

The Coming Together of  
**Care**

ANNUAL REVIEW 2018–2019

OUR PEOPLE,  
CONNECTED BY PURPOSE;

# Working as a Team.

**MS SAMIEYAH BTE SAFI'**  
Health Attendant,  
Pioneer Polyclinic



**MS SHIAMALA  
D/O SANTHIRAN**  
Senior Patient  
Service Associate,  
Pioneer Polyclinic

**DR SIAU KAI RONG**  
Family Physician,  
Pioneer Polyclinic



**MS AUDREY HII**  
Senior Medical Social Worker,  
Jurong Polyclinic



**MS YIN SHUMEI**  
Assistant Nurse Clinician,  
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- 3w CEO's Message
- 4 Team-based Care Model
- 6 Empowering Communities
- 12 Cultivating Innovation
- 16 Strengthening Care
- 22 Care and Teamwork in All that We Do
- 24 Senior Management Team
- 26 Highlights
- 27 Awards

## CEO's Message

Through teamwork, we have harnessed our diverse experiences and skills to strengthen our delivery of care, cultivate a climate of innovation, and empower our staff and the communities around us. We channel this into ensuring patient-centric and seamless care in the community.



As a new organisation and the first primary care arm of the National University Health System (NUHS), the last two years have not been free of challenges for us at NUP. Many of us have found ourselves in new territories. In between ensuring the smooth running of our clinics and coordinating care within the larger NUHS ecosystem, the healthcare industry as a whole has also faced new challenges that we have had to rapidly respond to.

The nationwide recall of Losartan in March 2019, along with the internet separation across all public healthcare institutions that followed from the cybersecurity attacks in July 2018, are two examples that had rattled all players. Teams in NUP exhibited speed and commitment in responding to such challenges, and I am proud of all staff for their dedication to patient safety and quality care.

In such times, we are reminded of the role that teamwork plays in our successes. Through teamwork, we have harnessed our diverse experiences and skills to strengthen our delivery of care, cultivate a climate of innovation, and empower our staff and the communities around us. We channel this into ensuring patient-centric and seamless care in the community.

Indeed, NUP was able to achieve excellent results in our annual patient experience survey thanks to the concerted effort and hard work of all staff. This could not have been possible without our staff's continuing commitment to delivering excellent care and service, and I thank them for their efforts.

This year, several of our projects have also made progress in reorganising our approach to healthcare and developing new models of care. The Transcutaneous Bilirubinometry (TcB) initiative transformed the way we assess and manage neonatal jaundice in all our polyclinics, impacting not only our patients, but also our staff and system. Another programme, known as the Patient Activation through Community Empowerment/Engagement for Diabetes Management (PACE-D), has also been newly piloted at four of our polyclinics to assess the feasibility of a new care model for patients with diabetes. Such projects were sparked by collaborations between the various teams in NUP, NUHS and our partners in the community. Partnerships will be crucial as we take promising projects from their pilot stage to look at how we can replicate these models and systemise them to ensure widespread impact.

More than building on partnerships to transform primary care, these collaborations will help us remain adaptable to changes as health issues emerge and we face disruption from technological advances. The upcoming adjustment of our new IT system as part of the Next Generation Electronic Medical Records (NGEMR) project will require rapid response, clear coordination between all roles and seamless execution. Teamwork is key and by continuing to work together, we can look forward to exciting opportunities for innovation.

As NUP grows, let us continue to foster synergies across the entities in NUHS, and together, see how we can advance the health of the community by synergising care, education and research. The recent alignment of all logos under NUHS is a testament to this commitment of working as OneNUHS, and we are excited to see what more we can achieve together for healthcare and the health of our nation.

**DR LEW YII JEN**  
Chief Executive Officer

# Working as One for Enhanced Patient Care

To ensure that care is centred around our patients' needs, NUP has adopted a team-based approach that aims to provide holistic care to patients with chronic diseases.

Under this model, patients are managed by a core team, comprising family physicians, a care coordinator and a care manager, to journey with them and their families as they aim to keep their conditions under control. Patients are educated by the team on healthier lifestyle choices, closely monitored with regard to their disease control, and actively engaged in the decision-making process around their individually tailored care plans. The core team is closely supported by pharmacists and allied health professionals such as dietitians, medical social workers, physiotherapists, podiatrists and psychologists.

## **FAMILY PHYSICIANS**

Leads the core team in managing the patient's chronic condition(s). Physicians spearhead the development of the care plan alongside the patient and the rest of the team.

