

Advancing Family Medicine, **Transforming** Primary Healthcare

ANNUAL REPORT FY2014



Over the years, the National Healthcare Group Polyclinics (NHGP) has become a central part Singapore's healthcare industry. With nine polyclinics across the island, NHGP is now a one-stop health centre, providing a spectrum of health services and treatment for Singapore's families. But where we are today would not have been possible without our partners and stakeholders. Our partnerships with governing institutions, healthcare providers and community organisations have taken us to greater heights, making us more than the sum of our parts. Within these pages, you will see how we are working with each of our partners, as our different strengths come together to continue **Advancing Family Medicine, Transforming Primary Healthcare.**

Our Vision, Mission and Values

OUR VISION

To be the leading health-promoting institution that helps to 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.

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.

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

Respect: We treat everyone with honesty, decency and fairness.

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

Social Responsibility: We contribute positively to the well-being of the community.

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Group CEO's Message



PRIMARY CARE: THE BEDROCK OF AN EFFECTIVE AND SUSTAINABLE HEALTHCARE SYSTEM

At National Healthcare Group (NHG), we believe that a healthier population makes us a happier nation, where people can lead more fulfilling lives both socially and economically. Hence, we have been actively pursuing our vision to add years of healthy life. As healthcare needs continue to grow, it is important to radically look at healthcare transformation to meet the needs of the rapidly growing and ageing population and ensure efficient use of resources.

Primary Care is key to this so that we can keep people healthy and manage diseases well in the community to avoid costly healthcare interventions and keep healthcare services affordable for our community. The National Healthcare Group Polyclinics (NHGP) is at the forefront of these efforts, providing the very foundation of our strong healthcare system and taking on a leadership role in many aspects of primary care in

Primary Care is key to this so that we can keep people healthy and manage diseases well in the community to avoid costly healthcare interventions and keep healthcare services affordable for our community

Professor Philip Choo,
Group Chief Executive Officer, National Healthcare Group

Singapore. I am happy to report that NHGP has made good progress in improving patient care and strengthening our ties with partners and stakeholders.

To expand our capacity to better care for the population in the west, NHGP successfully broke ground for the construction of a new polyclinic, Pioneer Family Healthcare Centre, scheduled to open in 2017. Our 3rd Family Medicine Clinic (FMC), situated in Hougang has also been officially opened in September 2015. The Hougang FMC @ Ci Yuan is a model of care delivery that combines the expertise of the public and private healthcare sectors to look after a growing number of elderly and chronic patients in Singapore. It allows us to partner and support GPs directly to develop a strong chronic care model in the community.

As our population ages, patients with multiple chronic conditions and complications will need more comprehensive care in the community. NHGP is meeting this challenge through the development of multi-disciplinary teams of professionals comprising of Family Physicians, Care Managers (Registered Nurses), care coordinators and Allied Healthcare Professionals, as well as the empanelment of patients. Patient empanelment ensures that patients are treated by a regular team and allows healthcare professionals and patients to develop a strong relationship that is essential for the delivery of optimal care.

As part of its efforts to transform primary healthcare in Singapore, NHGP has been redesigning processes

and improving the way it works with various healthcare partners, such as coordination of and ensuring appropriate referrals from our polyclinics to our hospitals. We are also partnering with community stakeholders to provide health education and promotion to empower individuals to maintain or restore health in the community.

In supporting MOH's plan to make primary care affordable to the population and the adoption of the Community Health Assist Scheme in the community, NHGP has also engaged 100 GPs over the past two years on opportunities for collaboration. NHGP has also worked closely with respective FMCs around our polyclinics to right-site more than 8,000 patients to date.

It has been an eventful journey since the formation of NHG 15 years ago. NHGP has worked tirelessly with the rest of the NHG family and our partners to transform primary care and develop an effective and sustainable healthcare system for the population. I want to thank our Chairman, Madam Kay Kuok, and Board of Directors for their astute leadership and support through the years. I would also like to thank the Ministry of Health (MOH), for leading the way in transforming and improving our healthcare system in our constantly evolving healthcare landscape. Most of all, I want to thank NHGP's management and staff for their contributions and dedication.

Going forward, NHGP will continue to work with our stakeholders and communities to ensure the well-being

of the population and to deliver more accessible, integrated, affordable and quality care to all.

Professor Philip Choo
Group Chief Executive Officer
National Healthcare Group

CEO's Message



REDESIGNING PRIMARY CARE

In FY2014, the National Healthcare Group Polyclinics (NHGP) continued our primary care journey with a greater focus on transforming our care delivery model to improve health and reduce illness among Singaporeans.

Among other initiatives, we piloted a first-of-its kind care delivery model at Toa Payoh Polyclinic. It involves the empanelment of patients with chronic diseases to a team of healthcare professionals led by a Family Physician. The team is able to develop a strong relationship with patients who are more engaged and empowered. We are now in the midst of fine-tuning and scaling up such a model across the rest of the polyclinics so that we will be better prepared to manage our ageing population with greater healthcare demands.

To better coordinate our work of transforming primary care and work more closely with our partners from different Regional Health Systems, we established the Primary Care Transformation Office (PCTO) in October 2014. PCTO has started collaborating with General Practitioners on the management of patients through various programmes. We have also been working closely with different regional hospitals to coordinate care between polyclinics and hospitals, including partnering in caring for the very frail and complex patients. We also partner the respective Regional Health Systems for opportunistic health screening of our patient population for cardiovascular risks such as obesity, diabetes, hypertension and hyperlipidaemia. For individuals identified to have clinical or lifestyle risks, our staff will follow up with suitable interventions and counselling to manage their conditions.

In addition, through various outreach activities by each of our polyclinics and the respective social partners and grassroot leaders, we have been promoting healthy lifestyle in the community. In June 2014, NHGP signed a memorandum of understanding with Nee Soon South Constituency to empower residents with the knowledge to improve their health. Various workshops and activities have been conducted to encourage residents to adopt healthier lifestyle changes. Similarly, we have also started to engage schools and community in the vicinity of our new Pioneer Family Healthcare Centre which will be opened in 2017.

ADVANCING FAMILY MEDICINE THROUGH CONTINUOUS LEARNING

NHGP continues as a leader in the training of primary healthcare professionals.

FY2014 saw our inaugural cohort of Family Medicine Residents graduate from the NHG Family Medicine Residency Programme. Meanwhile, the NHG Family Medicine Residency Programme achieved its Continued Accreditation status from ACGME-I for three years.

The Primary Care Academy, also started new courses such as "Practical Approach to Eczema Management" and Diabetic Foot Screening to strengthen the clinical knowledge and skills of our staff and partners. In addition, our Primary Care Forum (PCF) which was held from 26 to 27 September 2014, with the theme 'Primary Care: the Fulcrum of a Healthy Population', also attracted a record number of participants. Primary Care Forum continues to be a key event in Singapore's primary care calendar where

experts and participants share ideas to improve primary care.

PEOPLE EXCELLENCE

NHGP received five awards at the Singapore Human Resources Institute (SHRI) awards: in Employee Relations and People Management; Quality Work-Life, Physical and Mental Well-Being; and Learning and Human Capital Development categories.

Ensuring quality and patient-centred services has always been our focus and NHGP has invested much effort in training our staff to deliver a good standard of service to our patients. According to the Ministry of Health's Patient Satisfaction Survey conducted from September 2014 to January 2015, NHGP received a patient satisfaction score of 80.9% which was above the average of 79.1% across all healthcare institutions.

INNOVATIONS AND EXCELLENCE

Many of our staff have done us proud in 2014 and achieved national level awards and recognitions. For example, NHGP's Telecare Programme received the inaugural MOH IT Excellence award for increasing access to care and is a collaborative effort involving various staff including Nursing Services, Clinical Services and IT Office. Dr Jonathan Phang, Family Physician Consultant, received the award as the Champion for Health IT Excellence for his contributions to the Telecare programme and his efforts in driving other IT projects.

Indeed, much of what we have achieved in FY2014 is the result of the dedication and effective teamwork of every staff. Bound by a common vision of transforming

primary care in Singapore, they have done commendably in pursuing our mission to 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.

KEEPING THE MOMENTUM OF TRANSFORMING HEALTHCARE

I would like to take the opportunity to thank our Board and management for their leadership as we face challenges in an ever-changing healthcare landscape. I would also like to express my gratitude towards MOH, our partners and staff for supporting and working together with us towards our common goal of providing quality healthcare and improving population health. Going forward, we need to ride on the momentum to continue in our journey for excellence.

Adjunct Associate Professor Chong Phui-Nah
Chief Executive Officer
National Healthcare Group Polyclinics

NHGP Senior Management

From left to right:

1. standing

Ms Goh Geok Ngoh
Director, Corporate Planning & Communications, NHGP

Mr Simon Tan
Director, Human Resource, NHGP

Dr Peter Chow
Chief Operating Officer, NHGP

Mr David Kok
Director, Finance, NHGP

seated
Dr Lew Yii Jen
Senior Director, Clinical Services, NHGP

Adjunct A/Prof Chong Phui-Nah
Chief Executive Officer, NHGP

Dr Simon Lee
Chief Medical Informatics Officer, NHGP

Ms Chen Yee Chui
Chief Nurse, NHGP

2. standing

Dr Kenneth Low
Director, Dental Services, NHGP

Ms Lim Soh Har
Executive Director, NHG Diagnostics

Dr Wee Wei Keong
Director, Health Promotion & Preventive Care, NHGP

Dr Darren Seah
Assistant Director, Family Medicine Development Division, NHGP

seated

Dr Predeebha Kannan
Head, Primary Care Academy, NHGP

Ms Chan Soo Chung
Executive Director, NHG Pharmacy

Dr Lim Chee Kong
Deputy Director, Medical Manpower, NHGP

Dr Tang Wern Ee
Head, Clinical Research Unit, NHGP

3. standing

Dr Kwan Pek Yee
Head, Yishun Polyclinic, NHGP

Dr Steven Chong
Head, Clementi Polyclinic, NHGP

Dr Lee Eng Sing
Head, Hougang Polyclinic, NHGP

Dr Keith Tsou
Head, Bukit Batok Polyclinic and Regional Director (West), NHGP

Dr Meena Sundram
Head, Jurong Polyclinic and Regional Director (West), NHGP

Dr Evan Sim
Head, Woodlands Polyclinic, NHGP

seated

Dr Gowri Doraisamy
Regional Director (North), NHGP

Dr Tung Yew Cheong
Head, Toa Payoh Polyclinic, NHGP

Dr Richard Hui
Head, Choa Chu Kang Polyclinic, NHGP

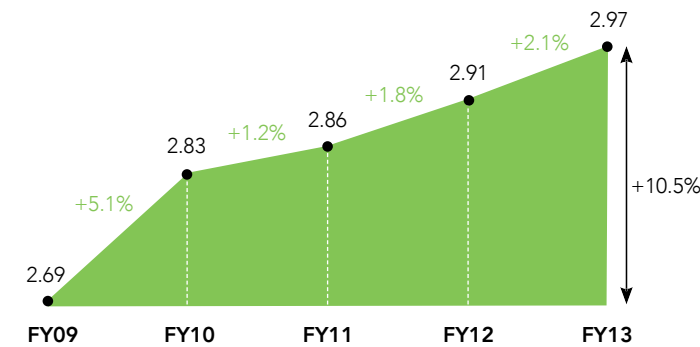
Dr Karen Ng
Head, Ang Mo Kio Polyclinic and Regional Director (Central), NHGP



Snapshots of Our Workload and Patients

VOLUME GROWTH HAS INCREASED GRADUALLY

Total Patient Attendance

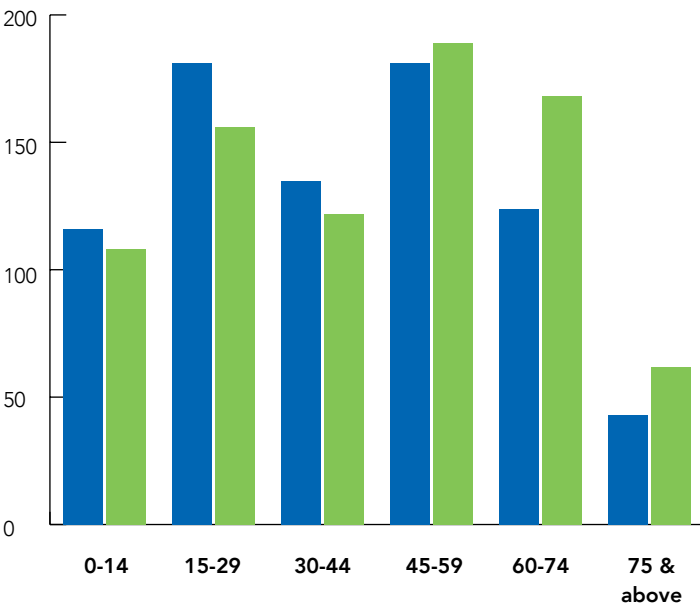


Daily Averages

FY	Total	Doctor Consults	Non-Morbid Services
2010	9,680	7,350	2,330
2011	10,220	7,300	2,920
2012	10,420	7,400	3,020
2013	10,459	7,222	3,236
2014	10,833	7,411	3,422

INCREASE IN NUMBER OF PATIENTS ABOVE 45 YEARS OLD

No. of Patients of Different Age Groups in FY2010 vs FY2014 ('000)



No. of patients ('000)			
Age Group	FY14	FY10	Diff (%)
0 - 14	108	116	-7.2%
15 - 29	156	181	-13.8%
30 - 44	122	135	-9.6%
45 - 59	189	181	4.3%
60 - 74	168	124	34.9%
75 above	62	43	44.4%

Note: Numbers are rounded for greater clarity; small rounding differences may arise.

Patients' Profile in FY2014

TOP 10 PRIMARY DIAGNOSES SEEN AT NHGP

ICD 10	Diagnosis	No. of Visits ('000)	% Total 2014 Visits
J06.9	Acute Upper Respiratory Infection, Unspecified	356	17.5%
E11.9	Type 2 Diabetes Mellitus Without Complication	284	14.0%
I10	Essential (Primary) Hypertension	266	13.1%
E78.5	Hyperlipidaemia, Unspecified	118	5.8%
R68	Other General Symptoms and Signs	63	3.1%
A09.9	Other Specified Noninfective Gastroenteritis and Colitis	51	2.5%
T14.3	Dislocation, Sprain and Strain of Unspecified Body Region	46	2.3%
L98.9	Disorder of Skin and Subcutaneous Tissue, Unspecified	46	2.3%
Z00.1	Routine Child Health Examination	44	2.2%
P59.9	Neonatal Jaundice, Unspecified	36	1.8%
M19.99	Arthritis, Unspecified, Site Unspecified	35	1.7%
M54.99	Unspecified Dorsalgia, Site Unspecified	34	1.7%

PATIENTS AGED 45 –74 YEARS CONTRIBUTE TO HALF OF FY2014 VISITS

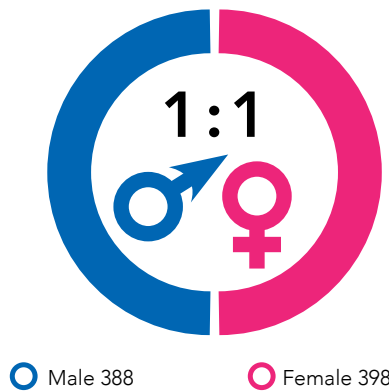
Age group (years)	No. of visits in 2014 ('000)			
	Acute	Chronic	Non-morbid	Total
0 - 14	159	17	152	328
15 - 29	276	54	62	116
30 - 44	151	77	94	322
45 - 59	195	296	281	772
60 - 74	133	382	321	836
75 & above	44	162	117	323
Total	958	988	1,027	2,697

DEFINITIONS

- Acute:** Cases with short onset of symptoms such as upper respiratory tract infections, diarrheal diseases, and sprains.
- Chronic:** Conditions that require long-term follow-up and in general, regular medications and management of risk factors. For example, hypertension, asthma, lipid disorders, chronic obstructive lung disease and diabetes.
- Non-morbid:** Includes development assessment, nursing and allied health services (e.g. wound dressing, vaccination, case management), lab-only visits, and other administrative procedures.

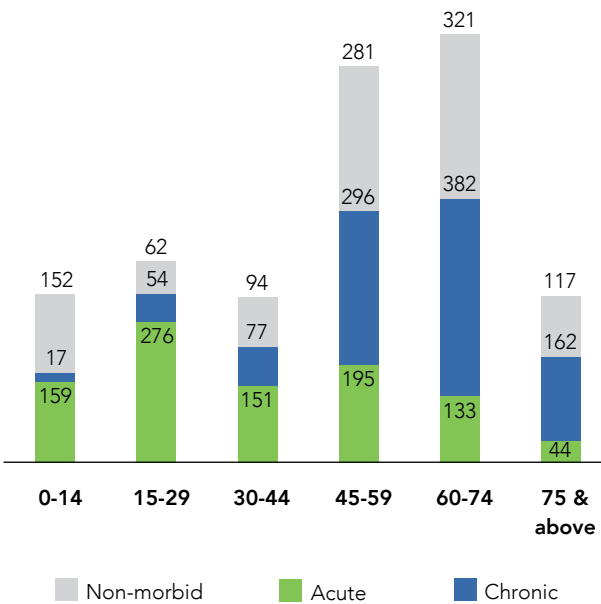
GENDER RATIO OF PATIENTS IN FY2014

No. of Patients ('000)

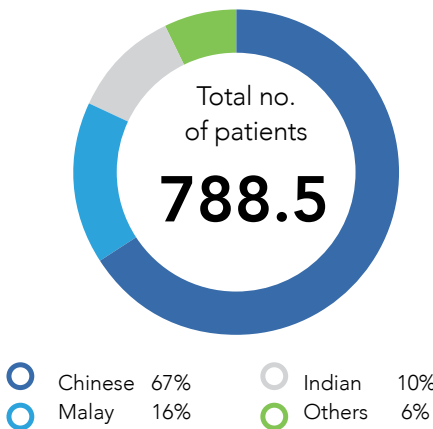


MORE CHRONIC AND NON-MORBID VISITS AMONG PATIENTS ABOVE 45 YEARS OLD

No. of Visits by Age Groups ('000)



ETHNIC COMPOSITION OF PATIENTS IN FY2014

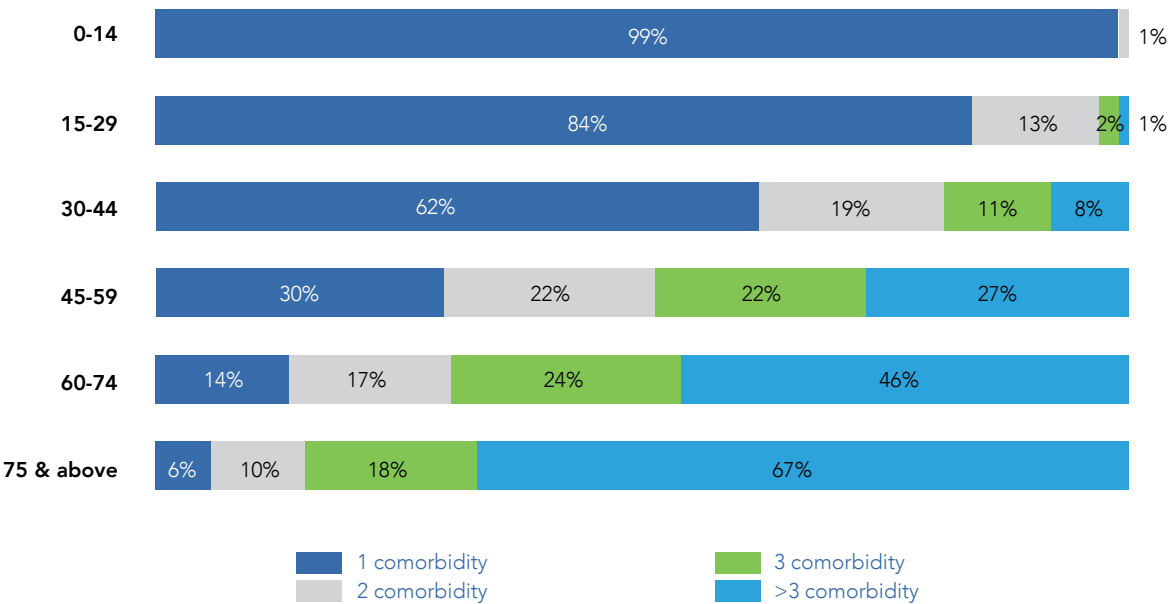


Ethnic Group	No. of patients ('000)	Total (%)
Chinese	529.1	67
Malay	128.0	16
Indian	82.1	10
Others	47.3	6
Total	786.5	100*

*Difference due to rounding

CORRESPONDING INCREASE IN NUMBER OF CO-MORBIDITIES WITH AGE

Chronic Patients By Age Group and Co-Morbidity (FY2014)



MORE THAN 50% OF VISITS ARE MADE BY PATIENTS 45 YEARS OLD AND ABOVE.

