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.
Advancing Family Medicine, Transforming Primary Healthcare

National Healthcare Group Polyclinics
Annual Report FY2013

On the cover: Family Medicine is characterised by personal, comprehensive and continuing care for the individual in the context of the family and the community. The design of the cover is therefore centred on the theme of family, the root of Family Medicine. Through building and nurturing relationships with patients and families, National Healthcare Group Polyclinics is committed to Advancing Family Medicine and Transforming Primary Healthcare.
Advancing Family Medicine, Transforming Primary Healthcare
Annual Report FY2013
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National Healthcare Group (NHG)’s vision of Adding Years of Healthy Life encapsulates all that we do — helping individuals prolong their healthy and active years, enjoy more years of functioning and independence, and shortening the time of failing health. To achieve that, we constantly remind ourselves to go back to the fundamentals of healthcare, focusing not just on illness care but also on pre- and post-illness care.

Primary care is therefore a vital building block in achieving our vision of population health. Beyond illness care, primary care provides health education and promotion to empower individuals to maintain or restore health in the community. I am pleased with the progress that National Healthcare Group Polyclinics (NHGP) has made in the past year in redefining the way we provide patient care and collaborate with our partners and stakeholders.

The initiatives NHGP started in 2012 have also shown some early successes. We saw an average 10-per-cent drop of glycated haemoglobin (HbA1c) and low-density lipoprotein cholesterol (LDL-C) levels in 700 complex chronic patients that we identified for close monitoring. Within that group, we also helped a third of those with HbA1c above 9 per cent to improve their diabetic control.

Under the care of the Assessment and Shared Care Team (ASCAT) — a multidisciplinary team in NHGP supported by specialists from the Institute of Mental Health — 67 per cent of the enrolled NHGP patients with mild to moderate mental health conditions achieved improvements in social, occupational and psychological functioning.

NHGP’s collaboration with National University Hospital (NUH) — NEMO (Nephrology Evaluation, Management and Optimisation) — is also proving to be effective in reducing the number of patients progressing from early-stage Diabetic Kidney Disease to its advanced stages, which could lead to renal failure. Of the 2,200 patients who have completed the programme thus far, 85 per cent of them have had their drug therapy optimised, or they achieved improvement in their kidney function.

To improve access to dementia care, NHGP collaborated with NUH to set up the third Memory Clinic at Choa Chu Kang Polyclinic in August 2013 to diagnose and initiate treatment for dementia in a primary care setting. Our first dementia clinic was set up with Yishun Polyclinicpartnering Khoo Teck Puat Hospital; the second one
partners Ang Mo Kio Polyclinic and Tan Tock Seng Hospital.

NHGP started a proof of concept of an empaneled patient population in Toa Payoh Polyclinic. The study is one of the first attempts at managing a panel of patients using a regular team. It is expected to yield useful knowledge that can be used as a basis for primary care population management for the private sector.

NHG Diagnostics introduced portable ultrasound services at the Hougang, Toa Payoh, Bukit Batok and Clementi Polyclinics in May 2013. This increased the number of polyclinics equipped with on-site ultrasound services from four to eight in FY2013. With the launch of portable ultrasound services, patients no longer need to travel to another clinic for their procedure. This increases accessibility, reduces appointment wait-time, provides convenience for the patient and improves the comprehensiveness of services provided by the polyclinics.

To improve patient safety and medication compliance, the ConviDose™ service was progressively rolled out to all polyclinics in 2013. NHGP patients who need help in managing their medications are able to sign up for the multi-dose packing service at any pharmacy in our polyclinics. Their medication doses are packed chronologically in sachets to ease the administration.

The advancement of Family Medicine is key to building up primary care’s capability

“Primary care is a vital building block in achieving our vision of population health. Beyond illness care, primary care provides health education and promotion to empower individuals to maintain or restore health in the community.”

Professor Chee Yam Cheng
Group Chief Executive Officer, National Healthcare Group
Group CEO’s Message

In Appreciation
As always, I wish to thank our Chairman and Board of Directors for their astute leadership in guiding us on our RHS journey. My thanks also go to Mr Leong Yew Meng who stepped down as the CEO of NHGP on 1 October 2014. I wish Yew Meng well and all the very best for many years to come.

We welcome Adjunct Associate Professor Chong Phui-Nah who took over the baton from Yew Meng on 1 October 2014. Phui-Nah has been with NHGP since MOH re-structured public healthcare institutions in 2000. She has contributed much to the primary care sector in Singapore, including implementing the NHGP Asthma Programme in 2003, setting up the first Family Physician Clinic in Ang Mo Kio Polyclinic in 2005, rolling out to the rest of NHGP and the Primary Care Academy in 2007 to provide training for all primary healthcare professionals to raise the standard of primary care. She was also instrumental in establishing the Family Medicine Development Division to advance Family Medicine in 2008.

Most of all, I want to thank the management and staff of NHGP who have been working tirelessly with the rest of the NHG family and our partners to bring health to the population we serve.

Lastly, I believe that healthcare transformation needs to be based on commitment rather than compliance, supported by investment in staff members to enable them to achieve continuous quality improvement in the long as well as the short term.

Professor Chee Yam Cheng
Group Chief Executive Officer
National Healthcare Group
2013 was an eventful year for NHGP.

In June 2013, Singapore faced the worst haze crisis in the nation’s history, along with the ongoing threats of dengue, Middle East Respiratory Syndrome, and H7N9 avian flu. Recognising that polyclinics play a key role in emergency preparedness and that any increase in patient load would be first experienced by polyclinics, the National Healthcare Group Polyclinics team responded swiftly to the crisis through various contingency plans. These included plans to convert air-conditioned rooms in the clinics to waiting areas, establishing a triage system to identify vulnerable patients, and extending tele-consultations to vulnerable patients to minimise their exposure to the haze. I would like to thank everyone in NHGP for their resilience and courage through these challenging months.

Right Things
On 4 September 2013, NHGP added a boost to primary care with the launch of the Family Medicine Academy. The academy — the first of its kind in Singapore — enables medical students to learn Family Medicine and Primary Care including communication skills, clinical method techniques and chronic disease management in a community setting.

We hope the early exposure to primary care will leave a lasting impression on the students and encourage more to consider Family Medicine as a career as they contribute to Singapore’s healthcare system.

Indeed, with more people suffering from chronic ailments, how patient care is being delivered has to change in order to keep more people well and healthy in the community and out of hospital. In supporting the Primary Care Masterplan, NHGP worked with GP partners to launch the Ang Mo Kio Family Medicine Clinic (FMC) and Unity FMC on 11 May 2013 and 23 May 2014, respectively. These FMCs provide more continuity of care options in the community for Singapore’s growing ageing population. As of May 2014, close to 4,300 polyclinic patients were transferred to these two FMCs, as well as the Lakeside and Frontier FMCs. Ang Mo Kio FMC has also started working with Tan Tock Seng Hospital to transfer stable patients from specialist outpatient clinics to the polyclinics, where their cases will be followed up on.

NHGP has also made strong inroads in reaching out to the community to right-site care. In 2013, we engaged about 60 community partners and jointly developed
close to 40 care paths, right-siting some 600 patients. For instance, we collaborated with Angsana Home, St. Andrew’s Nursing Home and Home Nursing Foundation to allow direct access to subsidised medications and laboratory services. We have also piloted primary care community case management in order to improve patients’ access to social and welfare services.

To enhance the patient experience, we have systematically upgraded our physical environment of care. The renovated Dental Clinic in Woodlands Polyclinic saw an addition of 12 individual, enclosed consultation rooms — an improvement from the previous “open” concept — in order to afford patients more privacy. Pharmacies at Ang Mo Kio, Hougang, Woodlands and Yishun Polyclinics were upgraded to include educational and elderly-friendly features. Laboratories at Bukit Batok, Choa Chu Kang and Toa Payoh Polyclinics were renovated, with the addition of biochemistry analysers to expand the onsite lab tests repertoire and improve turnaround time for results.

Right People
We couldn’t have achieved any of this without our people. In the past year, they consistently went the extra mile and made significant contributions to healthcare delivery. Their dedication won them recognition and commendation, both within the organisation and from the community. These include the Healthcare Humanity Award (HHA), National Day Award, PS21 Star Service Award and Nurses’ Merit Award, just to name a few.

Thanks to the relentless efforts and extraordinary dedication of our staff, NHGP has also maintained its level of patient satisfaction, according to a survey conducted by MOH in 2013, with our clinics clinching the top three positions among polyclinics for the third consecutive year. These accolades will spur us to achieve greater heights, with the ultimate aim of serving our patients and customers even better.

Right Culture
As having the right people is vital to our success, we need to continue to attract the very best into NHGP and create a culture that encourages them to do their best work and fulfil their potential.

To create a culture of care, CARE acts were organised regularly to communicate appreciation to our staff and to energise them in delivering great care. For example, during the haze, we provided bottles of
“With more people suffering from chronic ailments, how patient care is being delivered has to change in order to keep more people well and healthy in the community and out of hospital.”

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

We invest in our staff’s development through continuous training, effective mentoring, and assimilating best global practices so that they can deepen their knowledge and excel in their chosen professions. In 2013, close to 20,000 training places were utilised by staff for various programmes to strengthen their clinical, functional, or technical competencies. Fourteen doctors successfully attained the Master of Medicine degrees in Family Medicine, with one of our resident physicians topping the 2013 cohort and clinching the Gold Medal award for the examination nationwide.

Constancy of Purpose
I would like to thank our leadership, management and staff for their support and unyielding efforts. The challenges we face in this ever-changing healthcare landscape will require time, vigilance and dedication to solve. If we keep an open mind, open heart and open will, and stay focused on doing the right thing, having the right people, and promoting the right culture, we will succeed in transforming primary care and advancing family medicine.

Adjunct A/Prof Chong Phui-Nah
Chief Executive Officer
National Healthcare Group Polyclinics
Caring for Patients

Under management of the Assessment and Shared Care Team (ASCAT), 98 per cent of patients with mental health issues experienced less disruption at work and in their social and family lives.

Improving Quality and Safety

NHGP started a Patient Safety Foundation workshop in July 2013 to equip staff with knowledge on patient safety.

The ConviDose™ service was rolled out at all NHGP polyclinics in June 2013 to help patients manage their medications.

Dental services at Woodlands Polyclinic resumed operations in June 2013 after two months of major renovation.

NHGP clinched the top three positions among the 18 polyclinics nationwide in the MOH Patient Satisfaction Survey 2013 for the third consecutive year.

Building Primary Care Capacity

The Unity Family Medicine Clinic (FMC) was launched in May 2014 with strong support from NHGP.

In FY2013, Community Health Assist Scheme (CHAS) uptake among NHGP patients grew to some 230,000 due to changes in CHAS eligibility criteria, an Agency for Integrated Care (AIC) promotional campaign and additional CHAS promoters in our polyclinics.

Advancing Family Medicine

NHG, NHGP and the Nanyang Technological University’s Lee Kong Chian School of Medicine jointly set up a Family Medicine Academy in September 2013 to train medical undergraduates and doctors in Family Medicine.

The Primary Care Forum on 27 and 28 September 2013 attracted some 1,000 healthcare practitioners to learn and share about the changing scope and role of primary care.

Fourteen doctors passed the Master of Medicine (Family Medicine) examination in November 2013. Dr Valerie Teo, Resident Physician at Ang Mo Kio Polyclinic, topped the nationwide cohort and clinched the Gold Medal award for the examination.
In November 2013, NHGP piloted a **Systematic Health Risk Profiling (SHARP)** programme to actively offer cancer screening to eligible patients.

NHGP, NHG Diagnostics and NHG Pharmacy jointly clinched ninth position in the **Standard Chartered Marathon Singapore — Corporate Distance Challenge** in December 2013, running a total of 1,126 km.

NHGP launched a **mobile application** in December 2013 to help patients manage their appointments and order refills for their medications.

NHG Diagnostics implemented the **first ceiling-suspended X-ray system** at Woodlands Polyclinic in December 2013 to facilitate imaging for elderly patients and wheelchair-users.

As part of **Primary Care Community Case Management**, NHGP partnered community providers to connect patients with social and welfare service providers.

The inaugural **Family Appreciation Day** in November 2013 brought together the families of more than 30 staff. NHGP showed our appreciation to them through the NHGP Book Prize and Stand By Me Award.