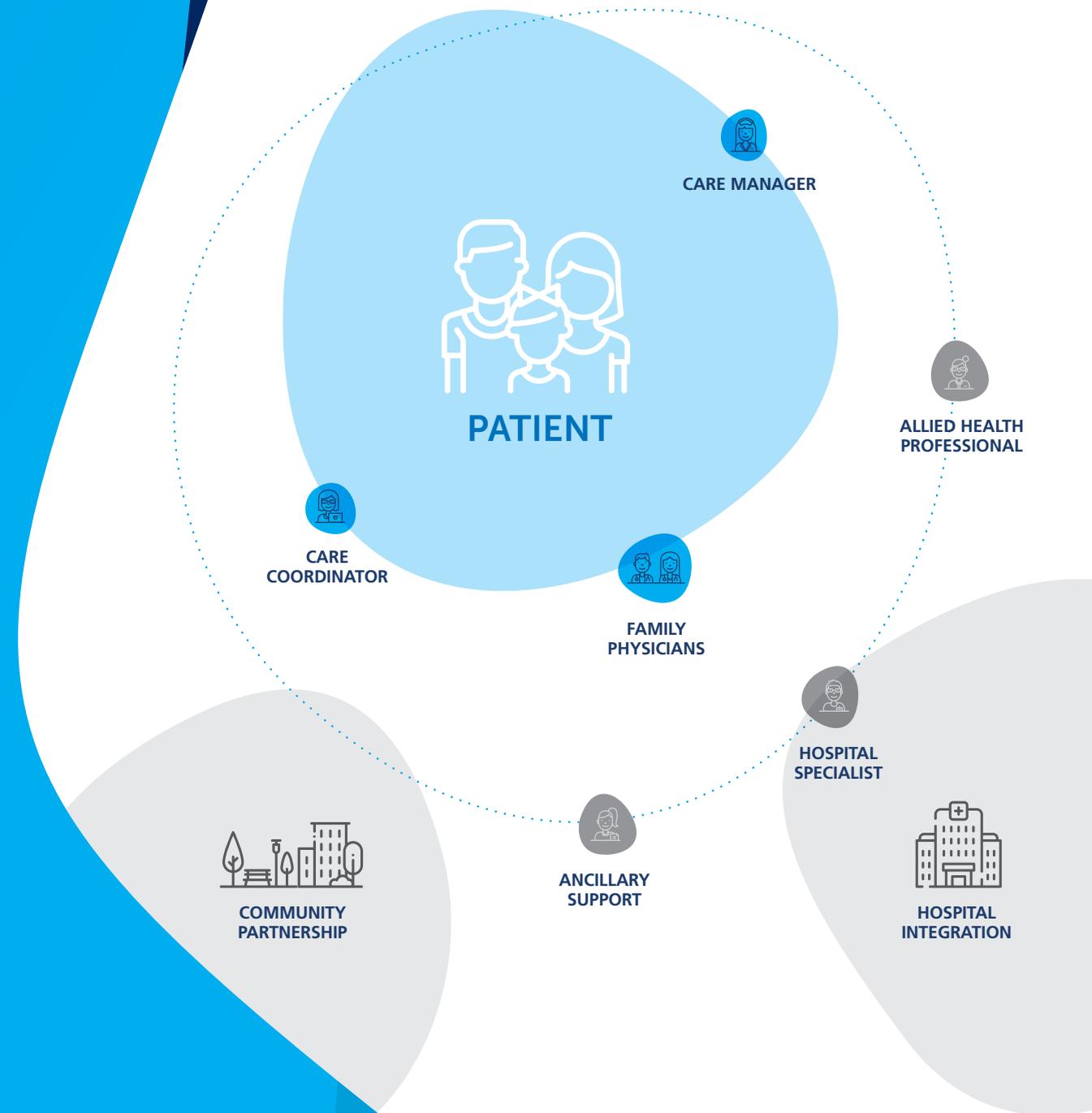
## **CARE COORDINATORS**

Identifies patient's preventive health needs and refers them to available resources where appropriate. They track and follow up with patients on their appointments, and provide support for chronic care delivery.

## **CARE MANAGERS**

Nurses who are specifically trained in managing chronic diseases, and help to execute patients' care plans. They actively empower patients and their families through health education so that patients can better manage their health.

## TEAM-BASED CARE MODEL



I find that we have more opportunities to build deeper relationships with our patients and their families. This helps the team to provide care that is a lot more tailored to their values, preferences and situation.

**DR CHEAH MING HANN**  
Family Physician, Jurong Polyclinic



## care organised around patients

Patients trust us more and it becomes easier for them to discuss their concerns and make decisions with us on how they want to manage their conditions. A big part of this is because the patient is matched to a team, and we can build a relationship with them over time.

**MS JUNE SULASTRI BINTE MOHAMED KALIP**  
Senior Staff Nurse, Bukit Batok Polyclinic



I find that this approach helps to improve communication and build trust between my mother and this team of healthcare workers.

**DAUGHTER OF A PATIENT  
UNDER TEAM-BASED CARE**



I think patients are more motivated to manage their health and come back to the clinic for their follow-ups, which makes a big difference to their overall health. Building on this, I hope we can continue to expand our team-based model and deliver holistic care to even more patients.

**MS RACHEL LOH**  
Care Coordinator,  
Choa Chu Kang Polyclinic

## Empowering Communities

We believe that in order for us to make an actual difference to community health, we will need to empower the public to make more informed health decisions, and ensure that our teams are equipped to recognise and address the changing needs of diverse communities. This shift can only come about as our teams work together and across institutions to bridge gaps in knowledge and improve the overall accessibility to care.

## Empowering Parents and Optimising Time for Nursing Services



At NUP, we are constantly exploring how we can leverage digital platforms and tools to streamline workflows, facilitate the collection of information for patient care and population health, promote collaboration, and empower patients and their caregivers.

As part of this, the NUP Clinical Informatics and Nursing departments collaborated on a project to identify and pilot process changes in its Childhood Immunisation and Development Assessment services to streamline workflows and optimise nurses' time in delivering care.

The project led to the launch of NUP's first Children's Health webpage in Jan 2019. The webpage readily provides parents with easy-to-understand information on the various vaccinations and development assessments for their children, from newborn babies to six years of age, and post-vaccination care tips for their infants. Previously, such information was only available at the clinic and during their consultation with nurses.

Piloted at Bukit Batok Polyclinic, the project means that nurses will be able to spend more time on care delivery, and it is hoped that the information will empower parents to make more informed decisions around the health of their children.

## Challenging Our Acceptance of Ageing and Frailty

As our population ages, it is increasingly important for our community to understand how they can age in place and live healthier lives. A key issue that impacts many of our elderly is frailty, which is often misperceived as a natural, irreversible process of ageing. While frailty is a condition that can lead to adverse health outcomes such as disabilities, increased hospitalisation and early mortality, it can be deterred or better managed.

A first for polyclinics in Singapore, NUP rolled out the Frailty Screening Programme at Bukit Batok Polyclinic and Choa Chu Kang Polyclinic to actively identify elderly patients who are frail or at risk of frailty. NUP worked closely with the National University Hospital (NUH) Geriatrics Department to develop a framework to screen for frailty, and to refer cases to the NUHS Happy Ageing Promotion Programme for You — Health Education and Active Lifestyle (HAPPY-HEAL) programme to slow down or prevent frailty through a combination of exercises and education.