Age group (years)	Average no. of visits per patients			
	Acute	Chronic	Non-Morbid	Total
0 - 14	2.17	1.20	2.75	2.30
15 - 29	2.16	1.38	2.20	2.01
30 - 44	1.78	1.78	2.42	1.93
45 - 59	1.85	2.46	2.54	2.30
60 - 74	1.81	2.81	2.60	2.51
75 & above	1.82	3.01	2.56	2.61

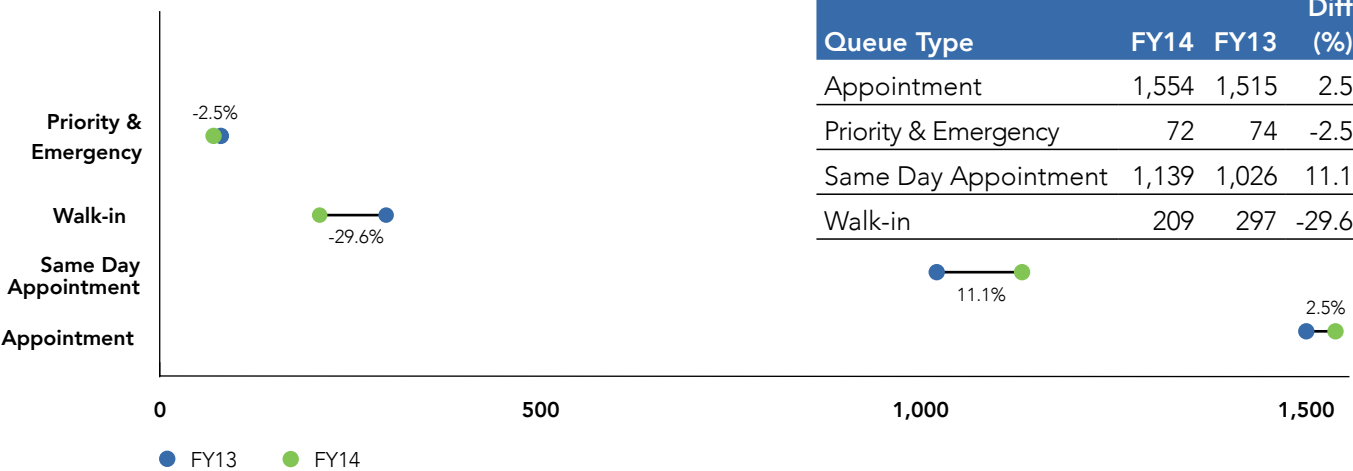
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Workload Management in FY2014

MORE PATIENTS COME BY APPOINTMENT AND SAME DAY APPOINTMENT IN FY2014

No. of Visits by Queue Types



IMPROVEMENT IN CONSULT WAIT TIME

Consult Waiting Time FY2014

Consult Waiting Time (min)				
Visit Type	Percentile	FY14	FY13	% Change
Walk-in	50 th	14	19	-26.3
	95 th	63	87	-27.6
Appointment	50 th	10	11	-9.1
	95 th	54	62	-12.9

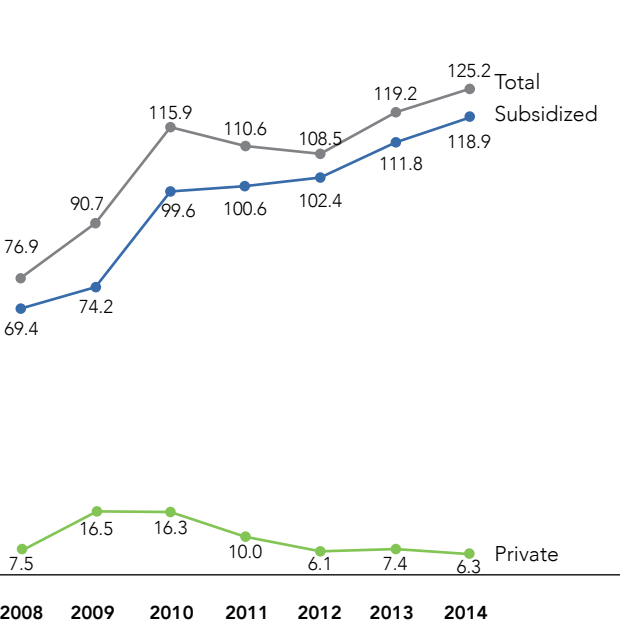
MORE STAFF IN ALL CATEGORIES TO MANAGE INCREASED WORKLOAD

Full-time equivalent			
Job category	FY14	FY13	% change
Ancillary	557	559	-0.4
Nursing	312	306	2.0
NHG Pharmacy	271	247	9.7
Medical	220	190	15.8
Administrative	185	173	6.9
NHG Diagnostics	215	199	8.0
Allied Health	54	45	20
Dental	47	43	9.3
Total	1,861	1,762	5.6

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

WE MOSTLY SEE SUBSIDISED PATIENTS

No. of Dental Visits ('000)

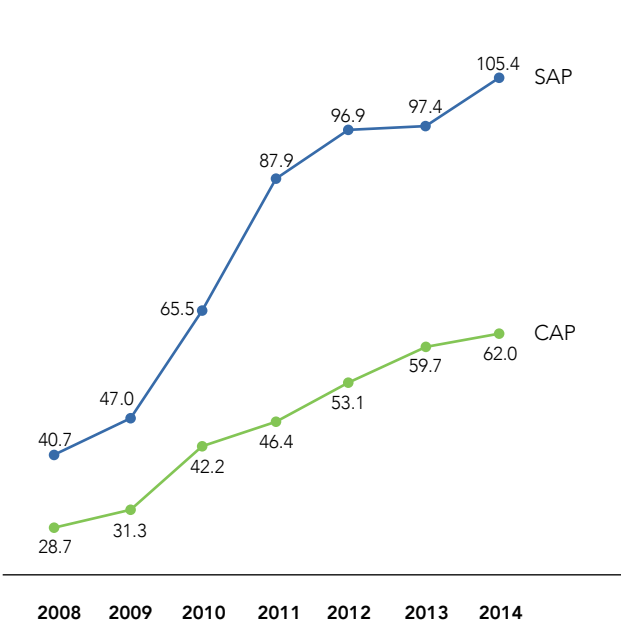


DAILY AVERAGE NUMBER OF BASIC DENTAL PROCEDURES

	FY10	FY11	FY12	FY13	FY14
Filling and extraction	152	168	194	214	226
Polishing and scaling	236	318	353	350	384

WE DO MORE PREVENTIVE PROCEDURES

No. of Dental Procedures ('000)



Notes
The number of subsidised dental visits has increased over the years. We have also seen growth in the daily averages of dental procedures done at our polyclinics.

Of the dental procedures performed, a larger proportion was made up of preventive procedures (i.e. polishing and scaling). The proportion of preventive procedures has also grown over the years, signifying greater emphasis on preventive care at NHGP.

Highlights of FY2014

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PUTTING PATIENTS FIRST

- 25 The inaugural Ministry of Health (MOH) IT Excellence Award 2014 for Excellence in Increasing Access to Care was awarded to NHGP's Telecare programme.



- 25 Family Physician and Consultant Dr Jonathan Phang, the man behind the award-winning Telecare programme, was presented the MOH IT Excellence Award 2014 Champion for Health IT Excellence.

ENHANCING THE QUALITY OF CARE

- 30 NHGP successfully met the Occupational Health and Safety Advisory Services (OHSAS) standard and maintained its OHSAS 18001 certification.
- 30 NHGP was awarded the bizSAFE partner status by the Workplace Safety and Health (WSH) Council on 14 July 2014.

GROWING OUR CAPACITY TO HEAL

- 40 With a new polyclinic scheduled to open in Pioneer in 2017, NHGP began its engagement work with the Pioneer community.

ADVANCING FAMILY MEDICINE FOR THE FUTURE

- 60 The NHG Family Medicine Residency Programme achieved continued accreditation status from ACGME-1. The programme has been given a three-year accreditation.
- 60 NHGP's inaugural cohort of Family Medicine Residents graduated from the NHG Family Medicine Residency Programme in 2014. Eight of the residents have successfully completed the Master of Medicine in Family Medicine examination.

CHAMPIONING HEALTHY LIFESTYLES

- 64 NHGP worked with NHG and the National University Health System to develop and implement Person-Centric Screening (PCS) across seven polyclinics in the Western and Central clusters.

PARTNERING THE COMMUNITY, STAKEHOLDERS AND PUBLIC INSTITUTIONS

- 72 Development works for the Hougang Family Medicine Clinic (FMC) in Hougang-Serangoon area began in FY2014. The FMC, which mainly caters to residents staying in the Hougang-Serangoon vicinity, officially opened on 20 September 2015.



- 73 On 25 October 2014, an information session on the Family Medicine Clinic (FMC) for the Hougang-Serangoon area was organised. The attendees were briefed on the FMC and invited to indicate their interest to set up the FMC.
- 77 NHGP was invited to support MOH in the medical planning for SEA (South East Asian) Games 2015. The organisation worked closely with external agencies to provide primary care services for the athletes.

ENABLING BETTER CARE WITH TECHNOLOGY

- 83 The Outpatient Pharmacy Automation System (OPAS) nabbed the inaugural MOH IT Excellence Award 2014 for IT Excellence in Providing Quality Care, Project of the Year Award 2015 – 2015 in the "Business and Information Systems" category and first runner-up in the "Most Innovative Use of Infocomm Technology (Public Sector)" category of the National Infocomm Award (NIA).



CARING FOR AND GROWING OUR PEOPLE

- 88 NHGP received the Singapore Human Resource Institute Awards for the categories of Employee Relations and People Management, Learning and Capital Development and Quality Work-Life Physical & Mental Well-Being on 11 July 2014.



Chapter 1: Putting Patients First

“I would like to thank Dr David Ng Wei Liang because he is very caring, kind-hearted, patient, thoughtful and professional. He always tries to make time to see me even though his patient slots are full. I am thankful and happy to consult him for my problems. He is my favorite doctor.”

In this photo: Dr David Ng, Deputy Head of Toa Payoh Polyclinic, exhibiting patient-centred care.

Ms Goh Ngin Keng,
patient of Toa Payoh Polyclinic, NHGP

Putting Patients First

National Healthcare Group Polyclinics (NHGP) is committed to putting our patients first and providing patient-centred care. It is this commitment that drives us to continually improve quality at our clinics or pioneer new programmes that lead to better clinical outcomes.

Numerous groundbreaking initiatives to empower stable chronic patients to manage their conditions have shown positive results. As we celebrate our successes, we are determined to continue our efforts to leverage on innovation and provide the best care possible.

MULTI-DISCIPLINARY APPROACH FOR CHRONIC DISEASE MANAGEMENT

NHGP has set up multi-disciplinary teams in all of its nine polyclinics to provide care for patients who have significant psychosocial problems and poorly controlled chronic disease and are at high risk of complications or with more than three hospital admissions in the last one year. Each team consists of a Family Physician, a Care Manager (who is a Registered Nurse), medical social worker and other Allied Healthcare Professionals (AHPs) as required.

These multi-disciplinary teams meet on a regular basis to discuss patients' conditions and challenges to develop care plans that are tailored to each patient's needs. All communications with patients and patient follow-ups are carried out either by the Care Manager or medical social worker, depending on the type of care interventions needed. As at 30 September 2014, over 900 patients have received multi-disciplinary care across all of NHGP's nine polyclinics.



► Members of the multi-disciplinary team learn how to carry out the revised functional assessment.



◀ Participants of the 'Start Right' workshop learnt how to manage their diabetes during the workshops.

MORE PROGRAMMES TO HELP PATIENTS MANAGE DIABETIC CONDITION

'Start Right' is a new programme developed for patients recently diagnosed with Type II diabetes and who have not seen a dietitian. The free two-and-a-half-hour programme was conducted six times between April and December 2014 at Ang Mo Kio and Hougang Polyclinics. Each session featured interactive activities that introduced participants to the different types of carbohydrates, carbohydrate counting, the role of fats and fibre in a diet, food label reading and healthier cooking methods.

Participants are required to attend an individual consultation within two months of the programme, during which a dietitian would help them apply their newfound knowledge in their daily lives.

Meanwhile, the NEMO – Nephrology Evaluation, Management, and Optimisation – programme started by NHGP and the National University Hospital continued

to show results. The programme aimed to slow diabetic nephropathy (DN), a deterioration of kidney function due to longstanding diabetes mellitus, in the primary care setting.

From November 2011 to March 2015, 7,478 patients were recruited into the programme which exceeded the initial target of 5,625 patients.

Some 3,973 patients have completed the programme while 30.9% of the enrolled patients showed improvement in albuminuria. The annual deterioration of diabetic patients' kidney function has also dropped from 7.1% to 5.9%.

DIETARY GUIDELINES FOR PATIENTS WITH HYPERTENSION

NHGP dietitians have developed the Nutrition Practice Guidelines for Hypertension to help hypertensive patients to adopt healthier diets. The guidelines were approved and adopted in consultation with Family Physicians from the Specialty Advisory Group. This is a

move to further enhance and standardise current evidence-based practice.

Programmes were also devised for hypertensive patients to learn practical tips to better manage their condition. For instance, Senior Dietitian Mr Won Tin Chiang led a Clinical Practice Improvement Project (CPIP) to increase the referral rate of newly diagnosed hypertensive patients to the DASH – Dietary Approaches to Stop Hypertension– diet programme. The programme has since been included into the MOH Clinical Practice Guidelines for Hypertension management.

MORE RESOURCES FOR PATIENTS WITH MENTAL CONDITIONS

To mark World Mental Health Day on 10 October 2014, NHGP launched a Mental Health Flipchart and ‘Release Stress Now’ CD.

The Mental Health Flipchart was developed by the Health and Mind Care Team to enhance inter-professional collaboration among healthcare professionals and to improve the efficiency of assessment and intervention for patients seeking help for mental health problems or lifestyle behaviour change.

▼ The team celebrating the launch of the Mental Health Flipchart and “Release Stress Now” CD.



The ‘Release Stress Now’ CD, which contains a series of audio tracks in English and Mandarin that offer listeners safe and simple stress reduction methods, was developed by NHGP Psychology Services.

Besides generating new materials to care for patients’ mental well-being, more work was done to engage patients and help them become more aware of where they could seek timely care for mental health conditions such as depression and anxiety. For instance, a “Health and Mind Care Team Programme” brochure was published in April 2014 to offer the public useful information about NHGP’s Health and Mind Clinic and its services. The first Health and Mind Clinic was launched at Ang Mo Kio Polyclinic in 2008. It has since expanded to Jurong and Woodlands Polyclinics in 2008 and 2014 respectively.

MANAGING FREQUENT ADMITTERS

To ease the strain on Singapore’s hospitals, Tan Tock Seng Hospital (TTSH) and National University Health System (NUHS) have partnered NHGP in managing frequent admitters (FAs) since April 2014 and September 2015, respectively. The

collaboration is targeted at managing the group of patients who has been imposing the largest cost burden on hospitals. Every year, NHG sees 2,000 patients – often those who are elderly, frail and have several illnesses – admitted to hospital at least three times within a year. With Singapore’s ageing population, this number is not expected to decrease. Regular multi-disciplinary team meetings and cross-institutional case discussions are convened to harmonise and monitor care plans for FA patients. Community Programme Managers (CPMs) are brought in to connect patients with community and social care providers to address their psychosocial and functional needs, conduct home visits, and educate patients on self-care.

TELECARE PROGRAMME RECEIVED TWO AWARDS

NHGP’s Telecare programme won the inaugural Ministry of Health (MOH) Health IT Excellence Award 2014 for Excellence in Increasing Access to Care. The award was presented at the National Health IT Summit in January 2015.

The Telecare programme allows patients with stable diabetes mellitus, hypertension or dyslipidaemia to submit their glucose, blood pressure and weight readings



through an online portal, www.Healthy.sg. The Care Managers remotely monitor patients and assist them in disease management through tele-consultations. The automated, customised health education messages on the portal also guide patients on self-care at home.

▲ Care Manager counselling patient on home-monitoring.

A joint development with MOH Holdings and the Integrated Health Information Systems, the programme has resulted in time-saving for patients and operational efficiency, while maintaining good clinical outcomes. It is available at all of NHGP’s nine polyclinics.



Dr Jonathan Phang – Champion for Health IT Excellence

Family Physician and Consultant Dr Jonathan Phang Siung King is the man behind NHGP’s award-winning Telecare programme. For his contributions to the programme, he was awarded the inaugural MOH IT Excellence Award 2014 Champion for Health IT Excellence.

Dr Phang has been an enthusiastic champion for the use of information technology to help deliver quality and efficient primary care. His many achievements include leading the planning and implementation of the clinical IT and Electronic Medical Records (EMR) systems at NHGP to improve clinical service delivery, chronic disease management and health information management. He was pivotal to realising the vision of a one patient-one registration-one bill system, and instrumental in the development and implementation of computerised order entry, results management and clinical notes. Through him, NHGP was transformed into a paperless environment for patient consultation in 2010. He continues to work on team-based care, healthcare integration and patient empowerment.



▲ Top: Participants sharing factors that hinder them from staying well in the community during the patient focus group held on 24 May 2014.

Bottom: At NHGP, every patient is cared for by a team of healthcare professionals.