In April 2013, NHGP introduced an **HR Clinic** to provide our staff with a platform to share their views and seek clarification on HR issues.
Senior Management (as of 1 Nov 2014)

CHIEF EXECUTIVE OFFICER
Mr Leong Yew Meng (till 30 Sep 2014)
Adjunct A/Prof Chong Phui-Nah (wef 1 Oct 2014)

OUR CORPORATE SUPPORT FUNCTIONS

Clinical Services
Senior Director
Dr Lew Yii Jen

Chief Medical Informatics Officer
Dr Jonathan Phang Siung King (till 30 Sep 2014)
Dr Simon Lee Biing Ming (wef 1 Oct 2014)

Corporate Development
Director
Dr Peter Chow Chorng Ann

Dental Services
Director
Dr Kenneth Low Meng Tze

Family Medicine Development
Director
Adjunct A/Prof Chong Phui-Nah (till 30 Sep 2014)
Dr Meena Sundram (wef 1 Oct 2014)

Health Promotion & Preventive Care
Director
Dr Wee Wei Keong

Human Resource & Finance
Director
Mr Simon Tan Tai Wui

NHG Diagnostics
General Manager
Ms Lim Soh Har

NHG Pharmacy
Executive Director
Ms Chan Soo Chung

Nursing Services
Director
Ms Chen Yee Chui

Operations
Chief Operating Officer
Ms Grace Chiang

REGIONAL DIRECTORS (WEF 1 OCT 2014)

Central
Dr Karen Ng Ming Yann

North
Dr Gowri Doraisamy

Jurong
Dr Meena Sundram

West
Dr Keith Tsou Yu Kei

OUR POLYCLINICS

Central Region
Ang Mo Kio Polyclinic
Head
Dr Karen Ng Ming Yann

Hougang Polyclinic
Head
Dr Lee Eng Sing

Toa Payoh Polyclinic
Head
Dr Tung Yew Cheong

Northern Region
Woodlands Polyclinic
Head
Dr Gowri Doraisamy (till 30 Sep 2014)
Dr Evan Sim Chin Sing (wef 1 Oct 2014)

Yishun Polyclinic
Head
Dr Simon Lee Biing Ming (till 30 Sep 2014)
Dr Kwan Pek Yee (wef 1 Oct 2014)

Western Region
Bukit Batok Polyclinic
Head
Dr Keith Tsou Yu Kei

Choa Chu Kang Polyclinic
Head
Dr Richard Hui Jor Yeong

Clementi Polyclinic
Head
Dr Steven Chong Shih Tsze

Jurong Polyclinic
Head
Dr Meena Sundram
Snapshots of Our Workload and Patients

Volume growth has become more gradual since 2011

<table>
<thead>
<tr>
<th>No. of visits* (in millions)</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>+4.6%</td>
<td>2.57</td>
<td>2.69</td>
<td>2.83</td>
<td>2.86</td>
<td>2.91</td>
</tr>
<tr>
<td>+5.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+1.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+1.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+13%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Excludes Dental visits

Increase in number of patients above 45 years old

<p>| No. of patients of different age groups in FY09 and FY13 ('000) |
|----------------------------------------|--------------------|</p>
<table>
<thead>
<tr>
<th>Age group (year)</th>
<th>No. of patients ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 &amp; above</td>
<td>39</td>
</tr>
<tr>
<td>60 – 74</td>
<td>115</td>
</tr>
<tr>
<td>45 – 59</td>
<td>120</td>
</tr>
<tr>
<td>30 – 44</td>
<td>126</td>
</tr>
<tr>
<td>15 – 29</td>
<td>164</td>
</tr>
<tr>
<td>0 – 14</td>
<td>110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age group</th>
<th>No. of patients ('000)</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY13</td>
<td>FY09</td>
<td></td>
</tr>
<tr>
<td>75 &amp; above</td>
<td>52</td>
<td>32.3</td>
</tr>
<tr>
<td>60 – 74</td>
<td>154</td>
<td>33.7</td>
</tr>
<tr>
<td>45 – 59</td>
<td>191</td>
<td>9.4</td>
</tr>
<tr>
<td>30 – 44</td>
<td>126</td>
<td>-6.6</td>
</tr>
<tr>
<td>15 – 29</td>
<td>164</td>
<td>-9.5</td>
</tr>
<tr>
<td>0 – 14</td>
<td>110</td>
<td>-7.5</td>
</tr>
</tbody>
</table>

Note: Numbers are rounded for greater clarity; small rounding differences may arise.
### Top 10 primary diagnoses seen at NHGP

<table>
<thead>
<tr>
<th>ICD 10</th>
<th>Diagnosis</th>
<th>No. of visits ('000)</th>
<th>% total 2013 visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>J06.9</td>
<td>Acute upper respiratory infection, unspecified</td>
<td>356</td>
<td>17.7</td>
</tr>
<tr>
<td>E11.9</td>
<td>Type 2 diabetes mellitus without complication</td>
<td>284</td>
<td>14.1</td>
</tr>
<tr>
<td>I10</td>
<td>Essential (primary) hypertension</td>
<td>266</td>
<td>13.2</td>
</tr>
<tr>
<td>E78.5</td>
<td>Hyperlipidaemia, unspecified</td>
<td>118</td>
<td>5.9</td>
</tr>
<tr>
<td>A09.9</td>
<td>Other specified non-infective gastroenteritis and colitis</td>
<td>63</td>
<td>3.1</td>
</tr>
<tr>
<td>R68</td>
<td>Other general symptoms and signs</td>
<td>51</td>
<td>2.5</td>
</tr>
<tr>
<td>R99</td>
<td>Other ill-defined and unspecified causes of mortality</td>
<td>46</td>
<td>2.3</td>
</tr>
<tr>
<td>L98.9</td>
<td>Disorder of skin and subcutaneous tissue, unspecified</td>
<td>46</td>
<td>2.3</td>
</tr>
<tr>
<td>T14.3</td>
<td>Dislocation, sprain and strain of unspecified body region</td>
<td>44</td>
<td>2.2</td>
</tr>
<tr>
<td>M54.99</td>
<td>Unspecified dorsalgia, site unspecified</td>
<td>36</td>
<td>1.8</td>
</tr>
</tbody>
</table>

ICD = International Classification of Diseases

### Patients aged 45 – 74 years contribute to half of FY2013 visits

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>No. of visits in 2013 ('000)</th>
<th>% within category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Acute</td>
</tr>
<tr>
<td>0 – 14</td>
<td>312</td>
<td>144</td>
</tr>
<tr>
<td>15 – 29</td>
<td>406</td>
<td>281</td>
</tr>
<tr>
<td>30 – 44</td>
<td>336</td>
<td>156</td>
</tr>
<tr>
<td>45 – 59</td>
<td>788</td>
<td>197</td>
</tr>
<tr>
<td>60 – 74</td>
<td>776</td>
<td>120</td>
</tr>
<tr>
<td>75 above</td>
<td>276</td>
<td>37</td>
</tr>
<tr>
<td>Unknown</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>2,913</td>
<td>953</td>
</tr>
</tbody>
</table>

**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 2013**

No. of patients ('000)

- **Female** 396
- **Male** 393

Gender ratio of patients in 2013: 1 : 1

**Ethnic composition of patients in 2013**

- **Chinese** 66%
- **Malay** 16%
- **Indian** 11%
- **Others** 7%

**Number of visits by age groups ('000)**

- **0 – 14**
  - Non-morbid: 149
  - Chronic: 19
  - Acute: 23

- **15 – 29**
  - Non-morbid: 69
  - Chronic: 56
  - Acute: 52

- **30 – 44**
  - Non-morbid: 97
  - Chronic: 72
  - Acute: 83

- **45 – 59**
  - Non-morbid: 280
  - Chronic: 196
  - Acute: 165

- **60 – 74**
  - Non-morbid: 325
  - Chronic: 192
  - Acute: 175

- **75 & above**
  - Non-morbid: 290
  - Chronic: 185
  - Acute: 155

**Total**
- Non-morbid: 1416
- Chronic: 996
- Acute: 858

**More chronic and non-morbid visits among patients above 45 years old**

**Percentage distribution of chronic patients at different age groups by the no. of co-morbidities**

- **1 comorbidity**
  - 0 – 14: 6%
  - 15 – 29: 17%
  - 30 – 44: 29%
  - 45 – 59: 60%
  - 60 – 74: 84%
  - 75 & above: 99%

- **2 comorbidity**
  - 0 – 14: 10%
  - 15 – 29: 17%
  - 30 – 44: 22%
  - 45 – 59: 22%
  - 60 – 74: 19%
  - 75 & above: 13%

- **3 comorbidity**
  - 0 – 14: 17%
  - 15 – 29: 24%
  - 30 – 44: 19%
  - 45 – 59: 12%
  - 60 – 74: 2%
  - 75 & above: 1%

- **>3 comorbidity**
  - 0 – 14: 1%
  - 15 – 29: 1%
  - 30 – 44: 1%
  - 45 – 59: 1%
  - 60 – 74: 1%
  - 75 & above: 1%

*Patients whose age are unknown are excluded*
More patients come by appointment and same-day queue in 2013

No. of visits by queue types

<table>
<thead>
<tr>
<th>Queue types</th>
<th>FY13</th>
<th>FY12</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority and emergency</td>
<td>69</td>
<td>74</td>
<td>7.7%</td>
</tr>
<tr>
<td>Walk-in</td>
<td>297</td>
<td>867</td>
<td>-65.8%</td>
</tr>
<tr>
<td>Same-day</td>
<td>601</td>
<td>1,026</td>
<td>70.8%</td>
</tr>
<tr>
<td>Appointment</td>
<td>1,259</td>
<td>1,515</td>
<td>20.4%</td>
</tr>
</tbody>
</table>

Improvement in consult wait time

Consult wait time (minutes)

<table>
<thead>
<tr>
<th>Visit type</th>
<th>Percentile</th>
<th>FY13</th>
<th>FY12</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk-In</td>
<td>50th</td>
<td>19</td>
<td>28</td>
<td>-32.1%</td>
</tr>
<tr>
<td></td>
<td>95th</td>
<td>87</td>
<td>100</td>
<td>-13.0%</td>
</tr>
<tr>
<td>Appointment</td>
<td>50th</td>
<td>11</td>
<td>15</td>
<td>-26.7%</td>
</tr>
<tr>
<td></td>
<td>95th</td>
<td>62</td>
<td>63</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

More staff in all categories to manage increased workload

Full-time equivalent

<table>
<thead>
<tr>
<th>Job category</th>
<th>FY13</th>
<th>FY12</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancillary</td>
<td>559</td>
<td>532</td>
<td>5.1%</td>
</tr>
<tr>
<td>Nursing</td>
<td>306</td>
<td>280</td>
<td>9.3%</td>
</tr>
<tr>
<td>NHG Pharmacy</td>
<td>247</td>
<td>238</td>
<td>3.8%</td>
</tr>
<tr>
<td>Medical</td>
<td>190</td>
<td>188</td>
<td>1.1%</td>
</tr>
<tr>
<td>Administrative</td>
<td>173</td>
<td>158</td>
<td>9.5%</td>
</tr>
<tr>
<td>NHG Diagnostics</td>
<td>199</td>
<td>177</td>
<td>12.4%</td>
</tr>
<tr>
<td>Allied Health</td>
<td>45</td>
<td>46</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Dental</td>
<td>43</td>
<td>41</td>
<td>4.9%</td>
</tr>
<tr>
<td>Total</td>
<td>1,762</td>
<td>1,660</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

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.
Dental Workload

We mostly see subsidised patients

<table>
<thead>
<tr>
<th></th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of dental visits ('000) Total Subsidised</td>
<td>115.9</td>
<td>110.6</td>
<td>108.5</td>
<td>119.2</td>
<td>111.8</td>
</tr>
<tr>
<td></td>
<td>90.7</td>
<td>99.6</td>
<td>100.6</td>
<td>102.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>74.7</td>
<td></td>
<td></td>
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</tbody>
</table>

We do more preventive procedures

<table>
<thead>
<tr>
<th></th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of dental procedures ('000) Polishing and scaling</td>
<td>47.0</td>
<td>65.5</td>
<td>87.9</td>
<td>96.9</td>
<td>97.4</td>
</tr>
<tr>
<td></td>
<td>31.3</td>
<td>42.2</td>
<td>46.4</td>
<td>53.1</td>
<td>59.7</td>
</tr>
</tbody>
</table>

Daily average number of basic dental procedures

<table>
<thead>
<tr>
<th>FY</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filling and extraction</td>
<td>113</td>
<td>152</td>
<td>168</td>
<td>194</td>
<td>214</td>
</tr>
<tr>
<td>Polishing and scaling</td>
<td>170</td>
<td>236</td>
<td>318</td>
<td>353</td>
<td>350</td>
</tr>
</tbody>
</table>

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.
Chapter 1:

Caring for Patients

I would like to thank Ms Carolyn Chan Mei Fong and Ms K Risnari because they were very patient with the children. They explained to the mums patiently about the procedures. They made effort to get to know the children and were very friendly.”

Ms Leong Shu-Yi Dorcas, a visitor to Jurong Polyclinic, 27 March 2013
Patient care underpins all we do at NHGP. NHGP has over the years been pushing the boundaries of family medicine and primary care by challenging conventions and redefining how care is delivered. Since 2012, NHGP has embarked on a biopsychosocial model of care for complex chronic patients. We also introduced the Telecare programme to help patients take control of their health through self-monitoring, supported by phone consultations with care managers. Many illnesses that are typically diagnosed and treated in specialist clinics — such as dementia, depression and diabetic nephropathy — can now be effectively managed in our polyclinics, making care more accessible and affordable for patients.

**Better Disease Control for Complex Chronic Patients**

As of March 2013, about 880 poorly controlled diabetes patients with complex care needs who would benefit from a closer, personalised and longitudinal care provision were identified. A care team, comprising doctors, nursing care managers, pharmacists, dietitians, psychologists and medical social workers, manages these patients holistically by addressing their needs in terms of medication and nutrition, as well as functional, psychological and social aspects. The care managers play a key role in identifying and coordinating care for the patient cohort.

We have shown good results in managing these complex chronic patients, with a 9- to 10-per-cent drop of HbA1c$^1$ and LDL-cholesterol$^2$ levels in those with HbA1c greater than 9 per cent, and a third of them achieved better diabetic control and significant improvements in LDL-cholesterol. Six per cent of patients achieved optimal diabetic control by the end of the first year.

**New Risk Stratification Model**

NHGP started a risk stratification panel study in Toa Payoh Polyclinic in February 2014. The model segregates chronic patients into different risk categories based on biopsychosocial factors. These factors include disease control, functional status, falls risk, availability of social support and frequency of unplanned hospital admissions or visits to the emergency department.

Identifying a patient’s health risk category is the first step towards planning and matching of healthcare resources for population health management. The plan may address a need for more robust care coordination with other providers, intensive care management or collaboration with community resources.