The screening programme is a key example of how synergies between different departments within NUHS can produce meaningful initiatives. Moving forward, the team will continue to find ways to further support frail patients and develop sustainable programmes to manage frailty in all our elderly patients.



### IMPACT:

- By March 2019, over 2,400 patients were screened
- Of this, less than 1 in 10 were identified as frail, and 3 in 10 identified as pre-frail
- Initial findings from HAPPY-HEAL showed more than 60% improvement in cognitive function and more than 44% improvement in physical function

# Inspiring Active Participation from Patients to Improve Diabetes Management

Beyond treatment, empowering patients to have a more active role in managing their chronic conditions is key to improving health and reducing the risk of complications. This belief led NUP to develop the Patient Activation through Community Empowerment/Engagement for Diabetes Management (PACE-D) programme with the NUH Division of Endocrinology, through a collaboration with the UK's Year-of-Care (YOC) team in 2018.

In PACE-D, the Care and Support Planning consultations provide patients with diabetes more time and space to discuss important issues and co-create care plans with their care team. These conversations are cultivated in part through an easy-to-understand results letter that will be mailed to them beforehand to allow them to better prepare for their clinic visit. Patients may also be referred to community programmes that support self-management.

After the training phase was completed in 2018, the programme was launched in 2019 at four NUP clinics — with Pioneer and Jurong clinics conducting the PACE-D interventions, and Bukit Batok and Choa Chu Kang clinics serving as the control group. Over 400 patients were enrolled by August 2019.

The PACE-D team also partnered the National University of Singapore (NUS) Saw Swee Hock School of Public Health and NUS Centre for Biomedical Ethics to evaluate the impact of the interventions on patient care and outcomes. If shown to be effective, PACE-D could represent a new model of care for diabetes management.

When PACE-D was launched after months of planning, preparation and training, it felt like a clock springing to life for the first time after all the parts had been carefully assembled. In future, I hope we can team up with non-healthcare partners to tap on their valuable expertise and resources for collaborative projects to improve our healthcare system and overall health of our communities.

**DR TAN WEE HIAN**  
Deputy Head, Pioneer Polyclinic and Family Physician, Associate Consultant

As Programme Director for PACE-D, Dr Tan leads the team and ensures that all members are aligned with the programme objectives, and updated on its progress and outcomes.



Seeing PACE-D come to life and rolled out in the various clinics was great after months of hard work with the rest of the team. We work hand-in-hand to resolve workflow issues and assist one another in becoming more familiar with the processes. This project has made communication more effective and created better understanding among our team members, as well as with our patients.

**MS NADZIRAH BINTE ISA**  
PACE-D Coordinator, Pioneer Polyclinic

In her role as a coordinator for PACE-D, Nadzirah recruits suitable patients for the programme, administers questionnaires and works with PACE-D Coordinators from other clinics to continually share work experiences to overcome challenges encountered.



With PACE-D, I feel that patients are more interested to understand their health and what they can do to help themselves. Through the Care and Support Planning consultations, patients are more willing to make changes to their lifestyle. When the team agrees with the patient on the care plan, it makes the patient feel more confident.

**MS SHEN XIAOLING**  
Senior Staff Nurse, Pioneer Polyclinic

As the care manager in the team, Xiaoling identifies patients for recruitment into PACE-D. She is also involved in the delivery of Care and Support Planning consultations to patients in the programme.



## Expanding the Role of Advanced Practice Nurses as we Enhance Community Care

Healthcare transformation over the last decade has seen the role of advanced practice nurses (APNs) and pharmacists evolve into team-based care, where they manage patients alongside other healthcare professionals.

To provide seamless care for our patients, and allow APNs and pharmacists the autonomy to practise at the top of their licences, three of NUP's APNs completed the National Collaborative Prescribing Programme (NCP). They will now be able to assess a patient's condition, develop a treatment plan and prescribe medications.

This could translate to improved accessibility, a more holistic care plan and shorter clinic waiting times for patients. The programme significantly paves the way forward in enhancing patient care within the community, and empowers other healthcare professionals to contribute to improving clinical outcomes and accessibility of care for patients.

As NUP continues to strive towards delivering holistic and patient-centred care, there are plans for all our APNs to undergo the programme to widen their scope of practice.

Left to right:

**MS WANG NA**  
Jurong Polyclinic

**MS LIAU WEI FONG**  
Bukit Batok Polyclinic

**MS NATASHA TEO**  
Choa Chu Kang Polyclinic

The three APNs from NUP who have been credentialed as collaborative prescribers.

## Equipping our Family Physicians for an Ageing Population

As Singapore's population ages, equipping our primary care doctors with the necessary skills to provide long-term care at the community level is crucial in helping to keep healthcare costs low and fostering healthy communities.

In line with this, NUP has worked closely with various NUHS entities — from NUS Yong Loo Lin School of Medicine, to our other specialist centres and hospitals — to train up competent family physicians by enhancing the NUHS Family Medicine residency programme. As part of this, the total number of new family medicine residents per year will increase to 30.

So far, targets are on track, as the number of residents taken in have increased from 11 for the Academic Year 2017–2018, to 21 for the Academic Year 2018–2019.

## Early Hands-on Experiences to Shape Future Doctors

Early exposure to clinical care as part of medical education provides students with the opportunity to deepen and apply their knowledge in a real setting, and enhance soft skills that are important for patient care and management.

In light of this, the NUHS Department of Family Medicine and the NUP Family Medicine Development department worked closely to organise half-day attachments for first-year medical students at NUP clinics. As part of this programme, students will observe patient consultations and several treatments for chronic conditions that are available at the clinics.