PATIENT FOCUS GROUPS TO UNDERSTAND CARE NEEDS

To provide patient-centred care and involve patients in shaping the care services received at the polyclinics, NHGP has been organising patient focus groups at all of its nine polyclinics over the years. Through these engagement platforms, patients are invited to voice their feedback and on how the organisation can

improve care and develop services to help them better manage their conditions and remain healthy in the community.

One such engagement was the patient focus group held on 24 May 2014 with 18 elderly patients of Toa Payoh Polyclinic, who reside in the precinct managed by the Care Corner Senior Activity Centre (SAC) of Block 149, Lorong 1, Toa Payoh. Through the focus group, NHGP gained a better understanding of the challenges and complex factors hindering these patients from staying healthy. The elderly chronic patients were also profiled to see how they would like to be better cared for and empowered to stay healthy in the community. The feedback garnered would be taken into consideration for operational planning and services development.

CAMPAIGN LAUNCHED TO MINIMISE FALLS RISK

To improve patients' safety, NHG Pharmacy's Customer Service Workgroup launched the Fall Prevention campaign in September 2014. The initiative aims to educate staff on how to identify patients who are at risk of falling. Staff will then dispense medication to these patients at their seat, instead of at the dispensing counter, to minimise their risk of falling.

WALL DECALS TO PROFILE NHGP'S MULTI-DISCIPLINARY APPROACH TO PATIENT CARE

To familiarise patients with their care teams and help them understand the value of team-based care, wall decals featuring members of the respective clinic's care team have been put up at NHGP's nine polyclinics. Each team is led by a Family Physician and comprises of nurses, pharmacists and AHPs. A registered nurse, known as a Care Manager, helps co-ordinate the patient's care with relevant AHPs such as podiatrists, dietitians, psychologists and so on.



◀ The civil emergency exercise took place on 22 May 2014.

PARTICIPATING IN EXERCISE FOR EMERGENCY-PREPAREDNESS

To learn more about casualty management, effective communication and emergency coordination, four nurses and a liaison officer participated in an aircraft crash at sea exercise. Other mutual aid agencies

were also included in the exercise, which was conducted by the Changi Airport Group on 22 May 2014.

The exercise was a good learning opportunity for NHGP to improve on its readiness in responding to a civil emergency upon activation.

Chapter 2: Enhancing the Quality of Care

“Quality improvement is tremendously important in any healthcare organisation. It drives a culture of directed and constructive criticism. It emphasises the importance of all departments coming together to work as a team. Constituent members become valuable assets who do not stop at criticism; they take that next step towards creating and sustaining a solution. The organisation ultimately grows smarter and more effective.”

In this photo: (Third from left) Dr Bobby Stryker, Family Physician, Senior Staff and his Clinical Practice Improvement Programme team in Woodlands Polyclinic.

Dr Rufus Daniel,
Deputy Head, Woodlands Polyclinic

Enhancing the Quality of Care

NHGP endeavours to provide the highest quality of care and service for its patients at every step of their journey. To achieve this level of excellence, our staff are dedicated to improving work processes and addressing areas of concern promptly to ensure that each patient's journey with us is safe, pleasant, smooth and efficient.

ACCREDITATIONS AND CERTIFICATIONS

NHGP Maintained OHSAS Certification

NHGP successfully met the Occupational Health and Safety Advisory Services (OHSAS) standard and maintained its OHSAS 18001 certification. This reflects our ability to adequately address workplace hazards and implement controls to eliminate or reduce workplace health and safety risks. The surveillance audit was conducted by an appointed Certification Body, TÜV SÜD PSB, on 27 June 2014 at Ang Mo Kio and Clementi Polyclinics.

NHGP Achieved bizSAFE Partner Status

NHGP was awarded the bizSAFE partner status by the Workplace Safety and Health (WSH) Council on 14 July 2014. The award recognises organisations that have been active and committed

in bringing small- and medium-sized enterprises onboard the bizSAFE programme by incorporating safety as part of their business model.

The bizSAFE certification is a national initiative started by the WSH Council and is supported by the Ministry of Manpower (MOM) to promote workplace safety and health across all industries. It is an affirmation of our efforts in providing resources to nurture our contractors to adopt safe work practices, while conducting works in our clinics.

NHG Pharmacy Received Singapore Quality Class Star Certification and People Developer Re-certification

NHG Pharmacy achieved the Singapore Quality Class (SQC) Star certification and People Developer (PD) recertification on

▼ Left: Auditors reviewing workflows during the OHSAS surveillance.

Right: Ms Chan Soo Chung, Executive Director, NHG Pharmacy, receiving the certification on behalf of the organisation.



16 September 2014. This milestone is made possible through staff's dedication and efforts in innovation and continuous improvement.

The SQC Star certification is awarded to existing SQC-certified organisations that have made further improvements in their business excellence journey. SQC – a certification for meeting standards of holistic business excellence – was first awarded to NHG Pharmacy in 2011. The PD certification, on the other hand, is a niche standard that focuses on excellence in developing and managing talent. NHG Pharmacy first achieved the PD standard in 2005.

NHG Diagnostics Attained ISO Accreditation

NHG Diagnostics successfully attained the International Standards Organization (ISO) re-accreditation under the new standards for ISO 15189:2012 – an international standard and requirement

for quality and competency particular to medical laboratories. The re-certification affirmed the quality, reliability and accuracy of laboratory processes and results.

IMPROVING PATIENT CARE AND SAFETY

Reducing Harm to Patients through Inter-agency Collaboration

On a national level, NHGP has been working with other like-minded healthcare institutions as part of the Singapore Healthcare Improvement Network (SHIne) to improve the quality of care.

SHIne started a Large Scale Initiative (LSI) to reduce patient harm by 30% in the areas of medication safety, surgical safety and prevention of healthcare associated infections within three years. Over a 36-month period, NHGP and the other 23 member-institutions in SHIne will establish a set of robust and

▲ NHGP formed a team to be part of the LSI in April 2014. The team worked hard with various initiatives to achieve hand hygiene compliance of 80%.

evidence-based strategies to help them achieve sustainable change.

As part of the SHINe initiative, NHGP participated in an improvement project to design and test a reliable hand hygiene process. In May 2014, the interventions were piloted in Ang Mo Kio Polyclinic and hand hygiene compliance rates in the polyclinic increased and met the target of 80%. Audits over the following months showed that the achievement was sustainable. The initiative is planned to be expanded to the other eight polyclinics.

Improving Medication Safety through Proper Storage and Labelling

NGHP has worked towards enhancing medication safety by emphasising proper storage and labelling to minimise the risk of medication errors.

For instance, a temperature log study of the isolated Directly Observed Therapy (DOT) room in all of its polyclinics revealed that temperatures in the room can rise to as high as 33°C during the day. This exceeded the recommended storage temperature range for DOT medications.

▼ A nurse promoting hand hygiene awareness to her colleague.



NHGP proceeded to install a chiller in the DOT rooms for medication storage at the start of 2014. Medications are stored according to specific placement logic to avoid dispensing errors. Sufficient supplies of medication to meet one patient workload are also stored in a dispensing box to avoid frequent opening and closing of the chiller door, thus preventing fluctuations in temperature. The box can be placed inside the chiller during service lull periods.

Promoting Hand Hygiene Awareness among Healthcare Workers

Hand hygiene is recognised as one of the most important measures to reduce the transmission of infection. In 2014, our infection prevention and control team launched several initiatives to promote this important practice among our healthcare staff. Through these initiatives, the hand hygiene compliance rates have improved to 77% in 2014 – a 9% increase from 2013.

The initiatives included hand hygiene education and awareness programmes for healthcare workers, monthly direct observations to assess behaviour and adherence to hand hygiene opportunities and techniques, and engaging leaders in poorer performing departments to streamline working processes to enable better hand hygiene compliance.

Enhancing Professional Learning through Communities of Practice

To enhance professional learning and improve professional practice among our staff, NHGP has set up Communities of Practice (COP) to gather practitioners with similar challenges and common interests to address their challenges.

Since the inception of the first COP in January 2014, five other COPs have since

been formed. These include the Geriatric COP, Respiratory COP, Acute COP, Smoking Cessation COP, Diabetic Retinal Photography COP and Diabetic Foot Screening COP. Each COP has identified its own priorities in line with NHGP’s strategic direction and started working on improvement projects.

The COPs meet regularly – usually bimonthly – to identify care gaps and review work processes. They also recommend innovative initiatives to enhance the nursing management of patients, develop care protocols and patient education materials and recommend learning needs for the professional development of nurses in respective practice areas.

New Workshops to Improve Patient Care

In FY2014, NHGP conducted various workshops for care co-ordinators and frontline healthcare professionals to expand their capacity to deliver quality care.



◀ A participant experiencing the inconveniences felt by the elderly.

Table 1 New workshops for frontline healthcare professionals

Workshop Name	Objective	Attendees
Understanding Diabetes, Hypertension and Lipidaemia (HDL)	To equip and prepare our frontline staff to educate and better care for patients with chronic diseases. Participants were equipped with theoretical knowledge and simple skills such as blood pressure (BP) measurement and blood glucose monitoring.	45
Know the Elderly	Its new feature – the “elderly” simulation set – enables participants to experience the inconveniences felt by the aged due to musculoskeletal, visual and auditory ageing. These include visual and hearing loss, and joints stiffness.	45

Improving Accuracy of Triage
Decisions by Triage Nurses

Triage nurses need to make timely and accurate decisions to determine the categories of care – emergency, priority or walk-in – based on presenting signs and symptoms of patients. To improve the accuracy of triage decisions and promote patient safety by ensuring that they receive timely and appropriate care, NHGP nurses underwent scenario-based training from December 2014 to March 2015. The scenarios are modelled on real-life cases, representing the most common triage cases at NHGP. A preliminary evaluation showed an increase in the accuracy of nurses’ triage decisions during the training.

Promoting Safety and Health
at Work

As part of its efforts to support and enhance the Workplace Safety and Health (WSH) culture, NHGP’s WSH committee organised a roadshow across its clinics and HQ from 26 January to 12 March 2015. Some of the topics covered during the event included risk management, sharps and infectious diseases. The talks gave staff an in-depth understanding of WSH issues and enabled them to

▼ Mr James Tay,
Specialist,
Operations Support
Services, educating
staff about
workplace safety
and health.



align their daily work routines with risk management processes.

Enhancing Laboratory Information
System for Reliable Tests Results

Laboratory testing is an important indicator for effective patient care management. As an additional measure for quality control, NHG Diagnostics has configured a delta check in the existing Laboratory Information System (LIS) to improve the reliability and accuracy of laboratory results. In the enhanced system, present results will be cross-checked with the previous ones. If the difference exceeds a pre-defined limit, the LIS would alert staff to investigate the discrepancy before validation.

BUILDING QUALITY IMPROVEMENT
CAPABILITIES

65 Improvement Projects
Completed

NHGP is focused on continual improvements and has 32 on-going projects. A total of 65 projects have been completed, of which 13 have been adopted by all our nine polyclinics. The list of completed projects can be found in Appendix A, page 102.

Table 2 Quality improvement projects that were adopted by all nine polyclinics in FY2014

Project Title	Project Lead
Decreasing the time interval between patient informing the Healthcare Assistants that they have missed their queue till the time they are called by the attending doctor, by 50% in 3 months	Alvin Sim, Operations Manager, Toa Payoh Polyclinic
Eliminate dual approval for purchase requisition (Capex and Opex)	Wong Luwen, Manager, Materials Management, Finance
Eliminating the unsafe practice of aliquoting formalin into specimen bottles for minor procedures	Jancy Mathews, Deputy Director, Nursing Services
Ensure patient’s contact details are correct in ePOS (stands for Electronic Polyclinic Outpatient System)	Serene Foo, Senior Operations Manager, Bukit Batok Polyclinic
Ensuring 100% of patients are informed by either restructured hospital or polyclinic of their SOC (stands for Specialist Outpatient Clinics) appointment status within 3 working days	Tan Seok Peng, Operations Manager, Hougang Polyclinic
Implementing best practices on sharps prevention in primary care	Yan Chau Chian, Senior Manager, Nursing Services
Reduce number of dislodged fillings to zero	Dr Kenneth Low, Director, Dental Services Sharon Koo, Assistant Director, Human Resource Management
Eliminate rejected patient merge requests at Jurong, Woodlands, Hougang and Bukit Batok Polyclinics	Ng Poh Eng, Senior Executive, Dental Services
Shortening laboratory waiting time for patients with same day consultations by 20% at NHG Diagnostics laboratories in all nine polyclinics by 2014	Janet Teng, Senior Medical Technologist, NHG Diagnostics Serene Kho, Manager, NHG Diagnostics
To achieve 100% audit log of external report received at the NHG Diagnostics laboratory in Hougang Polyclinic	Charito Dolojan, Medical Technologist, NHG Diagnostics
To improve the efficiency in managing patients’ own medication	Fanny Tan Chin Mang, Operations Executive, NHG Pharmacy
To increase patients’ awareness on post-operative care of fillings	Dr Serene Zhang, Senior Dental Surgeon, Woodlands Polyclinic
To reduce the number of external laboratory reports with invalid patient identification at Hougang Polyclinic	Sherry Ann Maniam, Medical Technologist, NHG Diagnostics

Quality Improvement Projects Showcased

The results of quality improvement and research projects of NHGP staff were showcased at local and international conferences through oral and poster presentations.

Table 3 Oral and Poster Presentations by NHGP Staff

Conference	Poster Title	Project Lead
International Forum on Quality and Safety in Healthcare Paris 2014	Reduction of Medication Picking Errors in Clementi Polyclinic Pharmacy by 50% in Six Months	Ms Neo Surong, Pharmacist, NHG Pharmacy
April 2014		
Paris, France		
Singapore Health and Biomedical Congress	A study on the knowledge in diabetic foot care among diabetic patients in Singapore	Dr Desmond Ong Luan Seng, Family Physician, Associate Consultant, Jurong Polyclinic
September 2014		
Singapore		
	Determinants of prevalence of anaemia in diabetic mellitus in primary care	Dr Richard Lee Meng Kam, Family Physician, Associate Consultant, Clementi Polyclinic
	Limited health literacy – how do healthcare professionals perceive the problem?	Ms Jancy Mathews, Deputy Director, Nursing Services
	Multimorbidity in primary care and its association with Depression, Anxiety and Quality of life (MDAQ)	Dr Lee Eng Sing, Head, Hougang Polyclinic; Deputy Head, Clinical Research Unit, Family Medicine Development; Family Physician, Consultant
	Primary care surveillance for prolonged neonatal jaundice using transcutaneous bilirubinometry	Dr Yehudi Yeo Wee Shung, Family Physician, Consultant, Choa Chu Kang Polyclinic
	The effects of psychological interventions on patients with depression and anxiety and their functioning in primary care	Mr Yap Chee Kong, Psychologist, Clinical Services
	Introduction of liquid meal replacement in a staff weight management programme yields improved weight loss results	Mr Won Tin Chiang, Senior Dietitian, Clinical Services

Conference	Poster Title	Project Lead
Singapore Health and Biomedical Congress	Knowledge, perception and barriers affecting whole-grain intake among healthcare workers in primary care setting	Ms Lynette Goh, Senior Dietitian, Clinical Services
September 2014		
Singapore		
NHG Quality Day Award 2014	Reducing the number of prescription keying “Near-Misses” attributed to keying errors to zero within Bukit Batok Polyclinic Pharmacy in six months	Ms Tan Lay Khim, Principal Pharmacist, NHG Pharmacy
October 2014		Ms Evonne Lee, Senior Pharmacist, NHG Pharmacy
Singapore		
	* Best Project Award	Pharmacy team at Bukit Batok Polyclinic
	Reduction of medication picking errors in Clementi Polyclinic Pharmacy by 50% in six months	Ms Ng Mok Shiang, Deputy Director, NHG Pharmacy
	* Merit Award	Ms Wang Hui Hui, Deputy Director, NHG Pharmacy
		Pharmacy team at Clementi Polyclinic
	To reduce the number of picking and packing “near-misses” and dispensing errors of insulin at Bukit Batok Polyclinic Pharmacy	Ms Tan Lay Khim, Principal Pharmacist, NHG Pharmacy
	* Merit Award	Ms Evelyn Soh Sok Hwee, Pharmacy Technician, NHG Pharmacy
		Pharmacy team at Bukit Batok Polyclinic
	To minimise medication discrepancies at Toa Payoh Polyclinic patients with recent visits to other healthcare institutions	Mr Gary Wiratama Chandra, Senior Pharmacist, NHG Pharmacy
	* Sustainability Project Award	Pharmacy team at Toa Payoh Polyclinic
Healthcare Improvement National Forum	DASH diet (Dietary Approaches to Stop Hypertension) for newly diagnosed hypertensive patients	Mr Won Tin Chiang, Senior Dietitian, Clinical Services
December 2014		
Orlando, USA		
5th ASEAN Regional Union of Psychological Societies Congress	The relationship between insomnia, depression and anxiety in primary care	Mr Yap Chee Kong Psychologist, Clinical Services
March 2015		
Singapore		



Chapter 3: Growing Our Capacity to Heal

“In 2014, we knew that about 50% of the load in Jurong Polyclinic actually comes from the residents in Jurong West, so by opening the polyclinic here, we actually do hope most of these residents will follow up at the new Family Healthcare Centre.”

In this photo: (Left to right): Ms Tracy Gan, Deputy Director, Service Leadership and Patient Relations, Operations Division and Dr David Tan Hsien Yang, Family Physician, Consultant, Deputy Head of Jurong Polyclinic and Head (Designate) of Pioneer Family Healthcare Centre engaging residents living in Jurong West. The residents can look forward to receiving care at the upcoming primary care facility in 2017.

Dr David Tan,
Deputy Head of Jurong Polyclinic and
Head (Designate) of Pioneer Family Healthcare Centre

Growing Our Capacity to Heal

We are committed to growing our capacity to cope with the increasing demand for primary healthcare in a growing and ageing population. This is achieved by introducing new technologies, developing the skills of our healthcare professionals and engaging our partners through dialogue and information sessions.

ENHANCING HEALTHCARE FACILITIES AND CAPABILITIES

An Auspicious Start for Pioneer Family Healthcare Centre

NHGP is expanding its capacity to serve the population in the West by building a new polyclinic known as Pioneer Family Healthcare Centre (PFHC). The new primary care facility is part of the Ministry of Health's (MOH) Healthcare 2020 Master Plan to expand the national healthcare capacity to meet the needs of Singapore's growing and rapidly ageing population.

The primary care facility is scheduled to open in 2017. It is projected to see about 272,300 attendances when it begins operations and will serve 385,000 attendances annually by 2030. The FHC will also ease the volume of patients at Jurong Polyclinic, where about 50% of patients are residents in Jurong West.

Leading to its completion, NHGP has been reaching out to its community stakeholders in the Pioneer region. Its engagement efforts started with a SG50 Lunar New Year celebration. Mr Cedric Foo, Member of Parliament for the Pioneer Single Member Constituency,

▼ Celebrating the Lunar New Year with Pioneer residents.