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1 HbA1c refers to glycated haemoglobin, a marker for average blood glucose levels over the months prior to the measurement.

2 LDL-cholesterol is the amount of cholesterol contained in low-density lipoprotein (LDL). Lipoprotein molecules carry lipids (fats), such as cholesterol, phospholipids, and triglycerides, within the water around cells, including the bloodstream. Studies have shown that higher levels of LDL-cholesterol are associated with health problems, including cardiovascular disease.
Telecare Shows Promising Results

 Implemented in February 2013, Telecare is a nurse-led home-monitoring programme involving patients with stable diabetes mellitus, hypertension or dyslipidaemia with no complications.

As at May 2014, about 130 eligible patients are enrolled in the programme. These patients learn from our care managers how to manage their illness at home, through monitoring their blood pressure and blood glucose levels and adjusting their medications accordingly. They then submit their home-monitoring readings to the care managers through an Internet portal. Based on these readings, the care managers advise the patients on their medication refills. Patients whose chronic conditions are well-controlled receive tele-consultation from the care managers instead of having to visit the polyclinic for face-to-face consultations.

Telecare has enabled stable chronic patients to remain independent in their own homes through standardised care plans and reassurance from the care managers. To date, these patients are well-controlled with no reports of hypotension, hypoglycaemia, uncontrolled hypertension or diabetic ketoacidosis.

98% of ASCAT Patients Experience Less Mental Health-related Disruptions at Work and in Life

From October 2012 to March 2014, about 520 patients were seen by the Assessment and Shared Care Team (ASCAT) at Ang Mo Kio Polyclinic. Of these patients, 67 per cent achieved improvements in social, occupational and psychological functioning, measured using the Global Assessment of Functioning (GAF) scale. About 98 per cent of them experienced less disruption at work and in their social and family lives due to mental health problems, measured based on the Sheehan Disability Scale.

ASCAT is a physician-led, multidisciplinary team that provides holistic physical and mental healthcare to patients with mild to moderate mental health conditions such as depression, anxiety disorder and sleep problems. The team, comprising family physicians, care managers, psychologists and medical social workers, is trained and supported by specialists from the Institute of Mental Health through co-consultations and case discussions.

With ASCAT, patients with mild to moderate mental illness are treated in the community, reducing the stigma associated with their conditions.

NHGP also launched a mental health flip chart in 2014 which ASCAT uses to educate patients about common mental health conditions.
NEMO Slows Kidney Function Decline in Diabetic Patients

With support from the Ministry of Health, NHGP and National University Hospital (NUH) started NEMO — Nephrology Evaluation, Management and Optimisation — a programme designed to slow diabetic nephropathy, a deterioration of kidney function due to longstanding diabetes mellitus, in the primary care setting.

NHGP doctors managed these patients’ conditions in accordance with the Chronic Kidney Disease Management Guidelines. Dedicated NEMO coordinators facilitate the care delivery by multiple stakeholders and educate patients on self-care.

One of the key interventions was initiating and optimising angiotensin-converting enzyme inhibitor (ACEi) or angiotensin receptor blocker (ARB) for these patients. ACEi and ARB are two classes of drugs that have shown to have protective effects on the kidneys.

Between April 2011 and March 2014, 5,600 patients were enrolled in the programme. Of the 2,200 patients who have completed the programme thus far, 85 per cent have had their drug therapy optimised or had achieved resolution or improvement in albuminuria, a pathological condition in which albumin is present in the urine, an indicator of damage to the kidneys.

NEMO proved that the management and optimisation of therapy for patients with diabetic nephropathy in primary care could potentially stem the rising incidence of end-stage renal failure. These efforts highlight the potential of straddling the primary and tertiary care divide to provide optimal care to patients with chronic diseases.

Third Memory Clinic in Collaboration with NUH

NHGP set up the third Memory Clinic at Choa Chu Kang Polyclinic in August 2013 in collaboration with the National University Hospital. Funded by the Agency for Integrated Care, a psychogeriatrician from NUH partners our family physician and care manager to diagnose dementia and initiate treatment in the polyclinic. Patients no longer need to be referred to an outpatient specialist clinic for diagnosis of dementia, preventing delays in treatment and saving them time and money.

Appropriate advice, support, education and training for caregivers are also provided at the polyclinic to keep patients well.

“Beyond clinical treatment, we are very much focused on providing ‘whole-person’ care for our patients via a team-based approach. Time is spent with the patients understanding their lifestyle and dietary habits and advising them on modifications where necessary.”

Dr Lim Chee Kong, Co-Director of NEMO and Deputy Director of Clinical Services, NHGP
in the community and avoid premature institutionalisation. As part of the collaboration, NHGP may also activate NUH’s home care team to assess the patients’ home environment, should the need arise.

The earlier Memory Clinics were set up at Yishun and Ang Mo Kio Polyclinics, partnering Khoo Teck Puat Hospital and Tan Tock Seng Hospital, respectively.

**Four More Polyclinics with Portable Ultrasound Services**

NHG Diagnostics introduced portable ultrasound services at the Hougang, Toa Payoh, Bukit Batok and Clementi Polyclinics in May 2013. This increased the number of polyclinics equipped with on-site ultrasound services from four to eight in FY2013. With the launch of portable ultrasound services, patients no longer need to travel to another clinic for their procedure. This increases accessibility, reduces appointment waiting time, provides convenience for the patient and improves the comprehensiveness of services provided by the polyclinics.

**Enhanced Parent and Caregiver Education on Children’s Health**

Starting in 2013, parents or caregivers who bring their children to our polyclinics for immunisation or developmental assessment also receive education on child growth and development. This educational component helps parents and caregivers recognise and manage their children’s developmental issues should they arise. A course on infant and preschooler health was introduced to expand nurses’ knowledge for this educational role.

**Resilience in the Face of Multiple Challenges**

In June 2013, NHGP showed resilience in meeting the simultaneous challenges of haze, dengue, Middle East Respiratory Syndrome (MERS) and H7N9 avian flu.

NHGP responded swiftly to what turned out to be the worst episode of haze to date by planning for various contingencies. These included putting in place plans to convert air-conditioned rooms in the polyclinics to waiting areas in the event that the Pollution Standards Index reading exceeded 300; planning to set up air-conditioned tents at polyclinics where feasible; establishing a triage system to identify vulnerable patients with respiratory conditions; and extending tele-consulting services to patients with respiratory conditions to minimise their exposure to the haze.
NHGP also issued N95 masks and eye drops to protect our staff from the haze. Lunch was provided to duty staff to minimise outdoor exposure.

On 25 March 2014, Woodlands Polyclinic conducted a Haze Table-Top Exercise to test the feasibility of the clinic’s haze contingency plan. Representatives from our four non-air-conditioned clinics — Bukit Batok, Choa Chu Kang, Hougang and Toa Payoh Polyclinics — were present to learn and share their experience with staff of the other polyclinics. The exercise helped to ensure that NHGP is operationally-ready to handle any increase in service demands should the haze return.

Emergency Preparedness Exercise: Anthrax Outbreak
On 15 March 2014, Hougang Polyclinic participated in an Emergency Preparedness Exercise which tested the operational readiness of the clinic in responding to a civil emergency. The exercise was conducted with the help of volunteers from the rest of our polyclinics and headquarters, in the presence of representatives from NHG, MOH and Singapore Health Services.
The exercise illustrated NHGP’s integral role of assisting MOH during emergencies by providing medical or psychological support upon activation.

For Hougang Polyclinic specifically, the focus of the exercise was converting the polyclinic into a Drug Dispensing Centre (DDC) within a stipulated time in the event of a terrorist attack by an anthrax agent. Under this DDC plan, the polyclinic’s role was to administer prophylaxis to all cases of potential exposure, and each polyclinic would be required to operate continuously on a 24-hour basis for the first three days once activated by MOH.

Ultimately, the exercise was a success and a good learning opportunity for NHGP to plan our anthrax outbreak layout.

**Business Continuity Management**

To ensure accountability to patients and stakeholders and continuity of critical functions in the face of threats, NHGP started our Business Continuity Management (BCM) process in the third quarter of FY2013. Business Impact Analysis is in progress and is expected to be complete by end of FY2014.

BCM, as a part of NHG Enterprise Risk Management, is a holistic management process that identifies potential threats to an organisation and the potential impact it could have on business operations. BCM provides a framework for building organisation resilience with the capability of an effective response that safeguards the interests of its key stakeholders, as well as its reputation, brand and value-creating activities.
Chapter 2:

Improving Quality and Safety

“

I would like to thank the National Healthcare Group Polyclinics for continually upgrading because I’ve seen improvements every time I visit the clinic. The environment is more conducive for patient care; I appreciate the clear signboards and instructions.”

Ms Nadzirah Bte Isa, a patient at Bukit Batok Polyclinic, 11 October 2013
NHGP strives to provide outstanding and compassionate care and service at every step of each patient’s journey. Putting patients first requires more than just world-class clinical care; it also requires exceptional care in every aspect of the NHGP patient experience.

ACCREDITATIONS AND CERTIFICATIONS

New Yishun Polyclinic Passes JCI Extension Survey
Yishun Polyclinic continued its accreditation status with the Joint Commission International (JCI) in an extension survey done in June 2013. The survey, which was conducted due to the relocation of Yishun Polyclinic in November 2012, included staff interviews and a facility walkabout. It was carried out by Dr Muayad Al-Hussaini, a urologist with more than 30 years of experience in clinical and academic healthcare, hospital clinical care design and medical leadership development.

NHGP first attained the JCI accreditation for Primary Care Centres in August 2012.

NHGP Passes OHSAS Re-certification Audit
NHGP was re-certified as having met the stringent requirements of OHSAS 18001: 2007. The Occupational Health & Safety Advisory Services (OHSAS) standards require an organisation to adequately address workplace hazards and implement controls to eliminate or reduce workplace health and safety risks. The audit was conducted on 27 June 2013 at Choa Chu Kang and Yishun Polyclinics by an appointed Certification Body, TÜV SÜD PSB.

NHG Diagnostics Maintains BreastScreen Singapore Accreditation
All NHG Diagnostics centres at NHGP, including the Mammobus mobile mammography service, have been accredited under the Health Promotion Board’s BreastScreen Singapore (BSS) programme since their inception. Diagnostics centres at Woodlands, Yishun and Jurong Polyclinics, as well as the Mammobus, maintained this accreditation in a re-assessment exercise in November 2013. With this continued BSS accreditation, patients who take up mammogram screening in NHGP and the Mammobus are assured of its standards.
NHG Diagnostics Retains ISO 15189 Quality System for Medical Laboratories Certification

In April 2013, NHG Diagnostics underwent a re-assessment audit on the quality and competency of its laboratories and maintained its ISO 15189 Quality System for Medical Laboratories certification. The re-certification affirmed the quality, reliability and accuracy of laboratory processes and results.

IMPROVING PATIENT SAFETY

85% of Safety Concerns Raised by Staff Are Addressed

To strengthen our safety culture, NHGP started a monthly Safety Leadership Walkabout in July 2012. All nine NHGP clinics had at least one walkabout in FY2013. During the walkabouts, staff shared their patient and workplace safety concerns with members of senior management. With support from management, more than 85 per cent of the concerns raised were addressed.

Launch of Patient Safety Foundation Workshop

NHGP started a Patient Safety Foundation workshop in July 2013 to equip NHGP staff with knowledge on patient safety. Doctors, nurses and operations staff learned about patient safety through e-learning or attending workshops conducted during lunch or after office hours. The training materials were adapted from NHG and cover four modules: Introduction to Patient Safety, Applying Human Factors in Patient Safety, Effective Team Player, and Engaging Patient and Caregivers. A patient safety video was also developed and used during the workshop to reinforce learning.
**International Patient Safety Goals Audit Revamp**

In January 2014, the Patient Safety and Clinical Quality Department revamped the internal audit of compliance with the International Patient Safety Goals (IPSGs). The Web-based questionnaire was replaced by quarterly site surveys that include direct observation of staff practice and reviews of patient records.

The audit findings were shared at the Quality Council and the Patient Safety Committee meetings. The IPSGs are requirements by the JCI under the International Standards for Primary Care Centres. The six goals are to:

- Identify patients correctly
- Improve effective communication
- Improve the safety of high-alert medications
- Ensure correct-site, correct-procedure, correct-patient surgery
- Reduce the risk of healthcare-associated infections
- Reduce the risk of patient harm resulting from falls

**Launch of Patient Safety Newsletter**

To strengthen a safety culture and to highlight good safety practices, NHGP launched our first patient safety newsletter, titled "Patient Safety Begins with Me", in April 2014. The newsletter focuses on awareness and education on patient safety, JCI safety standards, incident reporting and safety improvement initiatives.

**Hand Hygiene Compliance Up From 69% to 75%**

The hand hygiene compliance rate among NHGP staff improved from 69 per cent in the first quarter of FY2013 to 75 per cent in the fourth quarter. This was the result of various initiatives to promote hand hygiene, including assessing all new recruits on their hand washing steps, rewarding and recognising hand hygiene role models, implementing a hand hygiene pledge, and organising quarterly clinic roadshows to share hand hygiene audit findings with the staff.

![Figure 9](image)

The inaugural issue of NHGP’s patient safety newsletter.

![Figure 10](image)

A hand washing demonstration during a lunchtime talk on Hand Hygiene Day (5 May 2013).
Preventing Transmission of Multidrug-Resistant Organisms

Healthcare institutions around the world are increasingly facing the emergence and transmission of multidrug-resistant organisms (MDROs)\(^3\). In response to this, NHGP implemented a surveillance system to track the prevalence of MDRO carriers who attend our clinics for procedural treatments such as dressing and changing of a catheter.

