Extractions



135,800

Dental Check-ups, Scaling and Polishing

TOTAL
201,800

BASIC DENTAL PROCEDURES BY NUMBER OF VISITS (DAILY AVERAGE) IN FY2018



236

Fillings and Extractions



485

Dental Check-ups, Scaling and Polishing

NOTE
As numbers are rounded up for greater clarity, small rounding differences may arise.



National Healthcare Group Polyclinics

3 Fusionopolis Link
Nexus @ one-north
#05-10 South Tower
Singapore 138543

Contact Centre: (65) 6355 3000
Email: enquiries@nhgp.com.sg
Website: www.nhgp.com.sg