◀ The facade of the present Ang Mo Kio Polyclinic.

graced the special occasion that featured a lion dance, a health talk, songs, and exercises. Dr David Tan, Deputy Head of Jurong Polyclinic and Head (Designate) of PFHC, shared with over 700 residents on eating healthily during Lunar New Year. Participants were also invited to check out the 3D model of the clinic and the information panels to find out more about the upcoming polyclinic.

Redevelopment of Ang Mo Kio and Yishun Polyclinics

As part of MOH's efforts to enhance the quality of healthcare for all Singaporeans, the current Ang Mo Kio (AMK) and Yishun Polyclinics are being redeveloped in an effort to strengthen primary care services in the central and northern

regions to help the community manage chronic diseases and improve health.

In the first half of 2015, the redevelopment project team for AMK Polyclinic underwent intensive planning and design development workshops with MOH Holdings, architects and consultants. This new generation polyclinic is envisioned to be a green and healing facility that integrates with the community, and encompass universal designs that cater to all ages. In designing the redeveloped polyclinic, the multi-disciplinary team also went through a 3P (Production, Preparation, Process) workshop, putting in much thought to design the infrastructure with processes that support a patient-centric care delivery model.

The facility will be ready in 2018. The polyclinic will also have a Senior Care Centre beside it to help seniors age in an environment familiar to them.

Similarly, the redeveloped Yishun Polyclinic will also be ready in 2018.

NHG Diagnostics Enhanced Capabilities at Woodlands Polyclinic

NHG Diagnostics completed upgrading works for its centre in Woodlands Polyclinic. The renovation sought to enhance the centre's capabilities by redesigning the work space area and introducing newer technologies.

More service stations – such as phlebotomy stations, Electrocardiography (ECG) rooms and registration counters – were added, thereby reducing waiting time for patients. To reduce patient movement, the ultrasound service was moved into the diagnostics area. An on-site

biochemical analyser has also been installed, enabling the laboratory to process 95% of laboratory tests on-site.

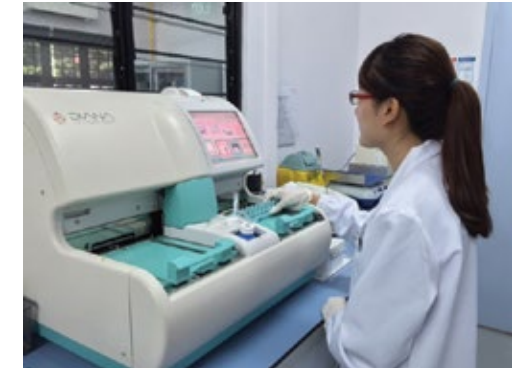
Upgrading works for remaining centres will continue to take place throughout 2015.

New Analysers to Improve Efficiency of Laboratory Tests

NHG Diagnostics performs more than 12,000 Faecal Occult Blood Tests (FBOT) every year. Automated analysers were installed in NHG Diagnostics' laboratories in November 2014 to enhance its in-house capacity to process FOBT. This frees up medical technologists to carry out other duties while performing FOBT, saving up to 800 man-hours per year. The automated FOBT analyser is also able to produce more objective test results as it eliminates potential human errors or bias that might occur during visual interpretation of each test reaction.

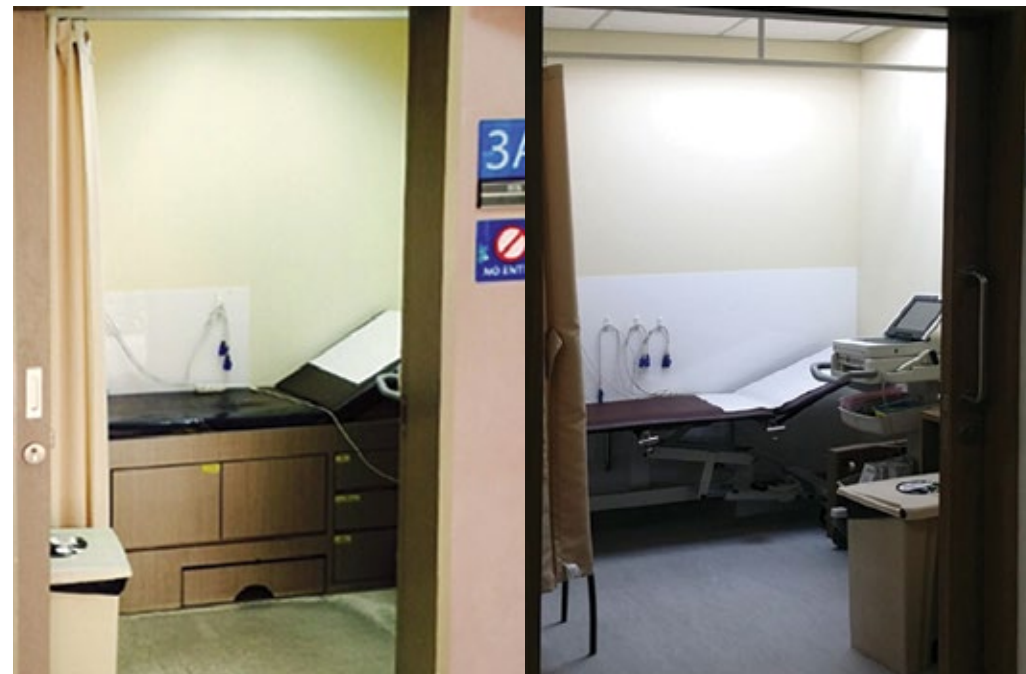
The quality of results has increased as the analyser standardises results across all laboratories, allowing better comparability when determining trends.

Meanwhile, Bukit Batok Polyclinic became the fifth polyclinic under NHGP to have an on-site biochemistry analyser installed. The analyser has the ability to process 22 different types of testing and can handle up to 300 tests per hour. This enables 95% of tests to be performed on-site. More importantly, critical results can now be managed during office hours. This eliminates the possibility of adverse events occurring due to a delay in laboratory results and ensures that patients receive care promptly.



Automated testing of faecal samples at NHG Diagnostics laboratory.

Sample integrity is also maintained as there is no longer a need for samples to be transported from one laboratory to another. On-site biochemical analysers are also available at Ang Mo Kio, Choa Chu Kang, Toa Payoh and Yishun Polyclinics.



ECG room before (left) and after (right).



Chapter 4: Advancing Family Medicine for the Future

“We hope to encourage and inspire more clinicians to embark on clinical and healthcare services research. Doing primary care research helps us to understand some of our patients and their diseases better as well as to assess the effectiveness of certain treatment regimes.”

In this photo: NHGP winners of the Singapore Primary Care Research Scientific Competition 2014. (From left) Dr Desmond Ong Luan Seng, Family Physician, Associate Consultant, Jurong Polyclinic; Mr Won Tin Chiang, Senior Dietitian, Clinical Services; Ms Jancy Mathews, Deputy Director, Nursing Services; Dr Yehudi Yeo Wee Shung, Family Physician, Consultant, Choa Chu Kang Polyclinic; Dr Richard Lee Meng Kam, Family Physician, Associate Consultant, Clementi Polyclinic; Mr Yap Chee Khong, Psychologist, Clinical Services.

Adjunct Associate Professor Chong Phui-Nah,
Chief Executive Officer, NHGP

Advancing Family Medicine for the Future

Family Medicine provides primary, preventive, comprehensive, continuing and co-ordinated healthcare in community settings to patients across all age groups. NHGP works towards the vision of advancing Family Medicine by ensuring that our healthcare professionals are equipped with the most relevant skills and knowledge to meet the evolving needs of our patients.

NHGP achieves this through a variety of workshops, education and professional development programmes conducted through the Primary Care Academy and other platforms. Furthermore, NHGP staff conduct research into Family Medicine and Medical Education to discover and share new knowledge with the healthcare community.

CONTINUING EDUCATION AND DEVELOPMENT

Primary Care Forum 2014

The Primary Care Academy collaborated with Family Medicine Division and Clinical Research Unit to organise Primary Care Forum 2014, themed "Primary Care: The Fulcrum of a Healthy Population",

on 26 and 27 September 2014. The forum, one of the satellite conferences of the Singapore Health and Biomedical Congress, was graced by Guest of Honour Mrs Tan Ching Yee, Permanent Secretary for the Ministry of Health.

The forum focused on how primary care practitioners in both the public and private sectors would play an

▼ Healthcare experts from overseas and Singapore gathered at the Primary Care Forum to engage in discussions on population health.



increasingly important role in taking care of patients and their families and the population at large. It expounded on how primary care would have to transform itself for new responsibilities and future health challenges.

The forum featured about 30 local and overseas speakers who presented on diverse topics that were contextualised to meet the needs of General Practitioners and primary healthcare professionals. At a symposium titled "Healthy Population: Beyond the Medical Realm", invited speakers included Dr Gilbert Fan, Head of the Department of Psychosocial Oncology, National Cancer Centre Singapore, who spoke on social medicine.

Guest speakers who presented at the Family Medicine Education symposium included Associate Professor Pang Weng Sun, Vice-Dean, Clinical Affairs, Lee Kong Chian School of Medicine; Associate Professor Lau Tang Ching, Rheumatologist, Senior Consultant, Department of Rheumatology, National University Health System, and Assistant

Dean, Undergraduate Education, Dean's Office, Yong Loo Lin School of Medicine; and Dr Sandra Kemp, Assistant Dean, Medical Education, Lee Kong Chian School of Medicine.

The forum was attended by 1,032 doctors, nurses, Allied Health Professionals and administrators, which made Primary Care Forum 2014 a resounding success.

Medical Forums and Workshops

The Family Medicine Division conducts bi-monthly medical forums to equip Family Physicians with the six competencies for healthcare professionals under the Accreditation Council for Graduate Medical Education (ACGME) framework. The six competencies are: patient care, medical knowledge, interpersonal and communication skills, practice-based learning and improvement, professionalism and systems-based practice.

Five medical forums (Table 1) were conducted in FY2014. Subject matter experts were invited to deliver the lectures.

Table 1 Medical Forums Conducted in FY2014

Title	Speaker / Trainer
Multi-disciplinary Care for the Complex Geriatric Patient	Dr Lim Wee Shiong Senior Consultant, Department of Geriatric Medicine, Tan Tock Seng Hospital (TTSH)
	Dr Cindy Yeo Family Physician, Department of Continuing and Community Care, TTSH

Title	Speaker / Trainer
Survival Guide for the Osteoporosis Apocalypse 2014	Dr Vivien Lim Consultant, Endocrinology, Khoo Teck Puat Hospital
Traditional Chinese Medicine: Ancient Art and Modern Medicine	Dr Derrick Aw Dermatologist, Acupuncturist Clinical Director, University Dermatology Clinic, National University Hospital
	Dr Lee Wee Yee Senior Consultant, Emergency Department, Changi General Hospital
Role of Primary Care Clinician in Managing Dementia – What do you do after referring?	Dr Colin Tan Family Physician, Consultant Deputy Director, Professional Standards, Clinical Services, NHGP
	Dr Seo Peng Sin Family Physician, Senior Staff, Yishun Polyclinic, NHGP
	Dr Yehudi Yeo Wee Shung Family Physician, Consultant, Choa Chu Kang Polyclinic, NHGP
	Dr Noorhazlina Consultant, Department of Geriatric Medicine, TTSH
	Dr Cindy Yeo Family Physician, Department of Continuing and Community Care, TTSH

Training Workshops for NHGP Healthcare Professionals

In FY2014, the Primary Care Academy held several workshops as part of continuous efforts to equip different healthcare professionals with the relevant skills to perform their roles effectively.

Table 2 Workshops Conducted by PCA

Name	Date	Description	Attendees
Developmental Assessment Workshop	26 April 2014	Primary care doctors and nurses are updated on the techniques and skills of performing childhood developmental assessments.	140
Wound Care for Enrolled Nurses	7, 15, 21 & 27 January 2015	Nurses are trained to assess wounds, choose and apply appropriate wound products and care for the wounds appropriately.	22
Advanced Wound Management Workshop	5 & 19 July 2014	The two half-day workshop is designed especially for doctors and registered nurses who provide advanced wound care for patients in the primary healthcare setting.	30
Surgical Procedures for the Primary Healthcare Physicians	25 October and 22 November 2014	These workshops equip and update doctors in primary care with skills to perform various common minor surgical and orthopaedic procedures in primary healthcare.	38
Orthopaedic Procedures for the Primary Healthcare Physicians			
Basic Chronic Disease Management	16 January – 25 March 2015	PCA collaborated with Nursing Services to organise an updated version of this workshop. Registered Nurses and Allied Health Professionals (AHP) are equipped with skills and knowledge to better manage patients with chronic diseases in a more collaborative and co-ordinated manner.	23

Learning from the Best

In September 2014, NHGP hosted two overseas experts – Professor Martin Roland, RAND Professor of Health Services Research, University of Cambridge and Professor Rifat Atun, Professor of Health Systems, Director of Global Health Systems Cluster, Harvard School of Public Health, Harvard University.



▲ Professor Rifat Atun (sixth from left) visited the Family Medicine Academy during his visit.

From 23 to 26 September 2014, Professor Roland met with NHGP Senior Management and various working groups to share his expertise on primary care delivery models, and other countries' experience of performance measures such as the Pay-for-Performance model. NHGP then hosted Professor Atun from 25 to 30 September 2014, who shared insights on the organisation and delivery of primary care, financing population health models and how innovation could help advance primary care with NHGP Senior Management and various working groups.

NHGP also welcomed a visit by Professor Elio Riboli, Director, School of Public Health, Imperial College London School of Public Health to Bukit Batok Polyclinic and Family Medicine Academy. During his visit, Professor Riboli offered valuable insights on research in primary care and public health systems and discussed potential research collaborations with NHGP.

EDUCATION AWARDS

Teachers are central to the success of their students. Likewise, this principle holds true for clinicians and healthcare professionals. In 2014, our clinicians, healthcare professionals and teaching partners received recognition for their commitment and contribution in teaching and mentoring junior clinicians and professionals.

Yong Loo Lin School of Medicine Dean's Awards 2014

The Dean's Award for Teaching Excellence (CE) was given out during the Appreciation for Yong Loo Lin Clinical Teachers event held at Tan Tock Seng Hospital Annex 2 Lounge on 18 November 2014. Award recipients were evaluated by their students at Yong Loo Lin School of Medicine.

Dr Ruth Zheng Mingli, Family Physician, Associate Consultant, Bukit Batok Polyclinic, NHGP

NHG Teaching Excellence Awards

The award was presented on 5 September 2014 at Tan Tock Seng Hospital Atrium. Graced by Professor Chee Yam Cheng, former Group Chief Executive Officer, NHG and present President, NHG College, the award presentation was held in recognition of the efforts made by well-deserving doctors in the teaching of their juniors and medical students to promote education.

NHG Education Leaders Award

Dr Predeebha Kannan, Head, Primary Care Academy, NHGP

NHG Outstanding Nurse Teachers Award

Ms Tong Ling Hoh, Nurse Educator, Nursing Services, NHGP

NHG Teaching Award for Nursing Preceptors

Ms Fatimah Bte Endut, Nurse Clinician, Choa Chu Kang Polyclinic, NHGP

Ms Hashimah Bte Hashim, Assistant Nurse Clinician, Choa Chu Kang Polyclinic, NHGP

Ms Quek Imm Pin, Senior Nurse Clinician, Ang Mo Kio Polyclinic, NHGP

Ms Saroja d/o Vadiveloo, Senior Staff Nurse, Yishun Polyclinic, NHGP

NHG Teaching Award for Allied Health Educators

Mr Kwok Boon Chong, Senior Physiotherapist, Clinical Services, NHGP

Ms Maria Isabel Joaquin Laray, Senior Radiographer, NHG Diagnostics

NHG Teaching Award for Pharmacy Preceptors

Ms Sandra Xu, Senior Pharmacist, NHG Pharmacy

NHG Teaching Award for Pharmacy Senior Preceptors

Ms Anna Liew, Principal Pharmacist, NHG Pharmacy

NHG Outstanding Education Partners Award

Dr Lee-Oh Chong Leng, Adjunct Family Physician, Family Medicine Development, NHGP



◀ NHG Teaching Excellence Awards' winners with NHGP management.

► Professor Rifat Atun delivering his keynote address at the Primary Care Forum 2014.



NHGP Best Family Medicine Trainers’ Award 2014

The annual award recognises the significant contribution by Family Medicine trainers for their initiative, passion and dedication in teaching. The trainers were evaluated by medical undergraduates and Family Medicine Residents based on their presentation content, teaching style, approachability and creativity. The recipients are role models in the field of undergraduate and post-graduate medical training.

Dr Tang Wern Ee, Family Physician, Consultant and Head, Clinical Research Unit, Family Medicine Development, NHGP

Dr Tan Kim Kiat, Family Physician, Associate Consultant and Assistant Director, Family Medicine Development, NHGP

NHGP Nursing Best Preceptor Award 2014

This award recognises nurses who have made outstanding contributions in providing effective clinical teaching to students and newly recruited nurses and

how these nurses have helped them achieve desired learning goals.

June Lim Hwee Hua, Senior Staff Nurse, Hougang Polyclinic, NHGP

PRIMARY CARE RESEARCH

NHGP is committed to promoting research in Family Medicine by creating and facilitating competitive platforms, dialogues, workshops and grants.

Singapore Primary Care Research Scientific Competition 2014

The Singapore Primary Care Research Scientific Competition was held in conjunction with the Primary Care Forum 2014 and shared the theme of “Primary Care: The Fulcrum of a Healthy Population”. The event provided a platform for healthcare professionals working in primary care to showcase their research work. It also recognised the importance of research in shaping clinical practice in primary care.

The finals of the research competition were held on 24 September 2014 at the Primary Care Academy. See Table 3 for the winners of the competition.

Table 3 Winners of the Singapore Primary Care Research Scientific Competition 2014

Category		Principal Investigator	Research Title
Oral	Gold	Dr Richard Lee Meng Kam, Family Physician, Associate Consultant, Clementi Polyclinic, NHGP	Determinants of prevalence of anaemia in diabetic mellitus in primary care
	Silver	Mr Yap Chee Khong, Psychologist, Clinical Services, NHGP	The effects of psychological interventions on patients with depression and anxiety and their functioning in primary care
	Bronze	Dr Desmond Ong Luan Seng, Family Physician, Associate Consultant, Jurong Polyclinic, NHGP	A study on the knowledge in diabetic foot care among diabetic patients in Singapore
Poster	Gold	Dr Yehudi Yeo Wee Shung, Family Physician, Consultant, Choa Chu Kang Polyclinic, NHGP	Primary care surveillance for prolonged neonatal jaundice using transcutaneous bilirubinometry
	Silver	Mr Won Tin Chiang, Senior Dietitian, Clinical Services, NHGP	Introduction of liquid meal replacement in a staff weight management programme yields improved weight loss results
	Bronze	Ms Jancy Mathews, Deputy Director, Nursing Services, NHGP	Limited health literacy – how do healthcare professionals perceive the problem?

Fuelling Research in Primary Care

From July 2014 to August 2014, the Clinical Research Unit and Associate Professor Josip Car, Founding Director, Health Services and Outcomes Research Programme, Lee Kong Chian School of Medicine, conducted lunchtime information sessions on primary care research. The aim was to inspire NHGP’s healthcare professionals to undertake research in primary care.