To prevent MDRO transmission, our infection control advocates conduct quarterly audits to ensure that staff take precautionary measures when attending to MDRO carriers. These measures include the appropriate use of personal protective equipment, patient education and environmental cleaning. Talks were also organised to educate staff about MDRO.

Workshop and Online Forum to Share Best Infection Control Practices

NHGP has been progressively updating our Infection Control Surveillance System (ICSS) since 2012. A discussion forum was added to the Web-based surveillance system in 2013 to encourage the sharing of best infection control practices among infection control teams. In addition to spreading knowledge about infection control, the ICSS allows infection control nurses to document observational data from the hand hygiene audits. The real-time feedback and sharing of audit findings have helped to improve hand hygiene compliance at NHGP.

In addition to sharing best practices online, NHGP organised workshops involving multidisciplinary teams to learn and share infection control best practices across the clinics and professions.

ConviDo\textsuperscript{™} Rolled Out to All Polyclinics

The ConviDose\textsuperscript{™} service was progressively rolled out to all polyclinics by 17 June 2013. NHGP patients who need help managing their medications are able to sign up for the multi-dose packing service at any pharmacy in our polyclinics.

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3 Multidrug-resistant organisms (MDRO) are bacteria that are resistant to many antibiotics. Examples of MDRO are Methicillin Resistant Staphylococcus aureus (MRSA) and Vancomycin Resistant Enterococcus (VRE). These pathogens have been associated with increased medical costs, extended treatments, and patient morbidity and mortality.
The service is offered to patients who are prescribed multiple drugs and have difficulty adhering to their medication regime due to confusion or other reasons. Their medication doses are packed chronologically in sachets to ease the administration.

As of January 2014, 141 polyclinic patients had signed up for the ConviDose™ service. Of 64 ConviDose™ users surveyed, 92 per cent were satisfied with the service, while 86 per cent were willing to recommend this service to others.

In addition, about 3,600 patients in 16 nursing homes and four long-stay wards in the Institute of Mental Health use the service.

Auto Transmission and Validation of PT/INR Results Eliminates Transcription Errors

In May 2013, NHG Diagnostics automated the transmission and validation of prothrombin time and international normalised ratio (PT/INR) results from PT–INR meters, point-of-care testing devices, to the Laboratory Information System. This allows our doctors to instantaneously view the results of these tests in the clinical system when the results are available, and eliminates the risk of human error present in the manual transcription process. The performance of each meter can also be monitored via a centralised quality monitoring system.

Audit Tool to Measure Nursing Care Standards

A revamped nursing audit tool was implemented in January 2014 with reference to the standards of nursing practice, institutional policies and workflows. It provides a more objective and measurable tool to evaluate the care rendered by nurses and serves as a basis for continuous improvement.

ENHANCING THE PHYSICAL ENVIRONMENT OF CARE

Major Facelift of Dental Clinic at Woodlands Polyclinic

The dental services at Woodlands Polyclinic resumed in June 2013 after a major renovation that began in April 2013.

The revamped dental clinic features 12 enclosed individual consultation rooms. This is an improvement over the previous open concept clinic in terms of patient privacy.

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4 Prothrombin time (PT) and international normalised ratio (INR) is a blood test that measures how long it takes blood to clot.

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Figure 13a Enclosed consult rooms provide better patient privacy.

Figure 13b The sterilisation room was upgraded with an enhanced layout.
The equipping of X-ray facilities in each dental operatory has improved operational efficiency, with 16.4 per cent more procedures done per dental officer. Furthermore, it has added convenience to our patients and caregivers who no longer need to move to another area to get an X-ray. Larger consultation rooms allow wheelchair access and are more elderly-friendly.

The layout of the sterilisation and decontamination rooms was improved to facilitate workflow. Staff amenities were also enhanced to create a safer and more comfortable workplace.

**Four Pharmacies Incorporate Educational and Elderly-Friendly Features**

By May 2014, renovation works at pharmacies in the Yishun, Woodlands, Ang Mo Kio and Hougang Polyclinics were completed. The new pharmacies incorporate education elements, such as interactive education corners, to educate patients in self-care. Its design concept is more contemporary, with wider aisles for wheelchair access. Two more pharmacies will undergo similar renovation in FY2014.

**Three Laboratories Renovated to Expand Capability and Capacity**

NHG Diagnostics renovated its laboratories at Bukit Batok, Choa Chu Kang and Toa Payoh Polyclinics by March 2014. Automation analysers, including a biochemistry analyser, were added to the laboratories to expand NHG Diagnostics’ on-site lab test repertoire, eliminating the need to transport lab specimens to external referral laboratories and thus shortening the turnaround time for results. Phlebotomy stations, electrocardiography rooms and registration counters were added to cater to the workload that is expected to grow in the next three years.

**Four Labs Operating with 95% Onsite Processing Capability with Biochemistry Analysers**

Biochemistry analysers were added to the laboratories at Ang Mo Kio and Yishun Polyclinics in April 2013 and January 2014, respectively. This is in addition to the units available at Choa Chu Kang and Toa Payoh Polyclinics. With this, four out of nine laboratories at NHGP now operate with
95 per cent onsite processing capability. The turnaround time for results was thus shortened from six hours to two for routine laboratory tests and 30 minutes for urgent tests. This capability improves patient care, as results are readily available for prompt diagnosis and treatment.

**Upgrading of NHG Diagnostics Referral Lab**

NHG Diagnostics integrated the biochemistry and immunoassay analysers at its referral laboratory at Buangkok Green Medical Park in October 2013. This improvement eliminates the manual transfer of specimens from one analyser to another, thus improving efficiency and safety. The upgrade has also allowed more tests to be processed onsite. These are tests for cancer markers, hepatitis A and hepatitis C, which together account for 10 per cent of the total tests run by the referral lab. Having onsite capability has cut the results turnaround time from six hours to two. As laboratory results are more quickly available, clinicians can attend to the patients more promptly.

**IMPROVING THE PATIENT EXPERIENCE**

**NHGP Clinches the Top Three Positions in MOH PSS for the Third Consecutive Year**

NHGP sustained our overall patient satisfaction level at 81.7 per cent, according to the MOH Patient Satisfaction Survey (PSS) 2013. NHGP clinched the top three positions among the 18 polyclinics for the third consecutive year. These clinics are Ang Mo Kio, Clementi and Bukit Batok Polyclinics scoring 90.8 per cent, 87.5 per cent, and 86 per cent, respectively.

Ang Mo Kio Polyclinic took the largest leap, going from 76.1 per cent patient satisfaction in 2012 to 90.8 per cent in 2013. Our dental clinics had an average of 92.7 per cent overall satisfaction, which is a 3.5-per-cent increase from 2012.

The survey has been commissioned by MOH every year, with the exception of 2011. About 1,000 NHGP patients were interviewed in August and September 2013 to complete the survey.

**Enhanced Self-Payment Kiosks**

From August 2013, patients can use self-payment kiosks at all nine NHGP polyclinics to pay their medical bills, with more payment options available too.

The kiosks were piloted in the Jurong, Hougang and Woodlands, Choa Chu Kang and Yishun Polyclinics in February and March 2013. They were enhanced in July 2013 to allow payment by Medisave or through third-party payments and

![Figure 16](image-url)

*Figure 16* The satisfaction surveys showed that overall patient satisfaction has grown over the years.
financial assistance schemes such as Medifund. The kiosks have since helped to reduce waiting times for payment. The kiosks currently accept payment using NETS, NETS Flashpay, NETS Cash Card and EZ-Link. The screen has elderly-friendly features such as big fonts and user-friendly graphics with minimal navigational clicks required.

‘Missed Queue Number’ Displays
To serve patients better, NHGP implemented displays of missed queue numbers across all nine polyclinics in March 2014. Missed queue numbers are flashed on television screens at the waiting areas to alert patients who did not respond when their numbers were called. This helps to reduce patients’ anxiety. Patients who missed their queue numbers can now approach clinic staff for assistance once their missed number is flashed again. The initiative has received positive feedback from patients and staff alike.

Service Makeovers Completed at Four Polyclinics
The Ang Mo Kio and Hougang Polyclinics completed their service makeovers in January 2014, following similar makeovers at Jurong and Yishun Polyclinics, completed in December 2012 and June 2013, respectively.

The initiative has improved the service standards at our clinics to be in line with the iCARE service framework which includes four service standards — Confidence, Attentiveness, Respect and Empathy. The approach and focus areas were customised according to each clinic’s needs as determined by a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

As part of these service makeovers, frontline staff attended grooming courses to improve their professional image. Audits of service standards were also held, as well as delivery of bite-sized service themes to staff. The rest of our clinics will undergo service makeovers in FY2014.

Eight Patient Focus Groups Conducted
In FY2013, NHGP conducted eight patient focus groups. Through these sessions, we gathered patients’ feedback on selected topics and improved our services to be more patient-centred. For instance, we have enhanced the communication about our Same-Day Queue System based on suggestions from the focus groups.

Figure 17
External consultants facilitating a patient focus group at Jurong Polyclinic.
Service Brief Tool ‘iCARE stories!’ Well-Received
The Service Leadership and Patient Relations (SLPR) Department launched a one-page service briefing tool called “iCARE Stories!” in September 2012. The briefing tool, made up of real stories featuring exemplary service delivered at the clinics along with learning notes and questions, serves as talking points for staff to reflect and discuss at their team meetings. As the service resource was well-received by staff, the publication has been increased from one issue per month to two issues per month since April 2013.

‘iCARE Clinic Energisers’ Strengthens Service Culture
To strengthen NHGP’s service culture, the SLPR team also conducts 30-minute interactive talks on selected service topics during clinic roll calls. The talks, also called “iCARE Clinic Energisers”, started in August 2013. As of May 2014, seven sessions had been conducted across NHGP’s clinics and departments.

Pleasant Surprises for Patients through iCARE Service Delight
iCARE Service Delight is an initiative to create pleasant surprises for patients and caregivers to lift spirits and bring smiles to their faces. These acts of service and kindness are coordinated by the SLPR Department, and are often carried out with support from the iCARE Service Network from each clinic.

Figure 18 “iCARE stories!” is published twice a month to facilitate discussions about service quality during meetings.

Figure 19 “iCARE Energiser” at Ang Mo Kio Polyclinic on 27 August 2013. A health attendant was blindfolded while her colleagues guided her to complete assigned tasks through verbal instructions. The activity demonstrated to staff the importance of clear communication.
Figure 20  An iCARE Service Delight was organised in December 2013. Patients received small gifts to bring cheer and merriment to them during the year-end festive season.

Figure 21  iCARE service leaders and ambassadors help to promote NHGP’s service quality values and improve the patient experience. On 13 December 2013, a year-end party was organised to thank them.

Figure 22  Personalised balloon sculptures were given out to young patients on Children’s Day on 4 and 5 October 2013.

Figure 23  The service training programmes “Embrace iCARE” and “Inspire iCARE” equip staff with the knowledge and skills to achieve service excellence.
BUILDING QUALITY IMPROVEMENT CAPABILITIES

111 Improvement Projects Completed
A total 111 projects were completed in FY2013, eight of which were spread to all our polyclinics. See the list of completed projects in Appendix A, page 118.

Table 1  Quality improvement projects that were spread to all nine polyclinics

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing the percentage of correct procedural time-out for patients</td>
<td>Dental Services</td>
</tr>
<tr>
<td>requiring extractions</td>
<td></td>
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<tr>
<td>Reducing waste in the patient billing process for dental clinicians</td>
<td>Dental Services</td>
</tr>
<tr>
<td>Reducing the percentage of erroneous submissions in dental Medisave</td>
<td>Dental Services</td>
</tr>
<tr>
<td>documentation</td>
<td></td>
</tr>
<tr>
<td>Achieving one-hour turnaround time for all NHGD’s internal performance</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>indicators</td>
<td></td>
</tr>
<tr>
<td>Reducing laboratory recall cases due to known haemoglobin variant</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>Streamlining referrals to TTSH Geriatric Medicine Department</td>
<td>Toa Payoh Polyclinic</td>
</tr>
<tr>
<td>Reducing medication picking errors at Clementi Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>Reducing the number of prescription keying near-misses at</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>Bukit Batok and Woodlands Polyclinic’s pharmacy</td>
<td></td>
</tr>
</tbody>
</table>

66% of Staff Trained in Quality Improvement
All staff at NHGP attend OurCare training programmes to help them improve their daily work. As of March 2014, 66 per cent staff completed at least one OurCare training programme. In addition to the compulsory OurCare basic training, staff may also attend the Advanced OurCare workshop and the Clinical Practice Improvement Programme (CPIP).

OurCare Facilitator Course
An OurCare Facilitator Course was held in December 2013 to equip participants with the tools and methodologies to facilitate quality improvement projects. The participants, made up of doctors, nurses, pharmacists and dental officers, learned about the different stages of team development and the challenges which may arise in each stage, as well as the various roles in a team. They also learned how to ask effective questions to help a team progress in their project. In 2013, NHGP had 34 OurCare facilitators.