**Since its pilot in 2018, 292 first-year medical students have already benefitted from the programme.**

### ABOUT NCPP:

- A 3-month training programme by NUS, which aims to consolidate and update knowledge from the participants' previous training with their current clinical practice
- The programme hones participants' skills in areas such as history taking, clinical decision-making, multi-disciplinary collaboration, clinical assessment, disease management and pharmaco-therapeutics
- Participants who successfully complete the programme will be licensed as collaborative prescribers within their own institutions



## Cultivating Innovation

We embrace the spirit of innovation in looking for new ways to shape community care. To us, this means tapping on the diverse backgrounds, experiences and expertise of our people and our partners to create new processes, approaches, and technologies that will ultimately result in better care.

As an operations trainer, I find meaning and joy in helping our younger colleagues by sharing the knowledge and experience I have gained over the years of working here.

**MS NURUL ASYIRIN  
BINTE ROSMAN**  
Senior Patient Service Associate,  
Pioneer Polyclinic

## A New Approach to Incorporate Values into Training



At NUP, we believe that staff at all levels should be competent, caring and committed to delivering value care for our patients. To address this and promote a culture in line with NUHS values, the team relooked at our training framework for existing and new hires to develop a new initiative that would take our service delivery to the next level.

As a result, the Service Culture initiative was launched in July 2018. Representatives from across the spectrum of departments, from Human Resource to Nursing Administration and Service Quality, provided their expertise in the development of the training curriculum and roadmap. They also trained 13 patient service associates who were selected to be the operations trainers for the functional and service-related modules.

As part of the roadmap, staff will now undergo service training to improve customer service, and performance will be tracked over time to monitor effectiveness. New hires will also undergo functional skills training to ensure that they are able to operate and implement the latest technologies used at our clinics.

## Pioneering Approach for Early Dementia Detection

With dementia cases on the rise, early detection remains a major challenge in ensuring timely intervention and management. As the first point of contact for patients, primary care doctors play an important role in detecting and managing dementia in the community.

In light of this, NUP published its first, first-authored paper in BMC Psychiatry, an internationally renowned journal, on a new model of care that tackles dementia in the community. The paper evaluated the effectiveness of the new model, a Memory Clinic in a polyclinic, that highlights the impact of redesigning healthcare services to foster collaboration between primary and specialist care services.

Choa Chu Kang Polyclinic (CCK) was one of the first in Singapore to have an onsite Memory Clinic run by a multidisciplinary team of primary care doctors, specialists and allied healthcare professionals. Although memory clinics have been established before, NUP's clinic is the first to integrate family medicine, specialist geriatric psychiatry services and community social service agencies to diagnose and manage dementia in the community. The Memory Clinic also provides training for NUP family physicians in dementia care.

The NUP team, led by Dr Lai Shan Hui from CCK, worked closely with Dr Tsoi Tung from the NUH Department of Psychiatry, his allied health team, and community partners such as Fei Yue Community Services to ensure that sufficient resources and support were provided to patients and their caregivers.

The success of the Memory Clinic has the potential to shape future dementia care models in Singapore and beyond, and there are plans to replicate the model in other NUP clinics.

### THE IMPACT OF A NEW MODEL OF CARE:

- Findings showed that more than 9 in 10 patients could be managed by the Memory Clinic and did not require escalation to other specialist services
- Almost all caregivers who required support had their needs addressed by the clinic

## From Innovative Technology to Stronger Systems

2018 saw the piloting of Transcutaneous Bilirubinometry (TcB) for jaundice screening in neonates at NUP. The new screening method is a product of the collaboration between NUP and the NUH Department of Neonatology, and reduces the need for unnecessary heel pricks to assess the severity of jaundice in neonates. With this, only neonates with a reading above a certain threshold require a blood test for Serum Bilirubin (SB) and may be referred to a doctor or a hospital thereafter.

While the first phase of the pilot focused on ensuring that nurses were able to administer the TcB tests prior to the review by doctors, the second phase looked at empowering nurses to manage follow-ups for repeat TcB tests among neonates, instead of referring all cases to doctors. About half of the infants tested did not require a blood test and doctor consultation, allowing doctors to focus more on other complex cases. In the next phase towards the end of 2019, both TcB and SB test results will be managed by nurses.

Key to this success is the teamwork between the NUP Nursing and Clinical Services departments, and NUP's Paediatrics Specialty Advisory Group. Several nurses were appointed as 'champions' at each clinic to provide on-the-ground feedback that helped to refine the test's protocols.

### IMPACT OF INNOVATION:

- Patients saved 53 minutes per visit on average
- 6 out of 10 infants were able to avoid a heel prick blood test
- No pain for neonates and less stress for parents, with 89% of parents rating the TcB test as 'Excellent' or 'Very Good'

Seeing parents and their babies benefitting from this initiative brought great satisfaction, especially since NUP is the first polyclinic cluster to roll this out! It would be great to see more of such collaborations in future, not only in how we serve patients but also in education and research.

**DR RUTH ZHENG**  
Family Physician, Consultant,  
Bukit Batok Polyclinic

As the Paediatrics Specialty Advisory Group lead, Dr Zheng was key in developing the protocols and clinical guidelines for the implementation of the TcB test in all clinics.



It was emotional for me, and I felt that the blood test was painful for the babies. My baby wailed during the first blood test but now, when the nurses use the machine, she doesn't cry. She did just fine through the five readings that the nurses took.

**MOTHER OF AN INFANT WHO UNDERWENT THE TcB TEST**



For me, seeing our nurses carry out the test and confidently following through with the care plan for the babies was especially rewarding. It's great to see the role of nurses expanding as they take on more responsibilities for patient care alongside the doctors, and we hope this will continue.

**MS MABEL ONG**  
Deputy Director, Nursing

Oversees and drives the development of new services for nursing in NUP, one of which is the TcB initiative.

## Strengthening Care

Teamwork lies at the heart of our ability to deliver care for patients and their families. By fostering teamwork between the various members of NUHS, we ensure the delivery of seamless care and the ability to continually innovate and improve.