Research Publications and Presentations by NHGP Staff

NHGP actively participated in research that has led to new medical knowledge. The following are NHGP staff who,

together with their respective research teams, have contributed to the local and international medical literature through journal publications (Table 4) and conferences (Table 5).



▼ Associate Professor Josip Car sharing on the benefits of conducting primary care research during an information session on primary care research.

Table 4 Publications by NHGP Staff in Various Journals

Research Topic	Journal Title	NHGP Staff in the Research Team
Relative efficacy of AS03-adjuvanted pandemic influenza A (H1N1) vaccine in children: results of a controlled, randomised efficacy trial.	The Journal of Infectious Diseases, 2014	Dr Lim Fong Seng, Family Physician, Senior Consultant, Choa Chu Kang Polyclinic
A randomised trial to evaluate the immunogenicity, reactogenicity, and safety of the 10-valent pneumococcal non-typeable <i>Haemophilus influenzae</i> protein D conjugate vaccine (PHiD-CV) co-administered with routine childhood vaccines in Singapore and Malaysia	BMC Infectious Diseases, 2014	Dr Lim Fong Seng (first author), Family Physician, Senior Consultant, Choa Chu Kang Polyclinic Dr Yehudi Yeo Wee Shung, Family Physician, Consultant, Choa Chu Kang Polyclinic
Does patient education and recommendation result in increased uptake of colorectal cancer screening using the Faecal Occult Blood Test?	Annals of the Academy of Medicine, Singapore, 2014	Dr Angelia Chua Hwee Ling, Family Physician, Consultant, Yishun Polyclinic
Low-density lipoprotein cholesterol levels in adults with Type II diabetes: an alternative equation for accurate estimation and improved cardiovascular risk classification	Diabetes & Vascular Disease Research, 2014	Dr Tang Wern Ee, Family Physician, Consultant and Head, Clinical Research Unit, Family Medicine Development Dr Simon Lee Biing Ming, Family Physician, Consultant and Chief Medical Informatics Officer, Office of Clinical Informatics
Overcoming barriers to mammography screening: a quasi-randomised pragmatic trial in a community-based primary care setting	Annals of the Academy of Medicine, Singapore, 2014	Dr Siew Wei Fong, Family Physician, Consultant, Clementi Polyclinic Ms Liao Wei Fong, Nurse Clinician, Bukit Batok Polyclinic

Research Topic	Journal Title	NHGP Staff in the Research Team
Feasibility and acceptability of the informant AD8 for cognitive screening in primary healthcare: a pilot study	Scientific World Journal, 2014	Dr Keith Tsou Yu Kei, Family Physician, Consultant, Regional Director (West) and Head, Bukit Batok Polyclinic
Anthropometrics indices of obesity, and all-cause and cardiovascular disease-related mortality, in an Asian cohort with Type II diabetes mellitus	Diabetes & Metabolism, 2015	Dr Tang Wern Ee, Family Physician, Consultant and Head, Clinical Research Unit, Family Medicine Development Dr Darren Seah, Family Physician, Consultant and Assistant Director, Family Medicine Development
Evaluation of body adiposity index as a predictor of aortic stiffness in multi-ethnic Asian population with Type II diabetes	Diabetes & Vascular Disease Research, 2015	Dr Simon Lee Biing Ming, Family Physician, Consultant and Chief Medical Informatics Officer, Office of Clinical Informatics Dr Tang Wern Ee, Family Physician, Consultant and Head, Clinical Research Unit, Family Medicine Development
Kinesio taping in musculoskeletal pain and disability that lasts for more than 4 weeks: is it time to peel off the tape and throw it out with the sweat? A systematic review with meta-analysis focused on pain and also methods of tape application	British Journal of Sports Medicine, 2015	Mr Mathew Tay Guo Xiang, Physiotherapist, Clinical Services
Novel use of the Wii Balance Board to prospectively predict falls in community-dwelling older adults	Clinical Biomechanics (Bristol, Avon), 2015	Mr Kwok Boon Chong (first author), Senior Physiotherapist, Clinical Services

Table 5 Oral and Poster Presentations by NHGP Staff at Various Conferences

Conference	Poster Title	Project Lead
19th World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) Europe Conference July 2014 Lisbon, Portugal	The changing profile of patients in primary care in Singapore	Dr Lew Yii Jen, Senior Director, Clinical Services
	A study on the knowledge towards diabetic foot care in diabetic patients in Singapore	Dr Desmond Ong, Family Physician, Associate Consultant, Jurong Polyclinic
	The efficacy of commonly used topical agents in patients with aphthous stomatitis – a literature review	Dr David Ng, Family Physician, Associate Consultant, Toa Payoh Polyclinic
World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) Asia Pacific Region Conference March 2015 Taipei, Taiwan	Insulin initiation in Type II diabetes in primary care setting	Dr Darren Seah, Assistant Director, Family Medicine Development, Family Physician, Consultant
	Evidence-based management of microalbuminuria in Type II diabetes mellitus	Dr Lim Chee Kong, Family Physician, Consultant and Deputy Director, Medical Manpower, Clinical Services
	Electronic cigarettes as an aid for tobacco smoking cessation: A review article	Dr Benjamin Cheah, Family Physician, Consultant, Jurong Polyclinic



Grant Enhancement Training Workshop

On 10 April 2014, Clinical Research Unit and the Singapore Clinical Research Institute (SCRI) co-organised the first Grant Enhancement Training Workshop for NHGP doctors, nurses and pharmacists. The course was facilitated by 13 research experts from SCRI, including Chief Executive Officer Dr Teoh Yee Leong, Chief Scientific Officer Dr Edwin Chan, biostatisticians, epidemiologists and project managers.

The SCRI experts provided short lectures on elements of grant writing and intensive

reviews of the research proposals prepared by the 30 participants. The one-day workshop aimed to build research capacity, enhance research capability and support individuals in developing competitive research grant proposals.

▲ Group photo of participants with the SCRI research experts.

Research Grants Awarded to Advance Family Medicine

The following NHGP staff have received grants for research studies to advance Family Medicine (Table 6). These grants serve to inspire further research at NHGP to strengthen and transform care and improve the health of patients, their families and the larger community.

Table 6 Research Grants Obtained by NHGP Staff

Study Title	Principal Investigator	Start/End Date	Funding
Multi-source feedback for Family Medicine residents	Dr Darren Seah, Family Physician, Consultant and Assistant Director, Family Medicine Development	December 2014/ June 2015	NHG HOMER Grant
Use of a standardised patient satisfaction questionnaire to assess the quality of care provided by Family Medicine residents in NHGP	Dr Meena Sundram, Family Physician, Senior Consultant and Head, Jurong Polyclinic	August 2014/ January 2015	NHGP Research Fund

Study Title	Principal Investigator	Start/End Date	Funding
Multi-morbidity in primary care and its association with Depression, Anxiety and Quality of Life (MDAQ)	Dr Lee Eng Sing, Family Physician, Consultant; Head, Hougang Polyclinic; Deputy Head, Clinical Research Unit, Family Medicine Development, NHGP	April 2014/ March 2016	NHG Small Innovative Grant (SIG) Award
A Comparative Study Evaluating Patient Adherence, Satisfaction and Handling Techniques of 3 Different Types of Budesonide Dry Powder Inhalers (DPIs)	Dr Tang Wern Ee, Family Physician, Consultant and Head, Clinical Research Unit, Family Medicine Development, NHGP	April 2014/ March 2016	NHG Small Innovative Grant (SIG) Award
Multi-morbidity in primary care and its association with Depression, Anxiety and Quality of Life (MDAQ)	Dr Lee Eng Sing, Family Physician, Consultant; Head, Hougang Polyclinic; Deputy Head, Clinical Research Unit, Family Medicine Development, NHGP	NA	NMRC Research Training Fellowship Award

Quarterly Research Forums to Facilitate Learning and Research

In FY2014, the Clinical Research Unit continued hosting quarterly research forums which served as a platform for NHGP doctors, nurses, Allied Health Professionals and pharmacists to present their research on current issues, refine their research ideas and network. See below for the list of research forum presentations.

Table 7 Research Forum Presentations for FY2014

Date, Venue	Topic	Presenter
29 May 2014 Ang Mo Kio Polyclinic	Pharmacist-led intervention to improve medication compliance – a randomised controlled trial	Ms Sandra Xu, Pharmacist, NHG Pharmacy Ms Esther Bek, Principal Pharmacist, NHG Pharmacy
	Effectiveness of the completion of Written Asthma Action Plan (WAAP) by Care Managers in primary care setting - a randomised controlled trial	Ms Wong Theng Theng, Nurse Clinician, Woodlands Polyclinic, NHGP

Date, Venue	Topic	Presenter
20 August 2014 Hougang Polyclinic	Multi-morbidity in primary care and its association with Depression, Anxiety and Quality of life (MDAQ)	Dr Lee Eng Sing, Family Physician, Consultant; Head, Hougang Polyclinic; Deputy Head, Clinical Research Unit, Family Medicine Development, NHGP
	Pilot study, Community Health Assist Scheme (CHAS): Factors influencing patients on CHAS on the use of public and/or private primary care for their chronic diseases	Dr Lee Mun Tuck, Family Physician, Associate Consultant, Ang Mo Kio Polyclinic, NHGP
12 November 2014 NHGP HQ	Evaluation of creatinine rise and hyperkalemia as adverse drug reactions associated with initiation of ACEi or ARBs in primary care of Singapore	Ms Wang Qingli, Advanced Practice Nurse, Hougang Polyclinic, NHGP
	Patients’ knowledge of and attitude towards Advanced Care Planning in primary care	Dr Valerie Teo, Family Physician, Ang Mo Kio Polyclinic, NHGP
4 February 2015 NHGP HQ	Exploring patient perception in self-wound care for patients with self-manageable wound in the primary healthcare sector	Ms Goh Ling Jia, Senior Staff Nurse, Hougang Polyclinic, NHGP
	A study on perceptions of weight loss among overweight to obese patients with chronic diseases	Dr Lim Chee Kong, Family Physician, Consultant and Deputy Director, Medical Manpower, Clinical Services, NHGP Dr Benjamin Cheah, Family Physician, Consultant, Jurong Polyclinic, NHGP

PROFESSIONAL ADVANCEMENT

NHGP recognises staff who are committed to continuous learning and development throughout their professional careers.

Master of Medicine in Family Medicine

Nine NHGP doctors passed the Master of Medicine in Family Medicine examinations in November 2014.

Dr Charlene Tan, Resident Physician, Hougang Polyclinic, NHGP

Dr Gan Sui Ji, Resident Physician, Choa Chu Kang Polyclinic, NHGP

Dr Kee Kok Wai, Resident Physician, Toa Payoh Polyclinic, NHGP

Dr Lim Hui Teng, Resident Physician, Toa Payoh Polyclinic, NHGP

Dr Ruth Chua, Resident Physician, Choa Chu Kang Polyclinic, NHGP

Dr Taiju Rangpa, Resident Physician, Bukit Batok Polyclinic, NHGP

Dr Tan Hong Weng, Family Physician, Bukit Batok Polyclinic, NHGP

Dr Teh Kai Lin, Resident Physician, Ang Mo Kio Polyclinic, NHGP

Dr Tricia Chang, Resident Physician, Ang Mo Kio Polyclinic, NHGP

Graduate Diploma in Family Medicine

Four NHGP doctors passed the Graduate Diploma in Family Medicine (GDFM) examinations in July 2014. The GDFM is a postgraduate structured training programme that equips family doctors in Singapore with skills to enhance their level of care to patients.

Dr Ng Chia Hau, Family Physician, Ang Mo Kio Polyclinic, NHGP

Dr Serena Felix Soosay, Family Physician, Clementi Polyclinic, NHGP

Dr Siti Aishah Bte Mohamed Ghazalie, Family Physician, Yishun Polyclinic, NHGP

Dr Tan Kwang, Family Physician, Senior Staff, Ang Mo Kio Polyclinic, NHGP

Fellowship of the College of Family Physicians of Singapore

Dr Lee Kwang How, Family Physician, Associate Consultant, Bukit Batok Polyclinic, NHGP

Dr David Ng, Family Physician, Associate Consultant, Toa Payoh Polyclinic, NHGP

Master of Clinical Pharmacy

One pharmacist passed the Master of Clinical Pharmacy examinations in March 2015.

Tan Beng Li, Senior Pharmacist, Bukit Batok Polyclinic, NHG Pharmacy

RE-ACCREDITATION

NHG Family Medicine Residency ACGME-I Re-accreditation

The NHG Family Medicine (FM) Residency Programme underwent an ACGME-I re-accreditation in October 2014. The accreditation employs a comprehensive, peer-review process to evaluate, improve and recognise programs and sponsoring institutions in graduate medical education that meet – and even exceed – standards of educational quality.

Ten faculty members and 10 residents from the programme were interviewed separately by the site visitor. With improvements put in place to ensure well-supervised clinical teaching and adequate didactics, the programme has been given a three-year accreditation.

Primary Care Academy Received Re-accreditation on Use of Medical Terminology in Work Activities (WSQ) Course

On 13 December 2014, the Primary Care Academy passed the Singapore Workforce Development Agency's Continuous Improvement Review audit and was successfully re-accredited to run its course "Use of Medical Terminology at Work Activities". This course adhered to the Singapore Workforce Skills Qualification System framework, endorsing the quality of the course delivery and assessment.

Primary Care Academy Re-accredited as Basic Cardiac Life Support Training Centre

The Primary Care Academy has been accredited as a basic cardiac life support (BCLS) training centre by the National Resuscitation Council since 2008. In 2015, the Primary Care Academy successfully passed the re-accreditation audit, enabling it to continue its status as a recognised and accredited BCLS training centre for two years commencing 12 February 2015.

Chapter 5: Championing Healthy Lifestyles

“All our polyclinics know the communities that they serve. They are aware of the demographics and disease patterns of the community that they are in.”

Dr Wee Wei Keong,

Director, Health Promotion and Preventive Care, NHGP

In this photo: Ms Cindy Soh, Principal Physiotherapist, Clinical Services, NHGP leading a group exercise session. This is one of NHGP's many initiatives to promote healthy lifestyle and encourage patients to take charge of their health and stay well.

Championing Healthy Lifestyles

Promoting healthy lifestyles to prevent diseases is a key part of primary care practice. As such, NHGP staff engage, empower and equip patients, their families and the community with knowledge and skills to take charge of their own health and wellness.

The organisation is committed to helping Singaporeans lead longer and more meaningful lives by educating both patients and members of the community on important aspects of healthy living and disease prevention. This is achieved through health screenings, intervention and education programmes, as well as participation in healthy lifestyle events.

PROMOTING HEALTH AND PREVENTING DISEASE

Person-Centric Screening to Help Lower Patients' Health Risks

▼ NHGP Chief Nurse Ms Chen Yee Chui setting an example by undergoing influenza vaccination for prevention.

NHGP has been working with NHG and the National University Health System to develop and implement Person-Centric Screening (PCS) across seven polyclinics in the Western and Central clusters. The initiative is part of a three-year

pilot under MOH's "Priority 5 – Health Promotion & Education to keep the population out of hospital", which began in October 2014.

Under the initiative, NHGP offers health screening services that focus on the top three cancers – breast cancer, cervical cancer and colorectal cancer. Health promotion booths were set up across the seven polyclinics to offer relevant screening services to patients. As of March 2015, more than 8,000 patients have been engaged for cancer screenings.

To help eligible patients identify their risk of developing cardiovascular disease, a new Coronary Risk Screening (CRS) programme was rolled out in Ang Mo Kio Polyclinic in March 2015. Post-screening follow-up intervention programmes will be provided to help at-risk patients.

Intervention Programmes for Better Health

NHGP Dietetics Services, Nursing Services and Health Promotion and Preventive Care (HPPC) conducted intervention programmes (Table 1) to help patients achieve better health.



Table 1 List of Intervention Programmes

Programme	Objective	Results
Weight No More Programme	Help overweight patients with body mass index (BMI) between 23.0kg/m ² to 32.4kg/m ² manage their weight through dietary and lifestyle changes.	The fifth run of the programme was conducted from 26 April 2014 to 12 July 2014. Over the three months, 50% of participants have lost more than 5% of their initial body weight.
Big O Challenge	The non-structured six-month weight management programme aims to help NHGP staff better manage their weight.	The fourth run of Big O Challenge began in October 2014. A total of 15 HQ staff with BMI above the healthy range participated in the programme. At the three-month end point, all of the participants have lost weight, 27% of which have lost more than 5% of their initial body weight.
Influenza Vaccination	Improve influenza vaccination uptake as the vaccination is an important patient safety issue. Unvaccinated staff can spread influenza to patients, co-workers, and family members, leading to influenza-related illnesses, hospitalisation and even death.	The prevention and control of infection committee together with the clinics' infection control teams adopted a series of measures to improve uptake of influenza vaccination among staff. The measures include better education on the vaccination. The influenza vaccination uptake for FY 2014 was 57% – up 26% from 31% in 2013.

▼ Patients participating in the Osteoporosis Risk Assessment at the education booth.

National Osteoporosis Awareness and Prevention Month

In conjunction with the National Osteoporosis Awareness and Prevention Month, NHGP HPPC collaborated with Singapore Osteoporosis Society to create awareness on osteoporosis. A public talk titled "Are you at risk of osteoporosis" was conducted by a NHGP dietitian and physiotherapist at Choa Chu Kang Polyclinic on 24 May 2014 and education



- Dental Services displayed posters to educate patients about preventing gum disease.



- NHGP Corporate Communications works with Straits Times' Mind Your Body section to feature health articles to the community.



booths were set up at the other eight NHGP's polyclinics. The education booths attracted some 431 patients, who participated in the osteoporosis risk assessments performed at the booths. They were then educated on the topic based on their risk assessment result.

World Mental Health Day Activities for Staff

In conjunction with World Mental Health Day and as part of the "Workplace Health Promotion – Mental Health" pillar

initiative, NHGP HPPC collaborated with NHGP psychologists to organise a series of talks on "Stress Management". The talks were conducted at its headquarters and nine polyclinics to help staff better manage their stress.

Wall Decals to Educate Patients about Gum Disease

To educate patients on the symptoms of gum disease, its prevention and how it can be cured, Dental Services put up dental education wall decals and posters in Toa Payoh and Jurong Polyclinics in January 2015.

7th BreastScreen Singapore Seminar 2014

NHG Diagnostics supported the Health Promotion Board (HPB) in the organising of the 7th BreastScreen Seminar 2014. The event, which took place at HPB Auditorium on 11 and 12 October 2014, was attended by more than 150 healthcare professionals involved in breast cancer screening and management.

Promoting Healthy Lifestyles through Media Profiling

Besides conducting talks and exhibitions, NHGP also promotes healthy lifestyles to the community through the mass media.

Media features included articles penned by Family Physicians and radio talk shows by Allied Health Professionals for Dietitians' Day, Podiatry Day and World Asthma Day.