Posters Presented at Various Conferences
Our staff have done us proud by showcasing their good work at local and international conferences (Table 2).
<table>
<thead>
<tr>
<th>Conference</th>
<th>Poster Title</th>
<th>Project Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6th International Congress of Asia Pacific Society of Infection Control (APSIC)</strong>&lt;br&gt;April 2013&lt;br&gt;Shanghai, China</td>
<td>Primary care adopts an Infection Control Surveillance System in hand hygiene monitoring management</td>
<td>Yan Chau Chain, Senior Nurse Manager, Nursing Services</td>
</tr>
<tr>
<td></td>
<td>An improvement process in the management of patients on Directly Observed Therapy (DOT) in primary care</td>
<td>Yan Chau Chain, Senior Nurse Manager, Nursing Services</td>
</tr>
<tr>
<td><strong>BMJ International Forum on Quality and Safety in Healthcare</strong>&lt;br&gt;April 2013&lt;br&gt;London, UK</td>
<td>Nurse-initiated inhaled bronchodilator therapy for acute exacerbations in a primary care clinic</td>
<td>Seah Hui Min, Nurse Manager, Clementi Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Nurse triage initiative for upper and lower limb injuries in a primary healthcare facility</td>
<td>Alarvarasi d/o Samynathan, Senior Staff Nurse, Clementi Polyclinic</td>
</tr>
<tr>
<td></td>
<td>To achieve turnaround time of less than 60 minutes for 95 per cent of laboratory tests</td>
<td>Serene Foo Ai Buay, Senior Operations Manager, Bukit Batok Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Increasing the percentage of eligible chronic kidney disease patients referred to renal specialist care</td>
<td>Santos Florencio III Pineda, Resident Physician, Choa Chu Kang Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Standardising the teaching of Obstetrics</td>
<td>Meena Sundram, Family Physician, Consultant, Jurong Polyclinic</td>
</tr>
<tr>
<td><strong>International Council of Nurses (ICN) 25th Quadrennial Congress</strong>&lt;br&gt;May 2013&lt;br&gt;Melbourne, Australia</td>
<td>Using an Infection Control Surveillance System to improve hand hygiene</td>
<td>Yan Chau Chain, Senior Nurse Manager, Nursing Services</td>
</tr>
<tr>
<td><strong>21st International Conference on Health Promoting Hospitals and Health Services</strong>&lt;br&gt;May 2013&lt;br&gt;Gothenburg, Sweden</td>
<td>Health promotion in primary care through healthier food choices: A lesson from the implementation of nutrition-based interventions for staff empowerment and creating supportive environment</td>
<td>Estonie Yuen Wing Ting, Dietitian, Clinical Services</td>
</tr>
<tr>
<td></td>
<td>Applying technology for opportunistic health education in a primary care setting: A tailored evaluation based on RE-AIM (Reach, Efficacy, Adoption, Implementation and Maintenance) framework</td>
<td>Navneet Kaur, Senior Executive, Health Promotion and Preventive Care</td>
</tr>
<tr>
<td></td>
<td>Screening for depression in Singapore’s primary care setting: Implications for mental health primary prevention initiatives</td>
<td>Colin Tan Yong Hui, Family Physician, Consultant, Clinical Services</td>
</tr>
<tr>
<td><strong>The 20th International Association of Gerontology and Geriatrics (IAGG) World Congress of Gerontology and Geriatrics</strong>&lt;br&gt;June 2013&lt;br&gt;Seoul, Korea</td>
<td>A pilot study in primary care using pedometer to predict prospective falls among community-dwelling older adults</td>
<td>Kwok Boon Chong, Senior Physiotherapist, Clinical Services</td>
</tr>
<tr>
<td>Conference</td>
<td>Poster Title</td>
<td>Project Lead</td>
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<tr>
<td>WONCA</td>
<td>Factors related to burnout in family doctors in public practice, and methods to mitigate burnout: A cross-sectional study in Singapore</td>
<td>David Tan Hsien Yung, Family Physician, Associate Consultant, Jurong Polyclinic</td>
</tr>
<tr>
<td>AMEE</td>
<td>A mastery learning based nurse training programme for clinical skills in asthma exacerbation management in primary care</td>
<td>Tang Wern Ee, Family Physician, Consultant, Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>NHG Quality Day</td>
<td>Shortening laboratory turnaround time for patients with same-day consultation at Hougang Polyclinic * Sustainability Award</td>
<td>Janet Teng, Senior Medical Technologist, NHG Diagnostics</td>
</tr>
<tr>
<td></td>
<td>Timely and efficient delivery of laboratory services</td>
<td>Tung Yew Cheong, Family Physician, Consultant, Toa Payoh Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Minimising medication discrepancies for Toa Payoh Polyclinic’s patients with the latest medication records from another healthcare institution</td>
<td>Gary Wiratama Chandra, Pharmacist, NHG Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Improving the workflow and patient’s understanding on metered dose inhaler technique counselling at Bukit Batok Polyclinic’s pharmacy * Best Project (Merit) Award</td>
<td>Tan Lay Khim, Principal Pharmacist, NHG Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Improving efficiency and reducing waiting time for purchase of balance medications at Yishun Polyclinic’s pharmacy * Best Project (Merit) Award winner</td>
<td>Xiong Shujuan, Pharmacist, NHG Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Improving the Asthma Control Test score capture rate for regular asthma patients in Clementi Polyclinic</td>
<td>Aditya Gupta, Family Physician, Senior Staff, Clementi Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Increasing the use of the Written Asthma Action Plan (WAAP) at Bukit Batok Polyclinic</td>
<td>Kong Jing Wen, Family Physician, Bukit Batok Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Increasing appointment rates for wound management patients</td>
<td>Regina Goh Geok Hua, Assistant Director, Operations</td>
</tr>
<tr>
<td>AMEE</td>
<td>Conceptualisation and design of a new dressing trolley at Ang Mo Kio Polyclinic * Best Project (Merit) Award winner</td>
<td>Richard Low Sai Yin, Nurse Manager, Woodlands Polyclinic</td>
</tr>
<tr>
<td>NHG Singapore Health &amp; Biomedical Congress</td>
<td>A pilot study: Parental attitudes and perceptions of childhood immunisations in a Singapore primary healthcare setting</td>
<td>Euan Lim Poh Hia, Nurse Manager, Hougang Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Evaluation of an improvement process to increase the use of surgical masks among patients on Directly Observed Therapy (DOT) during initial treatment period</td>
<td>Tan Pek Hoon, Nurse Clinician, Woodlands Polyclinic</td>
</tr>
<tr>
<td></td>
<td>Experiences of patients with chronic leg ulcer in primary care</td>
<td>Zhu Xiaoli, Senior Staff Nurse, Toa Payoh Polyclinic</td>
</tr>
<tr>
<td>Conference</td>
<td>Poster Title</td>
<td>Project Lead</td>
</tr>
<tr>
<td>------------</td>
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<td>--------------</td>
</tr>
<tr>
<td>Joanne Briggs Institute (JBI) Evidence Based Healthcare Convention October 2013 Adelaide, Australia</td>
<td>Management of patients with hypoglycaemia in primary care in Singapore</td>
<td>Chan Cheuk Ying, Senior Staff Nurse, Hougang Polyclinic</td>
</tr>
<tr>
<td>The International Society for Quality in Health Care (ISQua) Conference October 2013 Edinburgh, Scotland</td>
<td>Standardising asthma control assessment by increasing asthma control test score capture rate in Clementi Polyclinic * Best New Project, Poster Prize</td>
<td>Aditya Gupta, Family Physician, Senior Staff, Clementi Polyclinic</td>
</tr>
<tr>
<td>Tang Teck Ung, Manager, Patient Safety &amp; Clinical Quality Department, NHGP</td>
<td>Patient safety climate survey – A perspective from a primary care setting in Singapore</td>
<td></td>
</tr>
<tr>
<td>TTSH Nursing Conference November 2013 Singapore</td>
<td>Evaluation of nursing clinical teaching in polyclinics in Singapore</td>
<td>Dong Lijuan, Senior Nurse Educator, Nursing Services</td>
</tr>
<tr>
<td>World Congress on Integrated Care November 2013 Singapore</td>
<td>Enhancing Quality care (EQcare) in Physiotherapy</td>
<td>Kwok Boon Chong, Senior Physiotherapist, Clinical Services</td>
</tr>
</tbody>
</table>

**6S Competition to Promote an Organised Workplace**

To promote the practice of keeping an organised workplace, Lean Office ran a 6S³ competition in October 2013. Three teams won the Distinction awards. There were 11 Outstanding awards and 22 Excellence awards given. Please refer to the list of winners in Appendix B.

**Enhanced Staff Suggestion Portal**

Our staff are encouraged to continuously improve their work. To enable them to submit creative suggestions and ideas, we enhanced “My Bright Ideas”, our online staff suggestion portal, to allow access from home. We have also included an “On Behalf Submission” to enable those without email access to submit their improvement ideas.

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6S methodology is adapted from one of the Lean tools, 5S, which stands for: Sort, Shine, Straighten, Standardise and Sustain. The last “S” stands for Safety.
Chapter 3:

Building Primary Care Capacity

"The collaboration between the National Healthcare Group and NTUC Unity Healthcare is a win-win partnership that leverages on the clinical strengths of NHG and the community networks of Unity Healthcare to provide better healthcare for the community. Together, we look forward to adding more years of healthy life to our population."

Professor Chee Yam Cheng, Group Chief Executive Officer, NHG, 23 May 2013
NHGP has been playing a key role in spearheading and supporting various initiatives under the Ministry of Health's Primary Care Masterplan. We launched the first Family Medicine Clinic (FMC) under NHG — Ang Mo Kio FMC — on 11 May 2013. Following this, Unity FMC was launched on 23 May 2014. Development of the new Pioneer Polyclinic is in progress, and the polyclinic is expected to be operational by the end of 2017. NHGP has also made strong inroads in reaching out to the community to right-site care. In 2013, we engaged 57 community partners and jointly developed 37 care paths with these partners to facilitate right-siting of care for about 600 patients.

EXPANDING INFRASTRUCTURE

Unity Family Medicine Clinic Opens

On 23 May 2014, NTUC Unity Healthcare and NHG jointly announced the opening of NTUC Unity Family Medicine Clinic (FMC) to provide one-stop affordable healthcare for residents in the housing estates of Serangoon New Town and Braddell Heights. This is our second FMC, following the first one at Ang Mo Kio which opened on 11 May 2013.

The FMC is part of the government’s plan to provide continuing care within the community and complement general practitioners in enhancing care for Singapore’s ageing population. This gives patients within the community more care options, especially for chronic diseases.

A dedicated team of family physicians, nurses, pharmacy staff and care coordinators provides comprehensive services at the FMC. These include the treatment of common ailments like flu, chronic care, diabetic foot and eye screening, treatment procedures, pharmacy, basic laboratory services and allied health services such as podiatry and dietetic services.

Patients requiring physiotherapy can be referred to NTUC Eldercare’s Silver Circle day care centre next door in Serangoon Central. At every visit, patients also see the same doctor who is familiar with their medical history.

To keep medical bills affordable, patients who enjoy subsidies under the Community Health Assist Scheme (CHAS) or Public Assistance (PA) Scheme can make use of these schemes at Unity FMC. Patients can also tap their Medisave funds to manage chronic diseases under the Chronic Disease Management Programme.

Unity FMC in Serangoon Central is conveniently situated in the heart of the housing estate, making it accessible for community-dwelling patients who require regular check-ups.

Since 16 December 2013, Hougang Polyclinic has been working with Unity FMC to offer patients the option of having their chronic conditions followed up nearer their homes at Unity FMC. As of early May 2014, more than 200 patients have chosen to follow up their care at the FMC.
Figure 25a The Opening Ceremony of NTUC Unity Family Medicine Clinic on 23 May 2013. From left: Mr Chua Song Khim, Group CEO, NTUC Unity Healthcare; Mr Tan Hock Soon, Board Member, NTUC Unity Healthcare; Mr Soh Gim Teik, Board Member, NHG; Mr Seah Kian Peng, Adviser to Marine Parade Group Representative Constituency; Ms Tan Hwee Bin, Chairman, NTUC Unity Healthcare; Mdm Kay Kuok, Chairman, NHG; Mr Lim Suee Chieh, Group CEO, NTUC Enterprise; Prof Chee Yam Cheng, Group CEO, NHG; Mr Leon Luai, Head, Clinical Services and Wellness, NTUC Unity Healthcare; Ms Grace Chiang, COO, NHGP; Dr Ho Han Kwee, Director, Primary & Community Care Division, MOH; Mr Leong Yew Meng, CEO, NHGP.

Figure 25b Unity Family Medicine Clinic.

Figure 26 On 1 December 2013, Prime Minister Lee Hsien Loong, together with Ang Mo Kio Group Representation Constituency Advisers and grassroots leaders, visited Ang Mo Kio Family Medicine Clinic as part of the Active Agers Carnival 2013 and tour of Ang Mo Kio Town.

4,300 Patients Transferred to Family Medicine Clinics

As of May 2014, about 3,600 patients from Ang Mo Kio Polyclinic were transferred to Ang Mo Kio Family Medicine Clinic. Separately, since August 2013, Ang Mo Kio FMC has also been working with TTSH to gradually transfer stable patients from specialist outpatient clinics to be followed up at the clinic. Currently, suitably stable patients suffering from asthma, anxiety or depression, benign prostatic hyperplasia and osteoarthritis are offered the option to receive care at Ang Mo Kio FMC.

NHGP also worked with Lakeside and Frontier FMCs to offer another option for care to stable chronic patients from the Jurong and Clementi Polyclinics. As of May 2014, 670 polyclinic patients have chosen to receive care at the two FMCs.

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NHGP also worked with Lakeside and Frontier FMCs to offer another option for care to stable chronic patients from the Jurong and Clementi Polyclinics. As of May 2014, 670 polyclinic patients have chosen to receive care at the two FMCs.

NHGP is committed to supporting Singapore’s vision of achieving high-quality healthcare and a healthy population. The opening up of Unity Family Medicine Clinic will further strengthen NHG’s Regional Healthcare System to provide accessible and integrated healthcare services to the population in the central region of Singapore.”