## Ongoing Collaborations that Promote Oral Health

The formation of OneNUHS creates a unique opportunity to integrate tertiary care and community health. Building on this, NUP works closely with the National University Centre for Oral Health, Singapore (NUCOHS) and the NUHS Regional Health System (RHS) Office on various initiatives to strengthen dental care in the community.

Two screening projects have been launched. The first is an oral cancer campaign, led by Professor Philip McLoughlin and Dr John Loh from NUCOHS, that trains NUP dental officers to incorporate oral cancer screening as part of routine patient care. The second is Project Silver Screen, a functional screening to identify oral dysfunction among the elderly and ensure timely referral to the appropriate care settings, be it Community Health Assistance Scheme (CHAS) dental clinics, NUP dental clinics or NUCOHS for specialist care.

Beyond efforts in preventive health, the partnership also provides more opportunities for education and training for polyclinic dentists, which ultimately results in improved clinical care. NUP dental surgeons can now practise at NUCOHS' newly formed Advanced General Dental Practice Unit to increase their clinical exposure and upkeep their

We never expected our one-off lecture on oral cancer to become an ongoing collaboration that would create a new workflow for faster referrals from the community to NUCOHS. When I was in the UK, I had experience with oral cancer screening and awareness campaigns, so it's been great to be able to bring that to Singapore now and work with the team at NUP to bring this to life.

**ASSOCIATE PROFESSOR PHILIP MARTIN MCGLOUGHLIN**  
Senior Consultant, Oral & Maxillofacial Surgery, NUCOHS

Developed the educational framework on oral cancer for dental officers, as well as the screening process at the community level.

skills. Dr Patricia Wong, NUP Dental Surgeon and Head of Jurong Polyclinic Dental Services, has also been engaged to teach NUS Dental undergraduates, most of whom are first posted to NUP upon graduation.

The exchange of ideas and sharing of resources have been made possible through the integration within NUHS and the commitment of all parties in working together to improve oral health for the community.

It's been inspiring to see the OneNUHS vision come to life. These partnerships have benefitted our patients as well as our dental team. I've seen dental officers become more vigilant in screening and more confident in discussing cases with the specialists at NUCOHS. This is just the beginning and I look forward to initiating more projects in the future.

**DR WENDY WANG**  
Director, Dental Services

One of the key drivers of the ongoing partnership between NUP and NUCOHS.



This project has made dental officers more aware of oral cancer and suspicious lesions that could be a sign of oral cancer. Partnering with NUCOHS has also given us more confidence and assurance. Now, we can directly refer urgent cases to them for accurate diagnosis and treatment, or reach out to them when we examine suspicious lesions.

**DR ALEXANDER MARK LEE**  
Dental Officer-In-Charge,  
Queenstown Polyclinic

A key member of the oral cancer campaign and oversees the NUP dental officers in identifying patients with a high risk of oral cancer.



## Reinventing Systems for Patient Safety

A cornerstone for enhancing patient safety, the Incident Reporting Information System (IRIS) enables prompt notification of incidents and escalation of more serious events to senior management.

To maximise learning opportunities and reduce the risk of repeat incidents, the NUP Quality department revamped IRIS in 2018 to streamline the workflow for incident reporting and decentralise incident review.

This enhanced IRIS' value as a structured tool for analysis of reported incidents by the designated multidisciplinary teams at each clinic. The new IRIS facilitates the uncovering of risk-prone processes and allows for more rapid local response and corrective action. The learnings gleaned at the clinic level are consolidated, with additional audit and evaluation performed where necessary, and shared across other clinics to improve safety.

We acknowledge the contributions of various key stakeholders — clinic heads, NUP Clinical Services and Nursing departments, Data Protection Office and the Integrated Health Information Systems (IHIS) — for the revised reporting requirements and workflow.

## Cultivating a Collaborative and Open Culture of Learning

At its most basic, clinical audits serve as a quality check on the delivery of care, which is essentially a pass or fail test. But it is just as important for healthcare professionals to benefit from such checks by receiving peer inputs and to reflect on their practice to improve care. The peer auditors themselves also stand to gain from learning from the cases that have been assigned to them for review.



Left to right:

**MS ALANNA KWONG**  
Senior Executive, Quality

**MS CHUNG HWEI CHING**  
Manager, Quality

Members of the NUP Quality department at the 2019 International Forum on Quality and Safety in Healthcare that was held in Taipei, where posters on the IRIS and clinical audit projects were displayed.

This was the thinking that led the NUP Quality department to revamp the audit process within our clinics — shifting from a centralised approach that involved only a few selected physicians, to a peer-led approach that includes almost all physicians. The clinics also leveraged on digital tools such as the Redcap software, a secure online platform typically used for research and surveys, and a data visualisation software to gather inputs and visualise results to identify gaps and take action.

At each stage of the project, multiple stakeholders, such as the clinic heads, the NUP Clinical Services department and the NUHS Redcap team, were engaged to ensure smooth implementation.

We hope that this new approach at peer-directed learning will inculcate a culture of awareness and open feedback in NUP, paving the way for tangible, practical and consistent care to be delivered across all clinics and teams.

## Tackling Diabetes by Understanding Underlying Behaviour

Lifestyle habits contribute significantly to the progression of pre-diabetes to diabetes. Understanding the behaviours and beliefs of those with pre-diabetes can help to shape practice and policy to improve the delivery of care.

A study was conceptualised in a cross-institutional collaboration to assess the factors that influence the dietary and physical activity behaviours of primary care patients with pre-diabetes, including their education needs. Ms Lynette Goh, Principal Dietitian at NUP, was part of the research team which included the Principal Investigator from NUS Saw Swee Hock School of Public Health, and co-investigators from the National Healthcare Group Polyclinics.