CHAMPIONING HEALTHY LIVING

NHGP champions healthy living for both patients and staff by engaging the public on a variety of health-related topics through various initiatives such as education booths, public talks and healthy lifestyle events.

Promoting Healthy Eating through the Great, Simple, Tasty Corner

In August 2014, our Dietetics Services and HPPC set up a kitchen to encourage our patients to adopt healthier eating habits. The kitchen, known as the Great, Simple, Tasty (GST) Corner, is located at Bukit Batok Polyclinic.

The initiative promotes healthy eating to patients through interactive food tasting and cooking demonstration sessions. Co-funded by the Health Promotion Board (HPB), the project educates patients and the public about proper nutrition and provides them with healthy cooking tips.

The theme for the GST corner changes quarterly and a new easy-to-cook recipe is introduced each week based on the theme.



Educational hand-outs are distributed alongside the recipes to the daily crowd that gathers. As of 31 March 2015, 5,675 visitors have visited the GST corner.

Encouraging Healthy Eating the "Healthy Plate Way"

In conjunction with Dietitians' Day on 13 March 2015, a team of dietitians from NHGP organised celebrations for patients and staff at each of its nine polyclinics from 9 to 13 March 2015. This year's theme focused on how to eat the "Healthy Plate Way".

The event featured fun-filled activities with nutrition booths, posters with healthy eating messages and games like "spin the healthy plate wheel". Recipe cards with nutritious and affordable recipes capped at \$2 per serve were also launched.

Talks on Healthy Catering

To promote healthy eating during special occasions at NHGP, our Health Promotion Consultant conducted a series of Healthy Catering talks for our polyclinics' Operations Managers, HealthBuzz leaders and HQ staff. Over 50 staff attended the talk, which was held on 5 December 2014. During the event, HPPC also introduced a one-step ordering system – where staff



- ◀ Left: At the GST Corner, patients get to learn how to cook healthier meals through interactive sessions.

Right: NHGP patients and staff attended the fun-filled Dietitians' Day Celebrations at the polyclinics.



▲ Pharmacists, pharmacy technicians and retail and administrative staff learning more about the various retail products meant for those above 50 years old.

can order foods from a list of vetted healthy menus for their events.

Beyond 50's: Seminar on Retail Pharmacy Products

NHG Pharmacy organised a seminar titled "Beyond 50's: Live Well, Be Healthy, Feel Great" for its pharmacists, pharmacy technicians, and retail and administrative staff to equip staff with knowledge in retail products suited for individuals above the age of 50.

The event took place at Yishun SAFRA on 12 April 2014 and was attended by more than 70 staff. Highlights of the event included talks on understanding nutrition and staying fit and healthy while ageing. Activity booths were also set up for staff to learn more about the various retail products.

Lunchtime Talks on Safe Use of Medication

To promote safe medication use, NHG Pharmacy conducted a series

of lunchtime health talks within our polyclinics. In the last year, 18 talks were conducted with a total of 343 participants. Around 90% of the participants feedback that they found the talks informative.

Active Day 2014

About 420 staff from NHGP's HQ and nine polyclinics gathered at Yio Chu Kang stadium on 18 October 2014 to attend NHGP's annual Active Day. This year's instalment introduced some new features to encourage better participation. For instance, multiple activities were conducted concurrently to engage more participants – a two-kilometre walk and aerobics session of Zumba and Tai Chi alongside the Fitness Challenge. The annual Fitness Challenge also featured a unique Olympic Inflatable Challenge, where a total of 10 teams of 15 participants each navigated a float consisting of various obstacles as quickly as possible.



With a total score of 96% from its attendance in regular exercise classes and overall participation in the Fitness Challenge, the Ang Mo Kio team won the CEO Challenge Trophy for the second year running. Around 48% of NHGP staff also scored at least Silver during the Annual Staff Fitness Assessment via the 2km walk. This is up from 43% in FY2013.

Standard Chartered Corporate Challenge

NHGP teamed up with colleagues from NHG Pharmacy to clock a commendable distance of 1,900.545 km in the Standard Chartered Marathon Singapore – Corporate Distance Challenge. As the team covered a longer distance this year, NHGP's ranking at the Corporate



Distance Challenge improved from ninth place in FY2013 to sixth place.

Beyond winning the award, participants forged closer bonds by running together as a team.

▲ Top: NHGP staff doing aerobics at the NHGP Active Day on 18 October 2014.

Bottom: NHGP staff walking 2km as part of the Annual Staff Fitness Assessment.



In this photo: (Left) Head of Toa Payoh Polyclinic Dr Tung Yew Cheong engaging residents at the Care Corner Senior Activity Centre in a focus group discussion to gain a better understanding of the challenges they face in trying to stay well in the community.

Chapter 6: Partnering the Community, Stakeholders and Public Institutions

“The transformation of primary care will be vital as we move from illness to wellness care. Primary care will form the bedrock of healthcare in Singapore by helping patients with illness live well. We will continue to build strong relationships with GPs and community partners.”

Professor Philip Choo,
Group Chief Executive Officer, NHG

Partnering the Community, Stakeholders and Public Institutions

NHGP recognises that the holistic needs of the individual should be taken into account in order to provide quality patient-centric care that ensures optimal health outcomes. To enhance our patients' well-being, NHGP actively reaches out beyond the walls of the polyclinic to engage suitable and like-minded partners to look into the different needs of patients.

COLLABORATING WITH COMMUNITY STAKEHOLDERS TO SUPPORT RESIDENTS' HEALTH

NHGP signed a Memorandum of Understanding (MOU) with Nee Soon South (NSS) Constituency at the NSS Community Health Fair on 1 June 2014. The three-year collaboration will see NHGP working with the division's existing wellness centre – which offers services such as health screening and exercise facilities – to promote healthy living.

Together with NHGP, the wellness centre will provide better support for residents in psychology, dietetics, clinical pharmacy, diagnostics and caregiving services. With residents' consent, the polyclinics in the area will also share patient data with grassroots organisations so that residents with chronic conditions can receive follow-up visits.

▼ NSS residents participating in health screenings at the NSS Community Health Fair.



TAPPING PRIVATE CAPACITY

Transferring Patients to Family Medicine Clinics

In the Primary Care Masterplan 2011, MOH introduced a new care modality – Family Medicine Clinics (FMCs) – to increase capacities and capabilities in the primary care sector and to engage private general practitioners (GPs), especially in the management of chronic diseases in the community. The FMCs are also part of the government's plan to provide continuing care within the community. NHGP supported the set-up of Ang Mo Kio FMC in 2013, Unity FMC in 2014, and Hougang Family Medicine Clinic @ Ci Yuan Community Club in 2015.

Development works for the Hougang Family Medicine Clinic (FMC) in Hougang-Serangoon area began in FY2014. It adopts a model of care that combines the expertise of the public and private healthcare sectors to look after the growing number of elderly and chronic patients in Singapore. On 25 October 2014, an information session on the FMC was organised. GPs operating in the surrounding area and central region were invited to the event at the Serangoon Community Club where they were briefed on the FMC's objectives as well as the proposed partnership model. The GPs were also invited to indicate if they were keen to set up the FMC, which offers an additional care option

for patients by providing integrated, comprehensive health and community care to the whole family.

The FMC, which mainly caters to residents staying in the Hougang-Serangoon vicinity, officially opened on 20 September 2015. Staffed by a qualified medical team of Family Physicians, nurses, pharmacy and laboratory technicians, operations staff and care facilitators, it offers comprehensive healthcare services that go beyond medical and clinical care. These include the treatment of common acute ailments, chronic care, diabetic care like foot screening and retinal photography, laboratory services, treatment procedures, pharmacy services and Allied Health Services such as dietetic services. This FMC is our third FMC, after Ang Mo Kio FMC and Unity FMC located at Serangoon Central. There are now six FMCs in Singapore developed by different Regional Health Systems.

NHGP has been working with the FMCs, including Lakeside and Frontier FMCs, to facilitate referrals of suitable patients to the latter. This includes organising patient focus groups to better understand the motivators and barriers of transferring from polyclinics to FMCs. As of 30 November 2015, about 11,353 patients were transferred from NHGP to Ang Mo Kio, Unity, Lakeside, and Frontier FMCs.

Transferring Patients to GP Clinics

As part of our efforts to better handover care of our patients to our partners, NHGP conducted a series of dialogues to engage with GPs from participating Community Health Assist Scheme (CHAS) clinics.



One of the engagement sessions was conducted in Jurong Polyclinic on 29 August 2014. GPs from 10 CHAS-certified clinics were invited to discuss possible public-private care collaboration models to deliver holistic, quality and continuing care for patients with chronic diseases. Head of Jurong Polyclinic Dr Meena Sundram shared the services available at the polyclinic while GPs surfaced their challenges and suggested ways in which partnerships can be improved. Another GP dialogue session was held at Choa Chu Kang Polyclinic on 31 October 2014 which was attended by eight participating CHAS clinics in the area. The session was hosted by Dr Richard Hui, Head, Choa Chu Kang Polyclinic.

As of June 2015, we have approached more than 100 GP clinics, out of which 76 have agreed to work with us to continue providing care for our chronic patients. As of 30 November 2015, we have referred about 2,700 patients to our partnering GPs.

▲ NHGP staff conducting an engagement session with GPs from participating CHAS clinics.

► The infection control team visited Lentor Residence to provide training on hand hygiene and management of multidrug-resistant microorganisms (MDRO).



► Left: A learning corner in PCF Jurong Spring Childcare Centre which displays healthy eating tips the students have learnt during the healthy eating talk conducted by NHGP's dietitian.



Right: Residents enjoying their tasty and healthy Vietnamese cold roll after the Vietnamese cold roll making session conducted by NHGP's dietitian.



PROMOTING HEALTH AND DELIVERING SERVICES BEYOND CLINICS

Supporting Community Activities to Promote Healthy Lifestyles

NHGP, NHG Diagnostics and NHG Pharmacy supported community organisations' health-promoting events by conducting engagement activities. See below for the list of community activities we have supported.

Table 1 Community Outreach Activities supported by NHGP, NHG Diagnostics and NHG Pharmacy in FY2014

No.	Period	Type of Activities	Event/Venue	Supported by
1	March 2014	Infection prevention and control outreach programme	Lentor Residence	Nursing Services
2	April 2014	Guest judges	Teck Ghee Community Centre Baby Show	Ang Mo Kio Polyclinic

No.	Period	Type of Activities	Event/Venue	Supported by
3	3 May 2014	Talk, fitness workout and relaxation exercise: recognising early signs of heart attack	Jurong Green Community Club	Jurong Polyclinic
4	10 May 2014	Talk on healthy eating for pre-schoolers and raising healthy children	PCF (PAP Community Foundation) Jurong Spring Childcare Centre	Dietetic Services
5	16 May 2014	Health needs analysis survey of low income residents	Block 9, Teck Whye Lane	Choa Chu Kang Polyclinic
6	30 May 2014	Healthcare Career Talk	East View Primary School	Toa Payoh Polyclinic
7	1 June 2014	Stress reduction exercise	Nee Soon South Community Health Fair	Psychology Services
8	28 June 2014	Vietnamese cold roll making session	Teck Ghee Community Centre	Dietetic Services
9	16 July 2014	Talk on insomnia and cooking demonstration	Jurong Green Community Club	Jurong Polyclinic
10	26 July 2014	Talk on insomnia	Jurong Green Community Centre	Psychology Services
11	8 August 2014	Infection prevention and control outreach programme	Lentor Residence	Nursing Services
12	August 2014 – January 2015	Healthy eating talks	Asian Women's Welfare Association (AWWA) Community Home for Senior Citizens	Dietetic Services
13	23 August 2014	Talk: Healthy Eating, Healthy Living	Nanyang Community Centre	Dietetic Services
14	30 August 2014	Dietitian-led supermarket tour	NTUC FairPrice Xtra at Jurong Point	Dietetic Services
15	September 2014	Cooking demonstration, pneumococcal promotion and talk on fall prevention	St Luke's ElderCare	Hougang Polyclinic

No.	Period	Type of Activities	Event/Venue	Supported by
16	6 September 2014	Mammogram screening service	Marina Terrace Residents' Committee	NHG Diagnostics
17	28 September 2014	World Alzheimer's Day	Ang Mo Kio	Ang Mo Kio Polyclinic
18	4 October 2014	Talks on dementia	Clementi Community Centre	Clementi Polyclinic
19	11 October 2014	Home visits, food donation and distribution to elders from Lions Befrienders	Casa Clementi and Clementi Avenue 2	Clementi Polyclinic
20	12 October 2014	Mammogram screening service and tips on self-breast examination	Health for Life by Bukit Batok East Active Ageing Committee	NHG Diagnostics
21	4 November 2014	Lunchtime talk on stress management	Port Authority of Singapore	Psychology Services
22	14 November 2014	Creating awareness about falls at home	Toa Payoh	Toa Payoh Polyclinic
23	7 February 2015	Celebrate Chinese New Year festive season with elders from Lions Befrienders	Casa Clementi	Clementi Polyclinic



► Staff from NHGP's Clementi Polyclinic distributed goodie bags to the elderly from the Lion Befriender Activity Centre at Casa Clementi and Clementi Avenue 2.



Setting Up Games Medical Centre for SEA Games 2015

In FY2014, NHGP was invited to support the Ministry of Health (MOH) in the medical planning for SEA (South East Asian) Games 2015, which was held from 28 May to 18 June 2015. The organisation set up the Games Medical Centre at the Singapore Sports Hub and worked closely with external agencies to provide primary care services, sports medicine and physiotherapy, as well as specialist referrals for athletes. NHGP also collaborated with NHG Diagnostics to provide convenient on-site X-ray examination service for patients, with a one-hour turnaround time for results.

Health Screening Services in the Neighbourhood

Since August 2014, NHG Diagnostics has partnered NHG to deliver community health screening services to more residents at their doorsteps. The initiative aimed to help residents in the community to detect diseases early and hence reduce the risk of chronic diseases. There are plans to expand the support to more



regional health and community partners in health screening initiatives for their respective communities.

PROFESSIONAL LEARNING EXCHANGES

Courses for GP Assistants and Caregivers

The Primary Care Academy conducts workshops and courses to support capability building at the community level. In FY2014, 135 clinic assistants from various clinics in Singapore and caregivers have attended these courses (Table 2).

▲ NHG Diagnostics partnering the grassroots to deliver community health screening services like mammogram, through the mobus, to residents at their doorstep

◀ NHGP's physiotherapist demonstrating transfer techniques during the fall risk workshops conducted for healthcare practitioners from intermediate and long-term care sector.



▲ Left: NHGP hosted delegates from Korean Public Health School at Clementi Polyclinic.

Right: Senior officials from Guangdong visited NHGP's Clementi Polyclinic.



Table 2 Courses Conducted by PCA for Clinic Assistants and Caregivers

Course Title	Description	Attendees
Short course for therapy assistants and nursing aides from the Intermediate Long-Term Care (ILTC) sector	The workshops equip participants with skills and knowledge to identify and assist patients at risk of falls. Participants also learn how to minimise fall risks.	40
General Practitioner's Assistant Course	The course helps meet the training gaps of General Practitioner (GP) assistants.	45
Care Giver of the Elderly	Approved and funded by the Agency for Integrated Care, this course equips caregivers with skills to provide excellent care to their elderly loved ones at home.	50

NHGP Hosted Ten Visits to Facilitate Learning

In FY2014, NHGP continued to facilitate learning about Singapore’s healthcare system and NHGP by hosting visits from various sectors and countries.

Table 3 Visits hosted by NHGP in FY2014

Date	Delegation	Hosting Polyclinic
15 May 2014	MOH	Ang Mo Kio Polyclinic
27 June 2014	Korean Public Health School	Clementi Polyclinic
18 July 2014	National University Health System	Bukit Batok Polyclinic
31 July 2014	Senior officials from Guangdong Human Resource and Social Security Department	Clementi Polyclinic

Date	Delegation	Hosting Polyclinic
22 August 2014	Director of Medical Services, MOH	Choa Chu Kang Polyclinic
2 September 2014	Senior management delegates from Qinghai, China	Hougang Polyclinic
4 September 2014	Healthcare specialist from Henan, China	Clementi Polyclinic
9 January 2015	Visit by Professor Elio Riboli of Imperial College London	Bukit Batok Polyclinic
19 January 2015	NHG Board induction for Dr Tan Khai Tong, Ms Lock Yin Mei and Professor James Best	Ang Mo Kio Polyclinic
11 February 2015	Learning journey for Universal Health Coverage Meeting (ministerial visit)	Ang Mo Kio Polyclinic

Chapter 7: Enabling Better Care with Technology

“With the Telecare Programme,
I feel like I am in control of
my blood pressure; if it is not
proper, then I will inform the
doctor during my next visit. And
by sending over my readings
regularly, my doctor is able to
refer to them and advise me to
check on this and that.”

Mr Shaik Hussein Bin Shaik Dawood,
a patient of Clementi Polyclinic, NHGP

In this photo: A Care Manager counselling patient on home-monitoring as caregiver looks on.



Enabling Better Care with Technology

As technology advances, NHGP continues to leverage new solutions to streamline processes, increase accessibility, improve communications and enhance patients' experience at our clinics. We believe that this will ultimately enable us to deliver a higher quality of care to our patients across all our nine polyclinics.

TECHNOLOGY FOR CLINICAL EXCELLENCE

Tele-ophthalmology Service Broadened to Cater to More Patients

Since 2009, NHGP has been working with the National Healthcare Group Eye Institute (NHGEI) to provide tele-ophthalmology service at Hougang Polyclinic and later at Toa Payoh Polyclinic. Through providing this online video conferencing service in the primary healthcare setting, patients with chronic blurring of vision for more than three months can have their conditions assessed closer to home as they are remotely diagnosed by eye specialists at NHGEI. Patients benefit from greater convenience, as well as reduced travelling time and unnecessary referrals to ophthalmology departments in the hospitals.

In 2014, the service was broadened to patients who need a review for

► Patients can be remotely diagnosed by eye specialists at NHGEI with the tele-ophthalmology service.



their recent cataract operation. About 1,100 patients have attended the tele-ophthalmology sessions and about 50% of them did not need to be further referred to the hospital Specialist Outpatient Clinic (SOC).

More Patients Benefitting from the Singapore Integrated Diabetic Retinopathy Programme

In a seamless collaboration between NHGP and NHGEI, the Singapore Integrated Diabetic Retinopathy Programme (SiDRP) was introduced in April 2011 to promote early detection of diabetic retinopathy. Patients are provided with centralised remote diabetic retinopathy screening by trained optometrists. Retinal photographs are transmitted from the polyclinics to the reading centres for assessment by optometrists from NHGEI. Results are transmitted back to the polyclinics the next day. This helps reduce the waiting time for the retinal photograph readings, and patients to optimise their own time. To date, more than 10,100 patients benefited from the SiDRP and about a third were referred to the SOC.

NHGP Online Appointment System Introduced

As we move towards an increasingly tech savvy population, NHGP rolled out various initiatives, leveraging the use of technology, to ensure a more convenient and pleasant patient experience at our



polyclinics. In May 2014, the Online Appointment System was introduced to support same-day planned visits. The total waiting time for patients from their arrival at the clinic to consultation was reduced by as much as 40 minutes. The annual Ministry of Health (MOH) Patient Satisfaction Survey (PSS) found that patients' satisfaction for consult waiting times improved by 15%.