Prof Chee Yam Cheng, Group CEO, NHG
New Pioneer Polyclinic in the Pipeline

In early 2013, NHGP started planning for the upcoming Pioneer Polyclinic to cater to the rising demand for healthcare services in the Jurong area. The polyclinic is targeted to be ready for operations by the end of 2017.

In planning the new-generation polyclinic, we adopted a principle of “Design Thinking”. Facilitated by consultants, our management and planning team came together to “dream, define, design and develop” a new polyclinic model. Insights from in-depth user interviews were incorporated into our care model, care processes and service experiences. These serve as the foundation for the design of spaces to better meet the future healthcare needs of the population.

TAPPING PRIVATE CAPACITY

CHAS Patients Increase to 230,000

Since the launch of the CHAS, which is one of MOH’s programmes to provide accessible and affordable care to Singaporeans, NHGP has been working closely with MOH and the Agency for Integrated Care (AIC) to raise awareness about CHAS among our patients. From FY2012 to FY2013, CHAS uptake among NHGP patients tripled to some 230,000, due to changes in CHAS eligibility criteria, an AIC promotion campaign and additional CHAS promoters in our polyclinics.
GP Dialogue Sessions Take Positive Steps Forward

In 2013, NHGP conducted five engagement sessions with general practitioners (GPs) to facilitate the handover of care from NHGP to CHAS-certified GPs. The sessions involved 33 GPs with practices located around our polyclinics. In addition to updating the private practitioners on CHAS enhancements, the dialogue sessions helped the GPs to better understand the services offered by the polyclinics, the profile of chronic patients seen, and the typical bill sizes of chronic patients at the polyclinics.

12% More Patients Receive Help through Medifund

Polyclinic patients who — despite Medisave coverage — cannot afford the subsidised bill charges now have an additional safety net in Medifund. The scheme, which was previously available only at tertiary, intermediate, and long-term care facilities, was made available at NHGP on 28 June 2013, following approval by MOH.

A Medifund committee was formed and approved by MOH on 5 June 2013. Four members of the public were part of the committee. They were Mr Raja Mohan s/o Murugesu Kanagaratnam, Dr Wong Kai Peng, Mdm Chan Hui Yuh, and Dr Tan Poh Heng. The committee oversees the disbursement of the funds, as well as reviews and approves all non-straightforward applications. In the case of straightforward applications, our Finance team assesses and approves them based on a set of criteria.

To ensure that needy patients receive timely financial assistance, patients with a Medifund memo from restructured hospitals no longer need to go through additional financial assessment at the polyclinics.

Through Medifund, NHGP helped 12 per cent more needy patients than in the previous financial year.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Types of Medifund to cater to the needs of residents at different age groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medifund</td>
<td>for Singapore Citizen adult above 18 and below 65</td>
</tr>
<tr>
<td>Medifund Silver</td>
<td>for Singapore Citizen elderly aged 65 years and above</td>
</tr>
<tr>
<td>Medifund Junior</td>
<td>for Singapore Citizen children aged below 18</td>
</tr>
</tbody>
</table>
With our rapidly-ageing population, primary care will play an increasingly crucial role in the years to come. The opening of the Family Medicine Academy today signals the importance of grooming new generations of well-trained and caring primary care doctors.”

Mrs Tan Ching Yee, Permanent Secretary, Ministry of Health, 4 September 2013
Family Medicine provides primary, preventive, comprehensive, continuing and coordinated healthcare in community settings to patients across all age groups. To do this well, NHGP strives to consistently equip present and future generations of healthcare providers with the right skills and knowledge. The Primary Care Academy was established in April 2007 to meet the professional training needs of primary health providers in Singapore and the region.

We also promote and conduct research into Family Medicine and Medical Education, as a means to develop, consolidate and disseminate new knowledge in achieving the vision of advancing Family Medicine.

**LAUNCH OF THE FAMILY MEDICINE ACADEMY**

NHGP added a boost to primary care with the launch of the Family Medicine Academy on 4 September 2013. The academy located at Bukit Batok Polyclinic trains medical undergraduates and doctors in Family Medicine to better meet the healthcare needs of Singapore’s rapidly-ageing and growing population.

The academy was jointly set up by NHG, NHGP and the Lee Kong Chian School of Medicine (LKCMedicine), with support from the Ministry of Health. The academy plays an integral role in the delivery of primary care training as part of an innovative curriculum mapped by LKCMedicine and NHG as its principal clinical training partner, with NHGP lending its primary care expertise.

The academy features a clinical skills laboratory which enables students to gain practical skills in primary care procedures. It also has specially-designed consultation rooms where students observe lecturers as well as learn and practise their clinical examination skills on-site.

The inaugural cohort of 54 LKCMedicine students spent one week in their first semester of Year One at the polyclinics, with the Family Medicine Academy as their base of training within the community. Students gained hands-on learning in the areas of clinical skills and procedures, as well as patient communication and examination skills under the guidance of primary care physicians from NHGP.

In addition to providing medical skills training, the academy also aims to promote research in Family Medicine, which will further strengthen primary care in Singapore.

**Figure 29a** Permanent Secretary for Health Mrs Tan Ching Yee unveiled the plaque at the official launch of the Family Medicine Academy at Bukit Batok Polyclinic.
CONTINUING EDUCATION AND DEVELOPMENT

1,000 Healthcare Practitioners Attend the Primary Care Forum
On 27 and 28 September 2013, the annual Primary Care Forum took place at Singapore EXPO, in conjunction with NHG’s Singapore Health and Biomedical Congress. About 1,000 healthcare practitioners and administrators from the public and private sectors attended the forum.

Themed ‘Advancing Primary Care: Adapting for the Future’, the forum examined the changing scope and role of primary care, and explored how primary care has to change in order to meet future healthcare needs.

The forum featured 20 prominent local and overseas speakers. Professor Chris van Weel, Former President of WONCA (World Organization of Family Doctors) and Emeritus Professor of General Practice in the Department of Primary and Community Care, Radboud University Nijmegen Medical Centre in the Netherlands, was the keynote speaker. Prof van Weel spoke about how the Dutch primary care system had reinvented itself continuously during times of crisis.

To help primary care practitioners cope with the increasing demand for healthcare in terms of quality and quantity, Dr Andrew Lee Ellner, Co-Director of Harvard Medical School Centre for Primary Care, spoke about how systems design and the development of high-value health teams could achieve higher quality care at lower cost.

“"The Family Medicine Academy heralds a new direction in the training of medical undergraduates — one in which primary care is given more attention and focus within the student’s curriculum. We hope the early exposure to primary care will leave a deep imprint on the students and encourage more to seriously consider making Family Medicine a career as they contribute to Singapore’s healthcare system.”

Adjunct A/Prof Chong Phui-Nah, Senior Director, Family Medicine Development and Primary Care Academy
Two panel discussions — chaired by Professor Chin Jing Jih, President of the Singapore Medical Association, and Dr Predeebha d/o P N Kannan, Deputy Director of Family Medicine Development and Primary Care Academy, respectively — explored the challenges and opportunities of private-public partnership and how team-based care could enhance a patient’s healthcare journey.

To help healthcare practitioners — especially solo GPs — navigate the medico-legal minefields in primary care, Associate Professor Goh Lee Gan, Professorial Fellow, Division of Family Medicine of National University Health Systems, delivered a lecture on “Shared Decision Making: From Abdication to Coercion”. Dr Julian Lim from private practice also shared his experiences in managing risk in general practice.

Various topics, such as the relevance and applicability of clinical practice guidelines in multimorbidity, international perspective on family medicine education and team-based learning, were also featured at the forum.

Figure 30a The Primary Care Forum 2013. From left: Dr Tang Wern Ee, Head, Clinical Research Unit, NHGP; Mr Leong Yew Meng, CEO, NHGP; Dr Darren Seah Ee-Jin, Organising Chair, Primary Care Forum 2013; Dr Lew Yli Jen, Senior Director, Clinical Services, NHGP; Dr Andrew Lee Ellner, Plenary Speaker; Mrs Tan Ching Yee, Permanent Secretary, Ministry of Health; Prof Chris van Weel, Keynote Speaker; Prof Philip Choo, Deputy Group CEO, NHGP; Adjunct A/Prof Chong Phui-Nah, Senior Director, Family Medicine Development and Primary Care Academy; Dr Richard Lee Meng Kam, Family Physician, Associate Consultant, NHGP; Dr Predeebha d/o P N Kannan, Deputy Director, Primary Care Academy, NHGP.

Figure 30b Prof Chris van Weel delivering his keynote address at the Primary Care Forum 2013.
**Five Medical Forums Organised in 2013**

The Family Medicine Development Division conducts bi-monthly medical forums to equip primary care doctors with the six competencies for healthcare professionals under the Accreditation Council for Graduate Medical Education (ACGME) framework: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice. Subject matter experts are invited to deliver the lectures.

In 2013, five medical forums were organised (Table 4).

**WDA Re-accreditation Course**

On 29 April 2013, the Primary Care Academy passed the Singapore Workforce Development Agency (WDA) Continuous Improvement Review audit and obtained re-accreditation for its course “Use of Medical Terminology at Work Activities”. The course adhered to the Singapore Workforce Skills Qualification System framework, guaranteeing the quality of the course delivery and assessment.

### Table 4 Medical forums conducted in 2013

<table>
<thead>
<tr>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home care: Delivering quality care to the doorstep</td>
<td>Sabrina Wong, Family Physician, Associate Consultant, Continuing and Community Care, TTSH</td>
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<td></td>
<td>Julian Lim, General Practitioner, Newlife Family Clinic and Surgery</td>
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<td>Community care of psychiatric patients: Nothing to fear, but fear itself!</td>
<td>Habeebul Rahman s/o Sahul Hameed, Consultant, Psychological Medicine, TTSH</td>
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<td></td>
<td>Colin Tan Yong Hui, Family Physician, Consultant, NHGP</td>
</tr>
<tr>
<td>Pitfalls of HbA1c testing in diabetes care</td>
<td>Daniel Chew, Senior Consultant, Endocrinology, TTSH</td>
</tr>
<tr>
<td>Common eye conditions: What to look out for?</td>
<td>Harold Choi, Associate Consultant, Ophthalmology, National University Hospital</td>
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<tr>
<td>Writing medical reports: Are you doing it right?</td>
<td>Lew Yii Jen, Senior Director, Clinical Services, NHGP</td>
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<td></td>
<td>Francis Mook, Vice President and Head (Life Operations), Prudential Assurance Company Singapore Pte Ltd</td>
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<tr>
<td></td>
<td>Jessica Soo, Partner, Litigation and Dispute Resolution Practice, Donaldson &amp; Burkinshaw</td>
</tr>
</tbody>
</table>

*Figure 31 A medical forum on 9 January 2014 at LKCMedicine.*
Nurses and Allied Health Professionals Trained for Extended Roles

As nurses and allied health professionals (AHPs) play a critical role in managing chronic conditions, the Primary Care Academy organised a nine-week Chronic Disease Management course from 22 January 2014 for 19 nurses and AHPs from NHGP. The course equipped participants with essential skills and knowledge to better manage chronic conditions.

With the roles of nurses extending to managing patients with mental health and geriatric issues, the course programme was enhanced to include Functional Assessment, Depression Screening (PHQ-9), Mini Mental State Examination, and Abbreviated Mental Test.

Figure 32a Nineteen nurses and allied health professionals participated in the nine-week Chronic Disease Management course from 22 January 2014.

Figure 32b Enrolled nurses who completed the Certificate in Wound Care course.
The second batch of eight registered nurses completed their advanced training in wound care. Separately, the second batch of 15 assistant nurses also graduated from the Certificate in Wound Care for Enrolled Nurses course on 5 November 2013. This six-month programme was developed by the Primary Care Academy and accredited by the Singapore Nursing Board. A Foundation Course on Women’s Health was also developed in July 2013. A total of 24 nurses have since attended the training.

Skills Upgrading for Patient Service Associates and Care Coordinators

About 150 Patient Service Associates (PSA) attended the Basic Health Parameters Course in 2013. The course trained the PSAs to measure patients’ weight and height, body mass index and temperature.

A course entitled “Basic Clinical Measurement Course for Care Coordinators” was specially developed by the Primary Care Academy to equip our new care coordinators with the knowledge and skills to measure patients’ weight and height, body mass index, temperature, blood pressure and glucose level. These skills and knowledge have enabled our care coordinators to pre-screen patients and support care managers in coordinating care for patients.

Figure 33 Training Consultant Ms Angeline Yeo explaining to the care coordinators how to do a blood glucose test.
**Learning from the Best**

In an evolving healthcare landscape, healthcare providers need to continue to learn, organise and translate new information into patient care in order to improve the system's performance.

In 2013, NHGP hosted six world-class subject matter experts (Table 5) to facilitate learning and sharing of best practices in primary care.