The study revealed that 1 in 2 primary care patients with pre-diabetes did not feel at risk of diabetes. While healthcare professionals such as doctors and nurses were seen as key educators to patients, opportunities for engagement were lacking, with 3 in 4 patients having never received any education on pre-diabetes at the polyclinics. The findings also shed light on the key areas that our educational messaging should focus on to better engage those with pre-diabetes.

The study identified crucial gaps that subsequent practices and policies could fill, and is one example of how NUP is leveraging research to shape practice.

The findings were presented by the team at the Singapore Health and Biomedical Congress, and were awarded Gold for the Singapore Primary Care Research Award (Oral).



**MS LYNETTE GOH**  
Principal Dietitian, Pioneer Polyclinic

A member of the research team.

## Better Care with Further Education for Family Physicians



Medical education is a lifelong process, as practices and treatments are continually updated and new health trends emerge. The Fellowship programme by the College of Family Physicians, Singapore (CFPS) serves to enhance and complement the trainee's sphere of clinical experience and practice. Upon successful completion of the programme, the trainees will be able to function as a consultant in the essential roles of a family physician.

Recognising the value of further education in improving care, the NUP Family Medicine Development department organised the Family Physician Consultant Development Programme with Jurong Community Hospital (JCH) to provide guidance, resources and support for doctors who have registered for the Fellowship.

As part of the programme, trainees have a 3 to 6-month posting at JCH to expand their experience beyond the polyclinic, and attain a wider view of the healthcare system. The programme also provides teaching and research opportunities in Family Medicine.

Dr Ruth Zheng from NUP worked closely with Dr Kelvin Koh and Dr Alvin Ong from JCH to develop and plan the programme. The core team also worked with the various departments at JCH and NUP to ensure that trainees are able to complete the Fellowship.

## Special Mention

### TEAMWORK BEHIND OUR RAPID RESPONSE TO A NATIONWIDE MEDICINE RECALL

When the Health Sciences Authority (HSA) announced a nationwide recall of three brands of high blood pressure medicine in March 2019, NUP knew that we had to act fast as about 24,900 of our patients were affected by this.

The affected medicines, which contain the ingredient losartan, were found to have higher than acceptable levels of a nitrosamine impurity. This could potentially increase the risk of cancer if ingested over a long period of time.

To minimise risks to patient health, patients on the medication were advised to continue with their medication until they received a replacement prescription. Thus, it was important for our clinics to attend to all affected patients as soon as possible.

The various teams in NUP took action immediately to tackle the recall issue. Overnight, the NUP Operations department set up a NUP call centre, manned by NUP HQ and identified ground staff to handle queries from our patients. Our ground operations team in our clinics sent out SMSes to all affected patients, and in the first three days of the announcement, they managed to bring forward more than 6,000 appointments.

Doctors, nurses, diagnostics staff, operations staff and pharmacists worked round the clock — be it to review affected patients, run additional lab tests to assess patients' suitability for other types of medication, address patients and caregivers' concerns or manage the dispensing of medication.

At the end of the day, all patients were seen to and their medication altered accordingly. Despite the intense pressure of the situation, all teams functioned effectively and efficiently to complete the tasks as quickly as possible to ensure the safety of our patients.

## Care and Teamwork in All that We Do

At NUP, we strive to cultivate an inclusive and nurturing culture that not only promotes teamwork across the different divisions but also ensures that all staff are equipped with the skills to function effectively in multidisciplinary teams.



I'm really grateful for the opportunity to become a care coordinator. The programme has taught me new skills and prepared me to take on a larger role in patient education and care. I get to have closer interactions with patients, which I find meaningful and satisfying.

**MS KAREN PANG**  
Care Coordinator, Pioneer Polyclinic

Successfully completed the Careers Conversion Programme.



Our staff work very hard to fulfil our patients and internal customers' needs, and it can be extremely challenging. We want to care for them beyond their working needs. Through various wellness initiatives, we aim to provide avenues for them to spend quality time with their loved ones and maintain a healthy lifestyle.

**MS ONG HUI YIN**  
Senior Executive, Human Resource

The Careers Conversion Programme offers an excellent opportunity to forge a new career option for our patient service associates. The conversion scheme is particularly beneficial for those who prefer more interaction with patients, as they get to be directly involved in supporting chronic care management.

**MS JANCY MATHEWS**  
Chief Nurse

Our initiatives go beyond training staff and focus on nurturing closer bonds within and between teams, and ensuring the health and welfare of our employees.

### BUILDING A 'ONE NUP' CULTURE

A series of team building activities were carried out for HQ and six polyclinics in 2018 as we continue to build a culture that promotes teamwork. The activities saw over 620 participants from various departments gather together to bond and hear first-hand how various colleagues are able to apply our values at work to ensure NUP continues to deliver first-class care to patients and the community.

### HR CLINICS

As some clinic staff are unable to travel to HQ for their sessions with HR, we launched HR Clinics onsite at the polyclinics, to allow staff to voice their concerns and queries with the HR team. This also allows HR to become familiar with staff and understand the needs on the ground so as to better tailor solutions and initiatives.

### MENTAL WELLNESS AT THE FORE

NUP has enhanced our onboarding process with a buddy system to look out for the physical and mental health of our staff. Staff may seek support from our appointed Support Champions who are trained and equipped with the necessary counselling skills and coping techniques. The framework was a spin-off from the employees' health and wellness programme.

### NURTURING OUR FUTURE WORKFORCE

To encourage lifelong learning and in turn, an up-to-date primary healthcare workforce, NUP spent more than \$620,000 in FY2018 to train staff on the latest technology and machines in our cluster, develop talent and nurture future leaders. With the upskilling, it is hoped that staff will be able to adapt to the changing healthcare landscape and our multidisciplinary teams will remain committed, competent and capable with a future-ready skill set.