Continual IT Enhancements for Added Convenience to Patients

Following from the implementation of the self-payment kiosk at all of our nine polyclinics, NHGP continues its on-going efforts to enhance the payment modes, design and user interface of the kiosk. This is aimed at saving patients' time in making payment and making it more user-friendly for patients of various demographics.

Outpatient Pharmacy Automation System Wins Awards

The Outpatient Pharmacy Automation System (OPAS) – jointly developed by



NHG Pharmacy, National University Hospital (NUH), Tan Tock Seng Hospital (TTSH) and Integrated Health Information Systems (IHIS) – won several awards in FY2014.

The medication prescription filling system was piloted at Choa Chu Kang Polyclinic on 30 June 2014 and was subsequently implemented at Bukit Batok, Woodlands, Yishun and Hougang Polyclinics.

OPAS transformed medication dispensing and brought numerous benefits. For instance, patient safety is improved with its bar-code and Radio Frequency Identification (RFID) technology which ensure accurate medication picking. OPAS also enabled better use of trained manpower for patient care by relieving pharmacists from manual tasks so that they can dedicate more time to patient education, research and medication reconciliations.

The list of awards the system won can be found in Table 1.

▲ Left: The enhanced self-payment kiosk will offer additional payment modes and an improved design and user interface.

Right: Pharmacy staff benefit from the convenience brought about by OPAS.

Table 1 List of awards OPAS won in FY2014

Award	Category	Organiser
National Infocomm Awards	Most Innovative Use of Infocomm Technology (Public Sector)	Infocomm Development Authority of Singapore (IDA)
MOH Health IT Excellence Award	IT Excellence in Providing Quality of Care	Ministry of Health (MOH)
Project of the Year 2014-2015 Award	Business and Information Systems	Project Management Institute (PMI)- Singapore Chapter

TECHNOLOGY FOR BETTER PROCESSES AND AN ENHANCED PATIENT EXPERIENCE

Full-Field Digital Mammography

NHG Diagnostics’ efficient Full-Field Digital Mammography (FFDM) is now available at five of our polyclinics. The system, which was introduced in 2014, uses the same safe amount of radiation as a conventional system and captures images of the breast almost instantly.

The faster processing time enables a higher patient throughput and increases the daily maximum screening numbers. This translates to a significant reduction in waiting time for a mammogram appointment and an increase in the number of patients who can be screened for early detection. The remaining four NHG Diagnostics Centres will be equipped with the FFDMs in FY2015.

eMemo to Streamline Communication

NHG Diagnostics rolled out an eMemo system in April 2014 to facilitate the dissemination of information in their 13 laboratories. Previously, Laboratory In-Charges (IC) would print out notices and route them to their team members. Staff would then sign-off to acknowledge that they have read the notices. Now, staff can log on to the system with their own system identity to read notices

and acknowledge that they have read the information. The acknowledgement status can also be conveniently tracked on the eMemo platform.

With the system, the need to track acknowledgement signatures is eliminated and delays in communication prevented. The electronic approach also cuts down on the use of paper and need for storage space.

Automated Inventory Laboratory Checks

Inventory management is an essential element in maintaining the quality control standard within NHG Diagnostics’ laboratories. An easy-to-use eInventory system was introduced in July 2014 to replace manual processes of monitoring laboratories’ inventory. Items are bar-coded to allow data to be captured with a bar-code scanner. Stock-out situations are avoided with system-generated alerts whenever stock reaches par level, which refers to the quantity of an item that must be kept on hand to support daily operations. The system also allows for FIFO (first-in, first-out) inventory management, preventing any wastage due to overstocking or expired stock. With the system, the laboratory saved more than 40 man-hours per week by eliminating paper work, transcription errors, the stocking of inventory and investigation of discrepancies.

Ceiling Suspended X-ray Systems Available in More Clinics

NHG Diagnostics continued to replace analogue, floor mounted X-ray systems with ceiling suspended ones. The ‘age and wheelchair-friendly’ solution allows the elderly to be seated safely on the height-adjustable examination table and the radiographers to easily position the X-ray tube around patients seated in their wheelchairs prior to the procedure.

The first ceiling suspended X-ray system was implemented in the satellite imaging centre in Woodlands Polyclinic in December 2013. It removes risks of falls and improves the overall examination turnaround time.

Automation of Mediclaim System

NHG Diagnostics processes an average of 450 Medisave claims per month. In FY2014, they moved away from the manual data entry system and automated their Medisave claim system. The new system frees up 30 man-hours monthly by offering a seamless, real-time synchronisation of patients’ data and other necessary information. It also minimises potential transcription errors. The move improves staff productivity and cut down the time patients spent on administration processes.

E-Medical Courier Billing System Introduced

NHG Diagnostics Finance implemented the online medical courier billing system in July 2014. Staff can create online job requests by logging on to the system with their own system identity. Riders can also leverage the system to pre-plan their routes prior to dispatching. The system is also able to export data of all delivery jobs for reporting purposes at the end of each month.

The time consuming task of issuing manual consignment notes is eliminated with the system, resulting in 25 man-hour savings



▲ The automation of the checking process through AMIS has improved the efficiency and enhanced medication safety.

◀ The ConviDose™ service is a multi-dose packing service offered to NHGP patients who need help managing their multiple medications.

per case, or 240 man-hours per year. This system also resulted in better resource planning and a higher delivery success rate.

Automated Medication Inspection System

The Automated Medication Inspection System (AMIS) automated the checking of Convidose™ sachets before they are sent to customers. The manual system used previously was tedious and time-consuming, with a higher potential of dispensing errors due to operators’ fatigue.

With the system, the checking process is more efficient. Average time spent to complete a case at the checking system improved by 33.9% from 4.39 minutes to 2.9 minutes. Medication safety is also enhanced with a 22% decrease in the number of dispensing errors.

Chapter 8: Caring for and Growing Our People

“Seeing my fellow colleagues successfully complete their CPIP projects give me a sense of personal satisfaction. The hands-on experience with group discussion, group management, and solving problems in a structured manner has helped me grow in my own professional development as a facilitator.”

In this photo: NHGP Excellence in Action Award winners and Clinical Practice Improvement Programme (CPIP) graduates.

Ms Carolyn Chan,
Advanced Practice Nurse,
Nursing Services, NHGP

Caring For and Growing Our People

The success of any organisation depends on the quality and dedication of its people. At NHGP, whether it is enhancing patient experience or advancing Family Medicine, NHGP is committed to providing our staff with numerous platforms to develop their skills and capabilities in order to perform their roles to the best of their ability. We also spare no effort to recognise the successes of our staff across the organisation, so that they are motivated to continue on their journey of excellence.

On 11 July 2014, as an affirmation of our efforts, NHGP was recognised at the Singapore HR Awards Presentation Gala organised by the Singapore Human Resources Institute (SHRI). We were conferred awards in the Employee Relations and People Management; Quality Work-Life, Physical and Mental Well-Being; and Learning and Human Capital Development categories. The Leading HR Practices Awards are bestowed upon organisations that have achieved overall effectiveness in their HR and people management functions, thus contributing to the needs of businesses, profession, employees, industry and the nation.

BUILDING A CULTURE OF CARE

Kindness Filled NHGP's Nine Polyclinics

NHGP encouraged their staff and patients to display their appreciation unreservedly at two events held in May 2014.

On 2 May 2014, the May Day Service Delight was rolled out across the nine polyclinics. Customised memo pads were distributed to patients, who were encouraged to write their words of heartfelt appreciation for staff. These notes were displayed in the clinics.



► Mr Simon Tan, Director of Human Resource, NHGP, receiving the SHRI Awards on behalf of NHGP.



◀ Left: Staff using a Nerf gun to select a question to answer.



Right: NHG Pharmacy staff selling food to their colleagues to raise funds for St John's Home for Elderly Persons.

In conjunction with the Singapore Kindness Day on 30 May 2014, NHGP launched its Kindness Week on 26 May 2014. A web page was created and served as a platform for staff to recognise and thank their colleagues for showing them kindness. Within a week, the message board was overwhelmed with more than 100 "cheers and applause" for staff who were spotted performing acts of kindness.

"At NHGP, You are Family" Campaign to Further Strengthen Culture of Care

In August 2014, the iCARE Service Network and a group of Medical Social Workers conducted the "At NHGP, You are Family!" campaign roadshow across our nine polyclinics. The campaign aimed to further strengthen our culture of care and service commitment to make a difference.

To encourage staff to continue to keep a look-out for needy patients like how they would for their family members, a short film, in which our very own NHGP talents enacted the life story of a needy patient, was played. The film also provided tips on identifying and helping needy patients who would otherwise not voice out their struggles.

Staff also picked up service tips through educational games and activities. This interesting learning platform reinforced the iCARE values of Confidence, Attentiveness, Respect and Empathy. Every participant was rewarded with a souvenir.

Charity Food Fair for Fundraising

On 21 August 2014, NHG Pharmacy staff from Yishun Polyclinic got together to set up an internal food fair to raise funds for St John's Home for Elderly Persons. At the fair, NHG Pharmacy staff sold delicious home-made meals and goodies to their fellow colleagues in the polyclinic.

With the support of more than 80% of the clinic staff, the organising team managed to bring in a total of \$1,562. As the home is part of the Care and Share Movement, the donations were matched on a dollar-for-dollar basis by the Government, bringing the amount raised to a grand total of \$3,124.

NHGP Culture DNA Day 2014

On 28 August 2014, some 300 NHGP staff gathered at Yio Chu Kang Grassroots'



▲ Left: NHGP staff celebrating Culture DNA Day 2014.

Right: NHGP Operations staff participating in the annual Operations Day.

Club to celebrate the organisation's third Culture DNA Day. Based on the theme "Voyage to WOW", the event commemorated NHGP's corporate culture transformation programme that began in 2011. It also highlighted NHGP's commitment to embark on "a journey of continuous improvement and excellent service that makes our patients and colleagues go WOW".

NHGP's culture framework has three components. OurCare covers process improvements and iCARE covers service quality. The framework is anchored by the third component, which is the organisation's "Way of Being" (WoB) principles of "seeing people as people" and "holding ourselves accountable to patients, co-workers, supervisors and team members". These principles guide everyday behaviour to provide excellent care in a supportive environment where staff feel empowered and fulfilled.

An award ceremony was held to reward and recognise staff who had won the WoB Award, iCARE Champion (Star) Award, iCARE HQ Partners Award, iCARE Service Partners Award, OurCare Champion Award and OurCare Quality Improvement Award (Distinction). These winners were staff who had contributed to NHGP by providing great service or improving care processes. Four doctors and nurses were each presented a Certificate of Appreciation in recognition



of their continuous efforts to guide participants in the Clinical Practice Improvement Programme.

NHGP Family Appreciation Day

NHGP held its second Family Appreciation Day at Choa Chu Kang Polyclinic in November 2014 to acknowledge staff's family members and provide a platform for staff to show their appreciation to their loved ones. More than 25 families attended the event. Children from 16 families also received book prize awards, courtesy of NHGP's senior management and staff.

ENGAGING STAFF AND BUILDING BONDS AT WORK

CEO Townhall Sessions

The first bi-annual CEO townhall sessions for 2015 were held between 27 January 2015 and 24 March 2015. The sessions were organised at the nine polyclinics while the HQ townhall session was held at the auditorium in Matrix@Biopolis. Staff from NHGP, NHG Pharmacy and NHG Diagnostics attended the sessions.

The CEO Townhall is an important opportunity for NHGP CEO to present the achievements in the last six months and to share future plans for the organisation with fellow staff. This series of townhall sessions focused on how NHGP should transform the primary healthcare system



◀ NHG Diagnostics staff participating in a dragon boat race as part of teambuilding.



in the face of challenges. They include patient empanelment, risk stratification, team-based approach, Telecare and involving general practitioners (GPs) in managing complex chronic diseases and enhancing capability.

Celebrating Operations Day

Our operations colleagues held their annual Operations Day on 28 February 2015 at Resort World Sentosa's S.E.A. Aquarium. The event aimed to build camaraderie amongst NHGP Operations staff and recognise their contributions. The celebration was also opened to Clinic Heads, Deputy Heads, Nursing Managers and our non-clinic staff.

Teambuilding Event for NHG Diagnostics Staff

On 27 April 2014, more than 140 staff from NHG Diagnostics came together for



◀ Left: Over 1,000 NHGP staff attended the organisation's Dinner and Dance.

Right: Staff carrying out challenges as part of teambuilding activities at Choa Chu Kang Polyclinic.

a friendly dragon boat race. They were joined by their colleagues from NHG Group Corporate Communications and NHG Group Human Resource. The event drove home the message that team spirit is more important than the strength of individual team members. Participants were treated to a lunch after the event and each race participant was presented with a commemorative medal by NHG Diagnostics former Executive Director, Dr Tyrone Goh.

NHGP's Annual Dinner & Dance

Over 1,000 staff attended NHGP's Dinner and Dance held at Marina Bay Sands on 1 November 2014. Themed "Flashback Decades...Those Were The Days!", the Senior Management kicked off the event by dancing their way into the ballroom in retro get-ups.

Throughout the night, staff enjoyed various activities such as taking pictures at the photo booth and a performance by international act The Mentalist. They also cheered on as their colleagues from Woodlands, Hougang, Choa Chu Kang, Toa Payoh and Ang Mo Kio Polyclinics battled it out on the dance floor during the performance competition.

Teambuilding at Choa Chu Kang Polyclinic

In late November 2014, Choa Chu Kang Polyclinic held its teambuilding event for 120 staff across various departments. The event aimed to stimulate and enhance teamwork, communication, and strategy planning through food, fun and 'family-bonding'. Our Chief Executive Officer, Adjunct Associate Professor Chong Phui-Nah graced the event, where she shared a nugget of wisdom – "Coming together is a beginning, keeping together is a progress and working together is a success".

RECOGNISING ACHIEVEMENTS

Healthcare Humanity Award 2014

The Healthcare Humanity Award is presented annually to healthcare workers who have exemplified courage, dedication, selflessness, steadfastness to ethics, compassion, and humanity in the healthcare profession and the community.

Doris Ang Chye Lian, Health Attendant, Hougang Polyclinic, NHGP

Janet Teng, Senior Medical Technologist, NHG Diagnostics

Katherine Tan Gek Tee, Senior Staff Nurse, Clementi Polyclinic, NHGP

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

Richard Low Sai Yin, Senior Nurse Manager, Woodlands Polyclinic, NHGP



▲ NHGP staff receiving the Healthcare Humanity Awards 2014 with former NHGP Chief Executive Officer Mr Leong Yew Meng.

PS21 Star Service Award 2014

The prestigious PS21 Star Service Award recognises public officers and agencies, as well as members of the public, who have been helpful and have made significant contributions to public agencies.

The award recipient from NHGP is a dedicated individual who has provided excellent heartfelt service to patients, despite her own health conditions. Although she was diagnosed with kidney failure five years ago, she continues to create a better experience for patients at the polyclinic by drawing on her own experiences as a patient.

Esther Tan Lee Tiang, Health Attendant, Woodlands Polyclinic, NHGP



▲ PS21 Star Service Award recipient Ms Esther Tan was recognised for her great service despite longstanding personal challenges.

National Day Awards 2014

The National Day Awards are given out by the Prime Minister's office every year to recognise various forms of merit and service to Singapore. This year, 16 staff from NHGP, NHG Pharmacy and NHG Diagnostics received the awards on 9 August 2014.

The Long Service Medal is presented to public officers with at least 25 years of service in recognition of their service contributions to Singapore. The Commendation Award is awarded to selected individuals who have demonstrated efficiency, competence and devotion to duty for special performance under difficult circumstances. The Efficiency Medal recognises individuals who have demonstrated exceptional efficiency, exceptional devotion to duty or for work of special significance.

Long Service Medal

Chua Kwee Choo, Senior Pharmacy Technician, NHG Pharmacy

Er Lian Hwa, Senior Nurse Clinician, Ang Mo Kio Polyclinic, NHGP

Hadijah Binte Sa'ad, Operations Assistant, Jurong Polyclinic, NHGP

Jamelah Bte Abdul Ghani, Senior Patient Service Associate, Woodlands Polyclinic, NHGP

Kamariah Bte Bakar, Senior Pharmacy Technician, NHG Pharmacy

Lee Foong Lan, Senior Dental Assistant (Team Leader), Woodlands Polyclinic, NHGP

Lindy Ng Yu Hui, Senior Pharmacy Technician, NHG Pharmacy

Maya Binte Talib, Operations Assistant, Ang Mo Kio Polyclinic, NHGP

Rabiah Bte Sa'at, Senior Pharmacy Technician, NHG Pharmacy

Simah Binte Bakar Senior Assistant Nurse, Woodlands Polyclinic, NHGP

Zahrah Bte Alias, Senior Assistant Nurse, Yishun Polyclinic, NHGP

Commendation Medal

Yeo Loo See, Deputy Director, Nursing Services, NHGP

Efficiency Medal

Chng Lay Yan, Operations Senior Assistant Executive, Choa Chu Kang Polyclinic, NHGP

Christine Tan Suay Hua, Senior Staff Nurse, Jurong Polyclinic, NHGP

Tan Poh Yuen, Operations Executive Assistant, Jurong Polyclinic, NHGP

Yuan Hongyan, Medical Technologist, NHG Diagnostics

MOH Nurses' Merit Award

For their contributions in patient care, two NHGP nurses received the Nurses' Merit Award from Minister for Health Mr Gan Kim Yong on 6 August 2014 at Orchard Hotel Singapore. The award recognises their outstanding performance and dedication to the profession over the years.

Lim Voon Hooi, Senior Nurse Manager, Nursing Services, NHGP

Chan Kwai Peng Senior Nurse Clinician, Clementi Polyclinic, NHGP

NHG Outstanding Citizenship Award

Dr Elaine Tan Suan Leng, Family Physician, Consultant and former Director, Collaborative Care, NHGP

Excellence in Action Award 2014

The Excellence in Action Award recognises staff and teams who have



▲ NHGP EIA Award winners and CPIP graduates.

consistently demonstrated NHG's CARE Values - Confidence, Attentiveness, Respect and Empathy. These staff have provided exceptional service to both internal and external customers and contributed significantly to work practices that have improved customer service or patient safety.