<table>
<thead>
<tr>
<th>No.</th>
<th>Visiting Expert</th>
<th>Topic</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Professor Andrew Farmer</strong>&lt;br&gt;Family Physician, South Oxford Health Centre&lt;br&gt;Research Associate, Diabetes Trials Unit, the Oxford Centre for Diabetes, Endocrinology and Metabolism&lt;br&gt;Director, Oxford Primary Care Trials Unit&lt;br&gt;Co-Director, National Institute for Health Research Comprehensive Local Research Network</td>
<td>Improving research capabilities and research culture in a primary care organisation; potential research areas in primary care and translational research</td>
<td>23 Aug 2013</td>
</tr>
<tr>
<td>2</td>
<td><strong>Professor Stephanie Studenski</strong>&lt;br&gt;Director of Research, Division of Geriatric Medicine&lt;br&gt;Program Director, Pittsburgh Pepper Center&lt;br&gt;Director, Area of Concentration in Geriatric Medicine&lt;br&gt;Staff Physician at the Geriatric Research Education and Clinical Center, VA Pittsburgh Healthcare System</td>
<td>Inter-professional collaboration; future research directions in geriatric care; primary care screening, assessment and prevention of falls; frailty and sarcopenia</td>
<td>26 – 30 Aug 2013</td>
</tr>
<tr>
<td>3</td>
<td><strong>Professor Chris van Weel</strong>&lt;br&gt;Emeritus Professor of General Practice, Department of Primary and Community Care, Radboud University Nijmegen Medical Centre, Netherlands</td>
<td>Insights from the healthcare reforms in the Netherlands; primary care research and medical education</td>
<td>24 – 28 Sep 2013</td>
</tr>
<tr>
<td>4</td>
<td><strong>Dr Andrew Lee Ellner</strong>&lt;br&gt;Co-Director, Centre for Primary Care, Harvard Medical School</td>
<td>Innovations for patient-centred primary care; medical education; and the creation of high functioning healthcare teams</td>
<td>26 Sep – 1 Oct 2013</td>
</tr>
<tr>
<td>5</td>
<td><strong>Dr William Gong</strong>&lt;br&gt;Associate Professor of Clinical Pharmacy, Director for Residency and Fellowship Training, University of Southern California School of Pharmacy</td>
<td>Ambulatory care services, credentialing system for clinical pharmacists</td>
<td>17 – 22 Feb 2014</td>
</tr>
<tr>
<td>6</td>
<td><strong>Dr Douglas Eby</strong>&lt;br&gt;Vice President, Medical Services Division, Southcentral Foundation</td>
<td>Southcentral Foundation, NUKA System of Care</td>
<td>15 Jan 2014</td>
</tr>
</tbody>
</table>
Figure 34  Prof Stephanie Studenski (right) celebrated World Physiotherapy Day with our physiotherapy team.

Figure 35  Prof Chris van Weel (fourth from left) with senior management of NHGP, NHG, and NHG Pharmacy.

Figure 36  Dr Andrew Lee Ellner (third from right) and the NHGP team.

Figure 37  Prof Douglas Eby (right) and NHGP CEO, Mr Leong Yew Meng.
Dr Tang Wern Ee Receives A Master of Science in Health Professions Education

Dr Tang Wern Ee, Head, Clinical Research Unit, Family Medicine Development, NHGP, received the Master of Science in Health Professions Education in May 2013. This was made possible by sponsorship from the Ministry of Health through its Health Manpower Development Programme Clinician Educator Award.

Conducted by the Massachusetts General Hospital Institute of Health Professions, the Master of Science in Health Professions Education Programme covers core educator competencies by the Massachusetts General Hospital Institute of Health Professions in collaboration with the Harvard Macy Institute and the Center for Medical Simulation.

Primary Care Academy Re-accredited

The Primary Care Academy has been accredited as a life support training centre by the National Resuscitation Council (NRC) since 2009. In July 2013, the Academy passed the re-accreditation audit and will continue to be an Automated External Defibrillation training centre for another two years, commencing 10 July 2013.
RECOGNISING OUR CLINICIAN-EDUCATORS

Clinician teachers are central to the successful education of graduates. In 2013, our clinician-educators and teaching partners were recognised for their commitment and contributions in teaching and mentoring junior clinicians.

**NHG Education Leaders Award**

Dong Lijuan  
Senior Nurse Educator, Nursing Services

**NHG Teaching Award for Nursing Preceptors**

Tan Pek Hoon  
Nurse Clinician, Woodlands Polyclinic

**NHG Outstanding Nurse Teachers Award**

Satran Kaur  
Senior Staff Nurse, Choa Chu Kang Polyclinic

**NHG Teaching Award for Junior Clinicians**

Lee Kwang How  
Family Physician, Bukit Batok Polyclinic

Low Kang Yih  
Family Physician, Ang Mo Kio Polyclinic

**NHG Teaching Award for Senior Preceptors**

Esther Bek  
Principal Pharmacist, NHG Pharmacy

Ong Soo Im  
Senior Pharmacist, NHG Pharmacy

**NHG Teaching Award for Junior Preceptors**

Kim Tan Lay Khim  
Senior Pharmacist, NHG Pharmacy

Ng Ying Ru  
Senior Pharmacist, NHG Pharmacy

**NHG Teaching Award for Allied Health Educators**

Grace Lee Lay Lay  
Assistant Manager, NHG Diagnostics

Peggy Tan Paik Geok  
Senior Radiographer, NHG Diagnostics

**NHGP Best Family Medicine Trainers’ Award 2013**

Lee Kwang How  
Family Physician, Bukit Batok Polyclinic

Ruth Zheng Mingli  
Family Physician, Bukit Batok Polyclinic

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*Figure 40* Five clinicians from NHGP receiving the NHG Teaching Award at the NHG Teachers’ Day on 6 September 2013 at Tan Tock Seng Hospital. From left: Dr Lee Kwang How (NHG Teaching Award for Junior Clinicians); Adjunct A/Prof Chong Phui-Nah, Senior Director, Family Medicine Development and Primary Care Academy; Ms Dong Lijuan (NHG Education Leaders Award); Ms Satran Kaur (NHG Outstanding Nurse Teachers Award); Ms Tan Pek Hoon (NHG Teaching Award for Nursing Preceptors); Mr Leong Yew Meng, CEO, NHGP. Not pictured: Dr Low Kang Yih (NHG Teaching Award for Junior Clinicians).
Figure 41  Winners of the Singapore Primary Research Award 2013. From left: Dr Lee Kwang How, Dr Darren Seah Ee-Jin, Ms Chan Cheuk Ying, Dr Karen Ng Ming Yann, Dr Richard Lee Meng Kam and Mr Gavin Cheah Jia Sheng.

Table 6  Winners of the Singapore Primary Care Research Competition 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>Principal Investigator</th>
<th>Research Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Gold</td>
<td>Does seeing the same doctor improve LDL-C control in patients with type 2 diabetes mellitus? A retrospective cohort study</td>
</tr>
<tr>
<td></td>
<td>Lee Kwang How,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Physician,</td>
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<tr>
<td></td>
<td>Bukit Batok Polyclinic</td>
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</tr>
<tr>
<td>Silver</td>
<td>Darren Seah Ee-Jin,</td>
<td>Photograph-assisted dietary review amongst type 2 diabetics in primary care (see Special Feature)</td>
</tr>
<tr>
<td></td>
<td>Family Physician,</td>
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<tr>
<td></td>
<td>Associate Consultant,</td>
<td></td>
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<tr>
<td></td>
<td>Family Medicine</td>
<td></td>
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<tr>
<td></td>
<td>Development</td>
<td></td>
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<tr>
<td>Bronze</td>
<td>Chan Cheuk Ying,</td>
<td>Hypoglycaemia management of patients with type 2 diabetes in a primary care setting: A best practice implementation project</td>
</tr>
<tr>
<td></td>
<td>Senior Staff Nurse,</td>
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<td></td>
<td>Hougang Polyclinic</td>
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<tr>
<td>Poster</td>
<td>Gold</td>
<td>Does a blended interprofessional learning workshop improve infection control knowledge among primary care healthcare teams?</td>
</tr>
<tr>
<td></td>
<td>Karen Ng Ming Yann,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Physician,</td>
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<tr>
<td></td>
<td>Consultant,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ang Mo Kio Polyclinic</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>Gavin Cheah Jia Sheng,</td>
<td>Patient satisfaction with pharmacist-managed Hypertension-Diabetes-Lipids Clinic and its relation to medication adherence and beliefs about medication</td>
</tr>
<tr>
<td></td>
<td>Pharmacist,</td>
<td></td>
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<tr>
<td></td>
<td>NHG Pharmacy</td>
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</tr>
<tr>
<td>Bronze</td>
<td>Richard Lee Meng Kam,</td>
<td>The prevalence of anaemia in patients on aspirin in a primary care setting</td>
</tr>
<tr>
<td></td>
<td>Family Physician,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Associate Consultant,</td>
<td></td>
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<tr>
<td></td>
<td>Clementi Polyclinic</td>
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Snap photos of meals to control diabetes

Taking photos of our meals has become an increasingly common sight in Singapore. But for diabetes patients, these food photos may serve a purpose that goes beyond sharing with friends on social media sites. A research study at NHGP showed that keeping photographic records of a patient’s dietary intake helps them better manage their condition.

The World Health Organization has predicted that the number of people with diabetes will increase from 135 million in 1995 to 300 million by 2025, with the greatest increases seen in Asia. Many studies have reported that the use of multidisciplinary approaches to effect positive changes in patients’ lifestyle can improve glycaemic control and delay or reduce further disease complications.

Evidence also suggests that dietitian-led diabetes management and dietary advice improve metabolic outcomes in patients with type 2 diabetes mellitus. However, barriers such as confusion over the proper diet components impede patients’ adherence to dietary recommendations.

In the study led by Dr Darren Seah Ee-Jin, Family Physician and Associate Consultant in NHGP, 38 diabetic patients were reviewed at two visits with dietitians, 14 weeks apart. Patients received routine care at the first visit and were asked to keep a three-day food photo journal. At the next visit, these photos were used to facilitate counselling in which the dietitians advised the patients based on their journals and encouraged them to take an interest in improving their health. Following the second visit, these patients’ metabolic parameters were measured twice, each at 12 to 16 weeks’ interval.

The photo-assisted dietary reviews improved the metabolic parameters among these patients. These include a significant decrease in body mass index, HbA1c level and mean systolic blood pressure.

The Patient Activation Measure scores — a scale to gauge the knowledge, skills and confidence essential to managing one’s own health — have also increased significantly. This indicated that patients could manage their condition better.

The study is one of six winning projects in the Singapore Primary Care Research Scientific Competition, which concluded on 25 September 2013.
Research Publications by NHGP Staff
The following NHGP staff have published their work as first authors in various peer-reviewed journals.

<table>
<thead>
<tr>
<th>Title of publication</th>
<th>Journal title</th>
<th>First author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice for individuals travelling to high altitude</td>
<td>Singapore Family Physician</td>
<td>Lee Eng Sing, Family Physician, Consultant, Hougang Polyclinic</td>
</tr>
<tr>
<td>Applying mastery learning in a clinical skills training programme for primary care nurses</td>
<td>The Journal of Continuing Education in Nursing</td>
<td>Tang Wern Ee, Family Physician, Consultant, Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>Cytochrome P450 drug interactions with statin therapy</td>
<td>Singapore Medical Journal</td>
<td>Ivanna Goh Xin Wei, Resident Physician, Woodlands Polyclinic</td>
</tr>
<tr>
<td>The minimal clinically important difference of six-minute walk in Asian older adults</td>
<td>BMC Geriatrics</td>
<td>Kwok Boon Chong, Senior Physiotherapist, Clinical Services</td>
</tr>
<tr>
<td>Understanding the perception of patients with type 2 diabetes on insulin therapy at primary health care setting in Singapore</td>
<td>Singapore Nursing Journal</td>
<td>Carolyn Chan Mei Fong, Advanced Practice Nurse, Jurong Polyclinic</td>
</tr>
</tbody>
</table>

Research Grants to Advance Family Medicine
The following NHGP staff have received grants for their research work. These grants serve to inspire more research in NHGP to strengthen and transform care and improve the health of patients, their families and the larger community.

<table>
<thead>
<tr>
<th>Study Title</th>
<th>Principal Investigator</th>
<th>Start/End Date</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness of structured group diabetes education for newly-diagnosed type 2 diabetes mellitus patients</td>
<td>Ng Soh Mui, Senior Nurse Clinician, Jurong Polyclinic</td>
<td>Aug 2013/ Mar 2015</td>
<td>NHGP Research Fund</td>
</tr>
<tr>
<td>A comparative study evaluating patient adherence, satisfaction and handling techniques of different types of dry powder inhalers</td>
<td>Tang Wern Ee, Family Physician, Consultant, Bukit Batok Polyclinic</td>
<td>Jun 2014/ Mar 2016</td>
<td>NHG-KTPH Small Innovative Grant</td>
</tr>
</tbody>
</table>
Dr Lee Eng Sing Receives the First NMRC Research Training Fellowship

Dr Lee Eng Sing, Family Physician, Consultant at Hougang Polyclinic, received a National Medical Research Council (NMRC) Research Training Fellowship to pursue a Master of Clinical Science in Family Medicine offered by the Department of Family Medicine, Schulich School of Medicine & Dentistry at Western University in Ontario, Canada. This is the first NMRC award received by NHGP.

The training fellowship is awarded to outstanding and talented clinicians, health science professionals (e.g. nurses, pharmacists) and biostatisticians for overseas research training or to pursue a graduate degree in research in local institutions. The programme covers teaching and learning, theoretical foundations, advanced patient centered medicine and research methods in Family Medicine.

Six Nurses Trained in Translational Nursing Research

Six NHGP nurses completed a six-month Evidence Based Clinical Fellowship Programme by the Joanna Briggs Institute (JBI). As part of the programme, they were required to complete an evidence-based nursing study. They also learned to use the JBI Practical Application of Clinical Evidence System, a Web-based toolkit, to guide them in translating research findings into clinical practice.