### BUILDING A STRONG CORE FOR TEAM-BASED CARE

Our Careers Conversion Programme provides a platform for patient service associates (PSA) to undergo training and upskilling to move into the role of care coordinators to support NUP's team-based care model. PSAs who are keen to explore a progression into a nursing career can take on this career change to provide personal patient care.

### MANAGEMENT-UNION RELATIONS

We work in tandem with the Healthcare Services Employees' Union (HSEU) to maintain industrial relations and create an environment that will promote the interest and growth of all staff. Through regular meetings, we exchange updates on activities and relook at how we can improve current practices.

On 9 Nov 2018, NUP, together with other NUHS entities, concluded the Collective Agreement and a Memorandum of Understanding with HSEU. As part of this, various policies and welfare initiatives were enhanced to improve the experience of female staff as they return from maternity leave, and to simplify the inpatient payment process for staff seeking treatment within the NUHS cluster.

# Senior Management Team



**DR LEW YII JEN**  
Chief Executive Officer



**MR SAMUEL NG**  
Chief Operating Officer



**DR KEITH TSOU**  
Director, Clinical Services



**MS JANCY MATHEWS**  
Chief Nurse



**DR MEENA SUNDRAM**  
Director, Family Medicine  
Development



**DR VOO YAU ONN**  
Director, Quality



**MS ONG JING FANG**  
Assistant Chief Operating Officer



**DR STEVEN CHONG**  
Chief Medical Informatics Officer



**MS DAWN SIM**  
Head, Communications and  
Service Quality



**DR WENDY WANG**  
Director, Dental Services



**MR MATTHEW NG**  
Chief Financial Officer



**MR SIMON TAN**  
Chief Human Resource Officer



**DR KWEK SING CHEER**  
Head, Bukit Batok Polyclinic



**DR TAN KIM KIAT**  
Incoming Head, Bukit Panjang  
Polyclinic



**DR RICHARD HUI**  
Head, Choa Chu Kang Polyclinic



**DR ANANDAN GERARD  
THIAGARAJAH**  
Head, Clementi Polyclinic



**DR FRANCO WONG**  
Head, Jurong Polyclinic



**DR DAVID TAN**  
Head, Pioneer Polyclinic



**DR ALICIA BOO**  
Head, Queenstown Polyclinic

## Highlights

24 Apr 2018	NUP's Frailty Screening Programme was rolled out at Bukit Batok Polyclinic and Choa Chu Kang Polyclinic
3 May 2018	Members from the Peking Union Medical College, Beijing, visited Choa Chu Kang Polyclinic to learn about the NUHS Regional Health System and NUP
21 May 2018	The TcB test was implemented across NUP clinics
1 Jul 2018	Jurong Polyclinic Dental Services expanded to include two new dental chairs
18 Jul 2018	CEO Dr Lew visited Peking Union Medical College to share about NUP's experience with chronic disease management
Jul 2018	Intake of Family Medicine residents increased from 11 in AY2017/2018 to 21 in AY2018/2019
Jul 2018	The Operations Service Culture initiative was launched to train Operations staff in service delivery
10 Aug 2018	Nurses from Yangzhou University visited Jurong Polyclinic to learn about nursing in Singapore's primary care setting
6 Sept 2018	Pioneer Polyclinic was accredited by the Singapore Nursing Board
17-21 Sept 2018	Professor Ngairé Kerse, NUP's Health Manpower Development Plan (HMDP) Visiting Expert from New Zealand, visited NUP and shared on topics such as primary healthcare, aged care and chronic disease management
Sept 2018	Clementi Polyclinic expanded its capacity for nursing services such as developmental assessment, immunisation and diabetic foot screening, and increased allied health and doctor consultation rooms
25 Oct 2018	Ms Lynette Goh, Principal Dietitian, NUP, together with colleagues from NUS Saw Swee Hock School of Public Health and National Healthcare Group Polyclinics, were awarded Gold for the Singapore Primary Care Research Award (Oral) at the Singapore Health and Biomedical Congress
Oct 2018	Attachments for 292 Year 1 medical students were piloted at NUP in AY2018/2019
22 Jan 2019	Professor Howard Bergman, HMDP Visiting Expert from Canada, visited NUP and shared about providing sustainable geriatric services in the community
Jan 2019	NUP and NUCOHS' collaboration to raise oral cancer awareness began
Jan 2019	Clinical Management Audit was implemented at Bukit Batok Polyclinic, Choa Chu Kang Polyclinic, Clementi Polyclinic, Jurong Polyclinic and Pioneer Polyclinic
8 Feb 2019	Dr Lai Shanhui from Choa Chu Kang Polyclinic published NUP's first, first-authored article
5 Mar 2019	First APN, Ms Liau Wei Fong from Bukit Batok Polyclinic, started prescribing medications on her own
25 Mar 2019	Public health officials from Thailand visited Bukit Batok Polyclinic to learn about the NUHS Regional Health System and NUP
Mar to Apr 2019	PACE-D was rolled out in Pioneer Polyclinic, Jurong Polyclinic, Bukit Batok Polyclinic and Choa Chu Kang Polyclinic
29 May 2019	IRIS was revamped and the Quality Review Committees were formed at each NUP clinic
May 2019	Clinical Management Audit was implemented at Queenstown Polyclinic
1 Jul 2019	World Health Organisation's Chief Nursing Officer visited Bukit Batok Polyclinic to learn about nursing in Singapore's primary care setting
25 Jul 2019	Professor Paula Brauer, HMDP Visiting Expert from Canada, visited NUP and shared on the role of allied health professionals in collaborative care
6 Aug 2019	Professor Jon Emery, HMDP Visiting Expert from Australia, visited NUP and shared insights on primary care cancer screening and research