Individual Award

Au Yong Siew, Senior Pharmacy Technician, NHG Pharmacy

Bobby Rico Stryker, Family Physician, Senior Staff, Woodlands Polyclinic, NHGP

Chin Mun Foong Alice, Senior Pharmacy Technician, NHG Pharmacy

Jannie Mae Julapong Samontina, Pharmacy Technician, NHG Pharmacy

Jehieli Edlene Villena Magadia, Staff Nurse, Clementi Polyclinic, NHGP

Julia Zhu Xiao Li Senior Staff Nurse, Nursing Services, NHGP

K. Pusparani Senior Assistant Nurse, Nursing Services, NHGP

Karen Lynn Cheng, Medical Technologist, NHG Diagnostics

Lim Boon Keng Martina, Senior Patient Service Associate, NHG Diagnostics

Lin Huiqi Esther, Secretary, CEO's Office, NHGP

Lolita Nabong Bautisa, Medical Technologist, NHG Diagnostics

Mah Choon Siong, Senior Pharmacist, NHG Pharmacy

Ng Poh Ling, Executive, Operations, NHGP

Quek Imm Pin, Advanced Practice Nurse, Ang Mo Kio Polyclinic, NHGP

Wan Lili, Senior Staff Nurse, Yishun Polyclinic, NHGP

Leadership Award

Tan Lay Khim Clara, Principal Pharmacist, Woodlands Polyclinic, NHGP

Team Award

NHG Diagnostics @ Hougang Polyclinic

NHGP Finance Maintaining Efficient Work Processes in Finance Accounts Receivable

NHG Pharmacy Medication Safety Workgroup

NHGP Way of Being Award 2014

NHGP started the Way of Being (WoB) Award in 2012 to recognise and honour exemplary staff who have consistently demonstrated NHGP's WoB – seeing people as people. This year, six staff received the award. They were evaluated by how they practised WoB and "WOW" their customers by the way they cared, their team members or subordinates by their support, their colleagues by how they helped and their supervisors by how they held themselves accountable.

Chang Lee Peng, Manager, Finance, NHGP

Janet Teng, Senior Medical Technologist, NHG Diagnostics

Lee Gek Choo, Patient Service Associate, Toa Payoh Polyclinic, NHGP

Low Luan Hong Jenny Retail Supervisor, NHG Pharmacy

Dr Nicholas Lin Shengyang, Deputy Head, Clementi Polyclinic, NHGP

Sim Mong Kheng, Coordinator, Falls Prevention Volunteer Programme, Corporate Planning, NHGP

NHGP OurCare Champions 2014

Started in 2011, the OurCare Champion Award recognises individuals who have participated actively in our journey towards improving OurCare as a facilitator, project leader/co-leader or team member. The OurCare Champions are selected based on the number of projects they have participated in

FY2014, with weightage given to projects that are awarded. The award was presented to eight staff this year.

Chong Jiun Yih, Assistant Director, NHG Pharmacy

Harbhajan Kaur D/O Surjan Singh, Head Nurse, Clementi Polyclinic, NHGP

Janet Teng, Senior Medical Technologist, NHG Diagnostics

Lim See Yee, Executive, Operations, NHGP

Mariamman D/O Sukumaran, Deputy Head Nurse, Toa Payoh Polyclinic, NHGP

Dr Serene Wu Shilin, Dental Head, Hougang Polyclinic, NHGP

Summer Ha Ka Man, Senior Patient Service Associate, Jurong Polyclinic, NHGP

Dr Tung Yew Cheong, Head, Toa Payoh Polyclinic, NHGP

▼ The WoB Award winners taking a group photo with the Senior Management.





▲ The iCARE Award winners taking a group photo with the Senior Management

NHGP iCARE Awards 2014

iCARE Awards, started in 2012, identify service leaders who have made a difference to their external and internal customers in their everyday work through internalising the iCARE values and demonstrating them at work. There are three service excellence awards categories, namely iCARE Champions (Star, Gold, Silver), iCARE HQ Partners and iCARE Service Partners.

The iCARE Champions are selected based on the number of compliments staff received from patients and caregivers every year and are endorsed by their respective Reporting Officers. The iCARE HQ Partners and Service Partners are voted by NHGP staff every year.

In FY2014, 62 NHGP, NHG Diagnostics and NHG Pharmacy staff and service partners received the award.

iCARE Champion (Star)

Evangeline A Agraviador, Senior Radiographer, NHG Diagnostics

Jenny Tan Hong Mui, Senior Health Attendant, Bukit Batok Polyclinic, NHGP

Lim Meow Choo, Senior Patient Service Associate, NHG Diagnostics

Vasanthi D/O Suppiah, Patient Service Associate, NHG Diagnostics

iCARE Champion (Gold)

Alice Tan Ai Teen, Senior Health Attendant, Hougang Polyclinic, NHGP

Aminah Binte Mohamed, Senior Staff Nurse, Jurong Polyclinic, NHGP

Ang Chye Lian Doris, Health Attendant, Hougang Polyclinic, NHGP

Asiah Bte Dakok, Senior Staff Nurse, Jurong Polyclinic, NHGP

Dharshni, Senior Retail Assistant, NHG Pharmacy

Diane D. Aban, Pharmacy Technician, NHG Pharmacy

Dr Gary Si Khin Yuen, Family Physician, Senior Staff, Clementi Polyclinic, NHGP

Lolita B Nabong, Medical Technologist, NHG Diagnostics

Tan Sai Joo, Patient Service Associate, Hougang Polyclinic, NHGP

Yvonne Tan Ah Lan, Senior Health Attendant, Bukit Batok Polyclinic, NHGP

iCARE Champion (Silver)

Aikho Neil L Ampo, Pharmacy Technician, NHG Pharmacy

Alice Goh Khoon Chin, Senior Nurse Clinician, Bukit Batok Polyclinic, NHGP

Ann Lau Gaik Hiang, Senior Health Attendant, Hougang Polyclinic, NHGP

Candy Ng Hwee Meng, Senior Health Attendant, Hougang Polyclinic, NHGP

Choi Lai Hah, Senior Health Attendant, Bukit Batok Polyclinic, NHGP

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Donna Tee Ah Lan, Senior Healthcare Assistant, Clementi Polyclinic, NHGP

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Dr Ho Tze Woon, Resident Physician, Choa Chu Kang Polyclinic, NHGP

Jaclyn Pang Nget Moie, Patient Service Associate, Toa Payoh Polyclinic, NHGP

Jacqueline Umali, Senior Radiographer, NHG Diagnostics

Jane Soh Sio Hoon, Health Attendant, Hougang Polyclinic, NHGP

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Dr Jeremy Foo Fung Yee, Family Physician, Associate Consultant, Yishun Polyclinic, NHGP

Dr Joanne Woo Sing Yi, Dental Surgeon, Ang Mo Kio Polyclinic, NHGP

Jocelyn Chee, Retail Assistant, NHG Pharmacy

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Lim Hui Yi, Senior Patient Service Associate, Hougang Polyclinic, NHGP

Lim Moi Moi, Senior Health Attendant, Hougang Polyclinic, NHGP

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Dr Serene Wu Shilin, Dental Head, Hougang Polyclinic, NHGP

Sharon Seah Mui Keng, Senior Pharmacy Technician, NHG Pharmacy

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TRAINING TALENT AND DEVELOPING LEADERS

918 Staff Complete Core Programmes

NHGP’s Core Programmes are designed to inculcate organisational values among our staff. These are made of Staff Orientation, WoB, iCARE and Core Safety Programme. All new staff are required to attend staff orientation within the first three to six months of their employment. Our staff are able to gain a better appreciation and understanding of the existing systems, processes and values within NHGP through these programmes.

For FY2014, the Core Programmes attendances are as follows:

Table 1 NHGP, NHG Diagnostics and NHG Pharmacy Attendances at Core Programmes

Core Programme	Number of Runs	Number Attended
Staff Orientation	5	136
WoB	17	286
Embrace iCare (for non-executives)	12	213
Inspire iCare (for executives & above)	4	63
Core Safety Programme	9	220
Total	47	918

25,623 Training Places Utilised for Professional Development

Various learning opportunities are offered to help staff progress through the different stages of their career and equip them with relevant competencies. A total of 25,623 training places were utilised by staff to attend clinical, functional, technical and workplace programmes locally. In addition, 47 staff attended overseas conferences in both clinical and non-clinical related areas.

Training Sponsorships Offered to 49 Staff

Our staff are offered training opportunities that are sponsored by NHG and NHGP. These initiatives aim to encourage staff to further their education and equip themselves with the latest knowledge related to their work.

The following sponsorship awards were given out in FY2014:

Table 2 Training Sponsorship Received by NHGP Staff in FY2014

Type of Sponsorship	Number of Awardees
NHG Sponsorship	
HMDP – Medical	3
HMDP – Nursing	14
HMDP – Allied Health	1
MOH Strategic Nursing	8
MOH Advanced Practice Nurse	1
MOH Nursing Development Awards	1
NHGP Sponsorship	
Medical	18
Nursing	2
Dental	1
Grand Total	49

Continuous Development of Future Leaders

NHGP conducts several programmes to develop the leadership abilities of its staff. The HR Department works closely with various stakeholders to identify personnel to undergo NHG and MOH-coordinated leadership training initiatives. These allow us to build a steady pipeline of future leaders across the organisation.

In FY2014, there were a total of 44 attendances at NHG’s and MOH’s leadership programmes.

Table 3 Attendees at Leadership Programmes in FY2014

Leadership Programmes	Number of Attendees (April 14 - March 15)
(A) NHG College Leadership Programmes	
i. Inspiring SEAL Programme (ISP)	2
ii. Inter-Professional Leadership Programme (IPLP)	6
iii. NHG Leadership Moments	32
(B) External Leadership Programmes by MOH/MOHH HLC	
i. Healthcare Policy and Governance (HPG) Programme	2
ii. Activist for Change Programme (ACP)	1
iii. Nursing- Allied Health Leadership Programme (NALP)	1

New Platform to Support Continuous Learning and Sharing

To create an environment of continuous learning and sharing, NHGP organised its first Learning Forum in February 2015. The event is scheduled to take place every two months and can take the form of book reviews or sharing by invited speakers. The inaugural forum saw an external speaker, Mr PN Balji – a veteran journalist with more than 35 years of experience in the media industry – sharing his insights on today’s changing traditional and social media landscape and its implications.

Media Training to Build Staff Capabilities

On 4 September 2014, NHGP Corporate Communications worked together with

the Marketing Institute of Singapore (MIS) to carry out a Media Awareness Workshop for 19 NHGP staff from various departments. The participants learnt about what is considered newsworthy, how the media works and how to handle the media at the frontline through roleplaying and case scenarios.

Equipping Non-Medical Staff with Basic First-Aid Skills

NHGP equips staff with essential skills that would benefit them in their daily lives. For example, on 29 August 2014, the Primary Care Academy conducted its first basic first-aid workshop for non-medical NHGP staff. The workshop equipped participants with basic first-aid knowledge and skills required to attend to common injuries. Two runs of



the workshop were conducted for 35 operations and administrative staff.

Clinical Pharmacists’ Preparatory Programme to Groom New Clinical Pharmacists

The Clinical Pharmacists’ Preparatory Programme (CPPP) is a cross-institution training programme supported by NHG to groom new clinical pharmacists. In FY2014, one staff from NHG Pharmacy, Ms Cheryl Tan, Pharmacist, completed her training.

Increasing Competency of Laboratory Staff

To enhance the competency of laboratory staff, NHG Diagnostics subscribed to the College of America Pathologists (CAP) online assessment for all laboratory staff. CAP is an accredited, internationally renowned organisation in the field of laboratory medicine. The online assessment provides excellent learning resources that reinforce knowledge and provide updates on the latest development in laboratory medicine.

► Left: Pharmacist Ms Cheryl Tan from NHG Pharmacy receiving her graduation certificate upon completing the CPPP.

Right: NHGP staff learning different bandaging techniques during the basic first-aid workshop conducted by PCA.

Appendix A - List of Improvement Projects Completed in FY2014

No.	Project Title	Clinic / Department
1	Ensure patient contact details are correct in EPOS	Bukit Batok Polyclinic
2	Reduce rejected patient merge requests to zero Phase 1: JUR, WDL, HOU and BBK	Headquarters
3	To reduce waiting time of dressing patients in Jurong Polyclinic	Jurong Polyclinic
4	To minimise confusion arising from frequent changes of drug packaging in TPY Pharmacy	Toa Payoh Polyclinic
5	To increase compliance of patients on step doses of Angiotensin Receptor Blockers (ARBs)and Angiotensin converting enzyme inhibitors (ACEIs)	Yishun Polyclinic
6	Reduce rejection rate for spirometry test at Hougang Polyclinic due to poor test preparation by 50% in 6 months time	Hougang Polyclinic
7	To improve the efficiency in management of patient's own medication	Headquarters
8	To eliminate mislabelling of blood specimen in Jurong diagnostics	Jurong Polyclinic
9	Decreasing the time interval between patient informing the Healthcare Assistants that they have missed their queue till the time they are called by the attending doctor, by 50% in 3 months.	Toa Payoh Polyclinic
10	Reducing processing errors in urine sample sent out and near misses at Hougang laboratory	Hougang Polyclinic
11	To ensure 100% of patients diagnosed with ARMD to be counselled with Amsler chart and lifestyle advice	Hougang Polyclinic
12	To increase patients' awareness on post-operative care of fillings	Woodlands Polyclinic
13	To reduce the number of external lab reports with invalid patient ID at Hougang Polyclinic	Hougang Polyclinic
14	Streamline reporting of normal lipid result to patient post OHS	Bukit Batok Polyclinic
15	To improve the efficiency of OPAS repackaging workflow in Bukit Batok Polyclinic's pharmacy	Bukit Batok Polyclinic
16	Reducing the need for translators during consultation	Toa Payoh Polyclinic
17	Standardisation of list of drugs contraindicated or not recommended for use in children with acute conditions	Choa Chu Kang Polyclinic

No.	Project Title	Clinic / Department
18	To achieve 100% of patients with newly diagnosed impaired fasting glycaemia or impaired glucose tolerance at Bukit Batok Polyclinic to receive intensive lifestyle education within 2 months over a 6 month period	Bukit Batok Polyclinic
19	Reducing the lead time for financial counsellor appointments	Ang Mo Kio Polyclinic
20	Eliminating near-misses and errors due to misidentification during HbA1c processing in Care Managers' room in the Polyclinic	Toa Payoh Polyclinic
21	Improve call accuracy	HQ
22	To reduce the top 4* prescribing errors of 2013 by 50% within 6 months in Clementi Polyclinic. * refers to wrong dose, wrong frequency, wrong duration and contraindicated drugs	Clementi Polyclinic
23	Eliminating the unsafe practice of aliquoting formalin into specimen bottles for minor procedures	HQ
24	To reduce the number of dislodged restorations in Woodlands Dental Clinic to zero in 6 months.	HQ
25	To achieve 100% reduction in hypoglycemia (POCT< 4mmol/L) among diabetic patients coming for fasting blood tests in Ang Mo Kio Polyclinic within 6 months	Ang Mo Kio Polyclinic
26	To reduce the number of cases refusing to collect the full supply of the prepared medications at the dispensing counter by 50% in 9 months	Clementi Polyclinic
27	To reduce customer complaints and time spent by clinic to manage immunisation walk in cases	Jurong Polyclinic
28	100% of patients in Toa Payoh Polyclinic on warfarin should be reviewed by the Anti-Coagulation Clinic (ACC) at least once a year*, from the current mean of 52%^, over a period of 6 months	Toa Payoh Polyclinic
29	To improve the POCT workflow in the Care Manager room at Bukit Batok Polyclinic	Bukit Batok Polyclinic
30	To reduce interruptions during dispensing process	Ang Mo Kio Polyclinic
31	To increase documentation of interventions/near misses through iPharm in Toa Payoh Polyclinic Pharmacy	Toa Payoh Polyclinic
32	Improve Timeliness of Submission of Ministry of Social and Family Development (MSF) Maternity Claims	HQ

No.	Project Title	Clinic / Department
33	To provide clinicians with additional patient profile information	Toa Payoh Polyclinic
34	To Improve documentation rate of prescription intervention and near miss incidences in Ang Mo Kio Pharmacy	Ang Mo Kio Polyclinic
35	To increase referral rate of newly diagnosed hypertensive patients for DASH diet to Dietitian / Care Managers at Toa Payoh Polyclinic from 2.7% to 70% in next 6 months	Toa Payoh Polyclinic
36	Implementing best practices on sharps prevention in primary care	HQ
37	Zero occurrence of item stored under the sink cabinet	HQ
38	Reduction of omission of orders by capturers in Pharmacy Services Centre (PSC) by 50% in nine months	HQ
39	To reduce unnecessary wait time for patients who required medical assessments that are not provided by NHGP	Jurong Polyclinic
40	To reduce the number of pending vaccine refund via CDA account due to patients not submitting CDA statement promptly	Toa Payoh Polyclinic
41	To achieve prompt initiation of treatment in all asthmatic patients coming in exacerbation to Jurong Polyclinic within 20 minutes of arrival in the period of 6 months	Jurong Polyclinic
42	To reduce number of returned medications at pharmacy	Jurong Polyclinic
43	Reducing discrepancies when sending out CSSD items and receiving from PCSSD	Ang Mo Kio Polyclinic
44	Shortening lab waiting time for patients with same day consultation by 20% at 9 NHG Diagnostics polyclinic labs by 2014	Hougang Polyclinic
45	Increase compliance rate of annual DRP/DFS screening of diabetic patients in yishun polyclinic	Yishun Polyclinic
46	Eliminate dual approval for purchase requisition (Capex and Opex)	HQ
47	To achieve 100% audit log of external report received at Hougang Diagnostics laboratory	Hougang Polyclinic
48	To increase staff awareness of changes in brand/packing of medicines dispensed	Yishun Polyclinic
49	Improving Patient's Adherence to Insulin Doses	Hougang Polyclinic
50	To reduce the number of late medical report	Bukit Batok Polyclinic
51	To reduce staff movement in Bukit Batok Polyclinic dressing room using 6S	Bukit Batok Polyclinic
52	To streamline the process of medication extension	Jurong Polyclinic

No.	Project Title	Clinic / Department
53	To improve allocation of patient and doctor resources for the chronic and Same Day Appointment clusters of Choa Chu Kang Polyclinic	Choa Chu Kang Polyclinic
54	To increase the uptake of pneumococcal vaccine from 3.5% to 50 % by all the eligible COPD patients being followed up at Woodlands Polyclinic in 6 months time - from July 2014 till Dec 2014	Woodlands Polyclinic
55	Reducing confusion on appointment advice for patients with ultrasound appointment	Clementi Polyclinic
56	To reduce prescription rework	Choa Chu Kang Polyclinic
57	Improving wayfinding for patients in Clementi Polyclinic	Clementi Polyclinic
58	To reduce time taken to top up medication bins by 50% whenever there is a change in batch number	Hougang Polyclinic
59	Ensuring 100% of patients are informed by either RH or Polyclinic of their SOC appt status within 3 working days	Hougang Polyclinic
60	To increase the percentage of diabetes mellitus patients with two consecutive LDL readings of >2.6 mmol/L on statin therapy in Choa Chu Kang Polyclinic from 70% to 100% within 6 months	Choa Chu Kang Polyclinic
61	To increase percentage of hypertensive patient without diabetes with blood pressure < 140/ 90 mmhg	Ang Mo Kio Polyclinic
62	Reduce overall consultation waiting time in Jurong Polyclinic	Jurong Polyclinic
63	Learning and adopting the best practices in DOT medication management	Woodlands Polyclinic
64	Reducing motion waste	Clementi Polyclinic
65	To reduce time needed to search for a specific topic relating to Vaccination Clinic from 5 minutes to 1 minute.	Bukit Batok Polyclinic

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