## Awards

### PRESIDENT'S AWARD FOR NURSES 2019

**MS JANCY MATHEWS**  
Chief Nurse

### HMDP AWARDS 2019

#### Individual Award

**DR DAVID TAN**  
Head, Pioneer Polyclinic and Family Physician, Consultant

**DR ZHANG ZHI PENG**  
Deputy Head, Choa Chu Kang Polyclinic and Family Physician, Associate Consultant

#### Team Award

**MS JAMILAH BINTE MOHAMED JAILANI**  
Senior Assistant Director, Clinical Services

**MS MAMIDALA VARSHA RAJESH**  
Senior Physiotherapist, Bukit Batok Polyclinic

**MS SONG SIN HOOI**  
Assistant Nurse Clinician, Jurong Polyclinic

**MS TOH HUI MOON**  
Clinical Psychologist, Jurong Polyclinic

**MS LEE KIM YOONG**  
Senior Medical Social Worker, Choa Chu Kang Polyclinic

**MS CHOW LI MING**  
Senior Dietitian, Jurong Polyclinic

### HEALTHCARE HUMANITY AWARD 2018

**MS CHUA CHEW TEE**  
Digital Archival Assistant, Choa Chu Kang Polyclinic

### STRATEGIC NURSING DEVELOPMENT AWARD 2019

**MS JANE LI**  
Senior Staff Nurse, Pioneer Polyclinic

### NATIONAL DAY AWARDS 2019

#### Commendation Medal

**MS SHARON KOO**  
Deputy Director, Human Resource

#### Efficiency Medal

**MS CHOI LAI HAH**  
Patient Care Assistant, Bukit Batok Polyclinic

**MS JURIAH BTE MOHD NOOR**  
Patient Service Associate Executive, Queenstown Polyclinic

**MS KAMSI AH BINTI YACOOB**  
Senior Patient Service Associate, Queenstown Polyclinic

**MS LEE BEE DING (LYN)**  
Senior Patient Service Associate, Bukit Batok Polyclinic

**MS SOH SU YI (CELIN)**  
Senior Patient Service Associate, Clementi Polyclinic

**MS TAN LEE LEE**  
Assistant Nurse Clinician, Choa Chu Kang Polyclinic

**MS YAP CHING MEI (IVY)**  
Patient Service Associate, Jurong Polyclinic

**MS YEW KIM ENG (AMY)**  
Patient Care Assistant, Jurong Polyclinic

**MS ZULAIHA BEGUM BINTE ZABURLA**  
Senior Patient Service Associate, Queenstown Polyclinic

#### Long Service Medal

**DR LEW YII JEN**  
Chief Executive Officer

**DR JONATHAN PHANG**  
Deputy Director, Clinical Services

**MS PARIMALAH D/O NAGAYAH**  
Senior Patient Service Associate, Choa Chu Kang Polyclinic

**MS RASHIDA BT NARAWI**  
Senior Staff Nurse, Choa Chu Kang Polyclinic

### MOH NURSES' MERIT AWARD 2019

**MS MARIAMAN D/O SUKUMARAN**  
Nurse Manager, Choa Chu Kang Polyclinic

**MS SAPTAH HAJI AHMAD**  
Assistant Nurse Clinician, Jurong Polyclinic

**NUHS-MOCHTAR RIADY  
PINNACLE AWARDS 2019**

*Excellence Award*

**DR KEITH TSOU**

Director of Clinical Services and Family Physician,  
Senior Consultant

**DR MEENA SUNDARAM**

Director of Family Medicine Development and  
Family Physician, Senior Consultant, NUP

Core Faculty, NUHS Family Medicine  
Residency Programme, NUHS

*High Achiever Award*

**DR DAVID TAN**

Head, Pioneer Polyclinic and Family Physician,  
Senior Consultant, NUP

Programme Director, NUHS Family Medicine  
Residency Programme, NUHS

**MS DAWN SIM**

Head, Communications & Service Quality

**ONENUHS  
AWARDS 2019**

*Long Service Award*

**DR VOO YAU OON**

Director of Quality and Senior Consultant  
(30 years)

**MS SELAMAH BINTE MATARA**

Health Attendant, Jurong Polyclinic  
(40 years)

**MS OW KWAI LIN**

Senior Staff Nurse, Clementi Polyclinic  
(45 years)

*Appreciation Award*

**MS KO LAY LEE**

Senior Midwife, Jurong Polyclinic  
(Retired)

**MS SEAH AH WAH**

Health Attendant, Jurong Polyclinic  
(Retired)

**NUHS EDUCATORS'  
DAY AWARDS 2019**

*Teaching Excellence Award*

**DR RUTH ZHENG**

Family Physician, Consultant, Bukit Batok Polyclinic

**MS WONG LI HUI**

Staff Nurse, Jurong Polyclinic

*Young Clinician Mentor Award*

**DR CHEAH MING HANN**

Family Physician, Jurong Polyclinic

*Inter-Professional Teaching Award*

**MS NG SOH MUI**

Senior Nurse Clinician, Nursing Administration

**NUHS NIGHTINGALE  
AWARD 2019**

**MS BETTINA LIM**

Senior Staff Nurse, Bukit Batok Polyclinic

**MS EMMELINE GIANAN PUA**

Senior Staff Nurse, Clementi Polyclinic

**MS NIRMALA ARUNKUMAR**

Senior Staff Nurse, Queenstown Polyclinic

**MS YIN SHUMEI**

Assistant Nurse Clinician, Pioneer Polyclinic



The National University Polyclinics (NUP) was established on 17 March 2017 as the primary care arm of the National University Health System.

As part of the Ministry of Health's restructuring of the public healthcare system in 2017, NUP was formed to provide affordable, accessible, comprehensive and coordinated primary care to the western region of Singapore's population.

**NUP clinics include**

- Bukit Batok Polyclinic
- Bukit Panjang Polyclinic (upcoming)
- Choa Chu Kang Polyclinic
- Clementi Polyclinic
- Jurong Polyclinic
- Pioneer Polyclinic
- Queenstown Polyclinic
- Tengah Polyclinic (upcoming)
- Yew Tee Polyclinic (upcoming)

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