Evon Oh  
Senior Staff Nurse, Bukit Batok Polyclinic

Chan Cheuk Ying  
Senior Staff Nurse, Hougang Polyclinic

Hamha Bte Mohd Hamzah  
Senior Staff Nurse, Hougang Polyclinic

Magdalene Lee Yen Ling  
Senior Staff Nurse, Ang Mo Kio Polyclinic

Rachel King Xiao Li  
Staff Nurse, Toa Payoh Polyclinic

Wen Xia  
Senior Staff Nurse, Hougang Polyclinic

Formation of the Nursing Research Committee

An Evidence-Based Nursing and Research Committee was formed June 2013. The committee, made up of registered nurses with a common interest in nursing research, identifies research topics, secures research grants and coordinates evidence-based nursing research at NHGP. To promote evidence-based nursing and increase nursing standards, the committee also disseminates research findings through seminars and conferences. Apart from these functions, the committee encourages and mentors young nurse researchers in their research work.
First Qualitative Research Workshop
On 22 May 2013, the Primary Care Academy organised the first Qualitative Research Workshop for NHGP staff. The course was conducted by Mr Issac Lim, Assistant Director, Education Development Office, NHG.

Qualitative research is an important component of any clinical and health services research programme. Due to the ability of qualitative methods to dissect complex phenomena, more clinical researchers use such methods alongside randomised controlled trials to define and refine their research questions.

Quarterly Research Forums to Facilitate Learning
The Clinical Research Unit hosted quarterly research forums in 2013. The Research Forum is a platform for NHGP staff to showcase their research, as well as refine their research ideas and network. A learning component on biostatistics for researchers was added into the programme in 2013. The forums have over time attracted more attendees from pharmacy and allied health, in addition to doctors and nurses, and the feedback from participants has been positive.

PROFESSIONAL ADVANCEMENT
14 Doctors Attain Masters in Family Medicine
Fourteen doctors passed the Master of Medicine (Family Medicine) examinations in November 2013. This is an increase from five doctors last year. Dr Teo Hui Ying Valerie topped the 2013 cohort and clinched the Gold Medal award for the examinations nationwide.

Aysha Reema Muhsin
Medical Officer, Choa Chu Kang Polyclinic

Choo An-Qi Christine
Resident Physician, Jurong Polyclinic

Daniel Rufus
Family Physician, Senior Staff, Woodlands Polyclinic

John Cheng Ping Chang
Medical Officer, Yishun Polyclinic

Kong Jing Wen
Family Physician, Bukit Batok Polyclinic

Lai Shanhui
Family Physician, Choa Chu Kang Polyclinic

Lim Ziliang
Resident Physician, Bukit Batok Polyclinic

Manojkumar Kharbanda
Family Physician, Senior Staff, Ang Mo Kio Polyclinic

Ramasamy Jaganmohan Raja
Family Physician, Senior Staff, Woodlands Polyclinic

Sharon Ong Ee Wei
Resident Physician, Jurong Polyclinic

Tan Khai Wei
Resident Physician, Toa Payoh Polyclinic

Tan Wee Hian
Family Physician, Jurong Polyclinic

Teo Hui Ying Valerie
Resident Physician, Ang Mo Kio Polyclinic

Wee Wei Keong
Director, Health Promotion & Preventive Care
Eight Doctors Receive Graduate Diploma in Family Medicine

Eight doctors passed the Graduate Diploma in Family Medicine (GDFM) examinations in July 2013, achieving a 100 per cent pass rate. The GDFM is a post-graduate structured training programme that equips family doctors in Singapore with skills to enhance their level of care to patients.

Bagasol Jonna Charisma Agbayani
Medical Officer, Clementi Polyclinic

Chong Wern Siew Christopher
Family Physician, Ang Mo Kio Polyclinic

Cordez Sherry Hugo
Medical Officer, Toa Payoh Polyclinic

Khor Yee Han
Family Physician, Senior Staff, Toa Payoh Polyclinic

Ong Ai Li
Resident Physician, Ang Mo Kio Polyclinic

Sak Wai Mei Caron
Family Physician, Clementi Polyclinic

Say Tian Ling
Resident Physician, Woodlands Polyclinic

Steven Chao
Medical Officer, Toa Payoh Polyclinic

Two Pharmacists Achieve US Board Certified Ambulatory Care Pharmacist Certification

Two NHG pharmacists met the requirements set by the US Board of Pharmacy Specialties (BPS) to be certified as US Board Certified Ambulatory Care Pharmacist® (BCACP) in December 2013. The BCACP certification, which is valid for seven years, is a highly visible, peer-recognised credential that signals a higher level of excellence in specialty pharmacy practice. With specialty-trained pharmacists being a part of the collaborative care team, enhanced patient satisfaction has been documented with fewer complications in drug treatment, improved laboratory monitoring and a reduction in unnecessary medications.

Chia Hui Shan
Senior Pharmacist, NHG Pharmacy

Tan Beng Li
Senior Pharmacist, NHG Pharmacy

Growing our Pool of Advanced Practice Nurses

On 9 October 2013, Advanced Practice Nurse (APN) intern, Ms Bian Li from Bukit Batok Polyclinic, was certified as an APN by the Singapore Nursing Board after fulfilling an APN Certification Panel Interview. She had earlier completed a 24-month Master of Nursing Programme and a one-year internship that involved supervised clinical practice. Ms Bian Li worked collaboratively with doctors and other healthcare professionals to manage patients with chronic diseases.
Chapter 5:

Promoting Health and Preventing Disease

“I would like to thank Dr Rohit Bansal for giving me good advice and encouraging me to stop smoking and control my asthma. He’s a good doctor.”

Mr Muhd Suhairie Bin Jumahat, a patient at Jurong Polyclinic, 26 November 2013
Due to the significant increase in lifestyle diseases, early identification of risk factors and prevention initiatives are now a part of everyday practice in primary care. While polyclinic visits present a window of opportunity during which our care teams play a key role in educating patients on health promotion and disease prevention, NHGP is extending our influence beyond the walls of our polyclinics. From offering various health screening programmes in the polyclinics to conducting health talks in the community, NHGP is committed to empowering our population to take charge of their own health and adding years of health life.

**PROMOTING HEALTH AMONG PATIENTS**

**Systematic Health Risk Profiling (SHARP)**

NHGP piloted a Systematic Health Risk Profiling (SHARP) programme at Choa Chu Kang Polyclinic from 12 November 2013. The initiative involves a health promoter offering cancer screening tests to suitable chronic patients who are waiting for doctor consultations or lab results in the clinics.

The three cancer screening tests offered as part of the pilot are mammogram, Pap smear, and faecal occult blood tests (FOBT). The health promoter screens for cancer risk factors (e.g. age, gender) among chronic patients who are present at the clinic and checks against the Health Promotion Board database to determine if they are due for screening. She then recommends the relevant screening tests to eligible patients.

As of March 2014, some 600 patients took up the tests. The results were sent to the relevant stakeholders (e.g. FOBT results to the Health Promotion Board) for follow-up.
World Mental Health Awareness Month Campaign

During the World Mental Health Awareness Month in October 2013, our psychologists and the Health Promotion and Preventive Care Division organised a series of roadshows themed ‘Gratitude’. Patients were educated on the concept of gratitude and how it relates to their well-being. Booths manned by the psychologists were set up in the clinics and lunchtime talks were also organised for staff.

Colorectal Cancer Awareness Month Campaign

Colorectal cancer is the No. 1 cancer in Singapore among men and women. During the Colorectal Cancer Awareness Month of March 2014, NHGP collaborated with Singapore Cancer Society (SCS) to raise public awareness of colorectal cancer. As the risk of colorectal cancer is higher among those aged 50 and over, the campaign emphasised the importance of colorectal cancer screening to eligible patients and visitors at our polyclinics. Educational booths were set up in all our clinics. NHGP also worked with SCS to distribute Faecal Immunochemical Test kits to eligible patients at all nine clinics.

Health Promotion Videos Screened at Polyclinics

NHGP engaged Brand New Media Pte Ltd to screen their health promotion videos at our polyclinics. The videos, sponsored by the Health Promotion Board, allow patients to learn health tips while waiting for their consultation.

Promoting Hand Hygiene to Public and Staff

To celebrate Hand Hygiene Day on 5 May, as well as to promote hand hygiene, NHGP conducted activities for staff and the public. Booths were set up to encourage public interest and participation. Our Infection Control Advocates conducted public education about when hands should be cleaned, and demonstrated the six simple steps of hand washing. Lunchtime talks were also organised for staff to highlight the importance of hand hygiene and compliance.

For health-promoting activities in the community, please refer to page 81.
PROMOTING HEALTH AMONG STAFF

Staff Take Part in Annual Health Screening
About 80 per cent of NHGP staff took part in the annual health screening programme in 2013. Intervention programmes were offered to those found to have health issues based on their fasting blood glucose level, lipid profile, health and lifestyle survey, and Body Mass Index.

In May 2013, 30 staff participated in a weight management programme organised by the Health Promotion and Disease Prevention (HPPC) Division. Through classes and consultations led by our dietitians and health promotion consultants, participants learned to better manage their weight through lifestyle changes. At the end of the programme, 24 participants had achieved their weight loss goals.

The HPPC Division also conducted post-health screening talks to help staff understand their health status and encourage them to adopt a healthy lifestyle. In addition, various activities such as fruit days, aerobics classes, health talks and workshops were also regularly organised.

800 Staff Participate in Active Day
On 5 October 2013, about 800 staff participated in Active Day at Nanyang Polytechnic’s Sports Complex. The annual event was organised by NHGP to encourage staff to stay active and healthy.

The event kicked off with a Zumba performance by the senior management team. It was followed by a mass Zumba session to help participants warm up before the Fitness Challenge. During the challenge, all teams competed in a series of calisthenics exercises in a relay format to test various aspects of the participants’ physical fitness. The Ang Mo Kio Polyclinic team was crowned champion of this year’s Fitness Challenge.

NHGP Runs 1,126 km at Standard Chartered Marathon
A team of 106 staff from NHGP, NHG Diagnostics and NHG Pharmacy participated in the Standard Chartered Marathon Singapore — Corporate Distance Challenge on 1 December 2013. The team ran a commendable total of 1,126 km. Following the successful round-up of the marathon, the winners, including NHGP, were invited to an appreciation lunch at the Conrad Centennial Singapore hotel on 10 January 2014.

It’s a personal responsibility to stay active and healthy for the sake of our beloved families. As a healthcare institution, NHGP encourages our staff to take up the challenge together and ‘run’ the talk.”

NHGP CEO Mr Leong Yew Meng, who also participated in the Standard Chartered Marathon, on running as an organisation.
**NHG Sports Meet & Fun Walk**

On 19 October 2013, NHGP staff participated in the NHG Sports Meet-cum-Fun Walk. The staff took part in the Cross Country run and Telematches, displaying our strong team spirit. The event also allowed staff to spend quality time with their families, as many colleagues brought their loved ones along to take part in the fun-walk and participate in the different events of the day.

**70 Staff Weighing in for the 1 Million kg Challenge**

In support of the nation-wide weight management initiative 1 Million kg Challenge™, NHGP worked with NHG to bring a Health Promotion Board’s roadshow to our headquarters on 3 April 2014. The event drew about 70 NHGP staff to register and do a weigh-in at the Wellness Kiosks, which were specially brought in for the roadshow.

Launched by the Health Promotion Board on 15 March, the 1 Million kg Challenge™ aims to encourage Singaporeans to take small steps towards a healthier lifestyle, at a pace suited for each individual. The initiative rewards every healthy action with “pixels” which can be used to redeem a prize.

**Figure 46a** Mr Simon Tan, Director, Human Resource and Finance, NHGP (left), receiving a commemorative plaque on behalf of NHGP for the Corporate Distance Challenge.

**Figure 46b** Participants from the NHGP Human Resource Division at the Corporate Distance Challenge.

**Figure 47** NHGP colleagues cheering our teams on in the Telematches at the NHG Sports Meet on 19 October 2013.
Lunch Dates with Dietitians

NHGP staff gathered during their break to learn from our dietitian colleagues how to achieve a balanced diet in spite of their busy schedules. The lunchtime sessions were conducted at all nine polyclinics and headquarters over four days from 11 to 14 March, in conjunction with Dietitian’s Day on 12 March 2014.

During the sessions, NHGP dietitians introduced to staff the concept of the Healthy Plate — a simple visual guide to help people choose the right type and right amount of food in a plate setting. A pasta salad-making session was also conducted to give staff hands-on experience in creating a quick, healthy and tasty meal.

Figure 49 Ms Lynette Goh, Dietitian, NHGP, demonstrating to staff how to prepare healthy salad dressing.

Figure 48 About 70 NHGP staff signed up for the 1 Million kg Challenge during the roadshow on 3 April 2014.
Celebrating Healthy Smiles
In celebration of World Oral Health Day on 20 March, the Dental Division organised a roadshow themed “Celebrating Healthy Smiles” to share dental health information and oral health care tips with 150 staff at NHGP Headquarters.

Workplace Safety and Health Celebration
NHGP celebrated Workplace Safety and Health (WSH) Day in February and March 2014. The celebration included a series of lunchtime talks and exhibitions across our nine clinics and headquarters. To increase awareness and knowledge about workplace safety and health, the talks and exhibitions covered topics such as sharps injuries; infectious diseases and hand hygiene; slips, trips and falls; and office ergonomics. A multimedia interactive hazard identification game was introduced to facilitate learning in a fun way.
In this photo: NHGP collaborated with NHG Diagnostics, Khoo Teck Puat Hospital, and the Agency for Integrated Care to set up a healthcare booth at the Sembawang GRC Healthy Lifestyle and Celebrate Wellness Roadshow on 18 August 2013. Some 280 residents benefited from the health screening and counselling, mammogram and bone mineral densitometry screening.

Chapter 6:
Engaging the Community and Stakeholders

“There are many providers in the community who could help look into our patients’ non-medical issues. As a primary care provider, our role is to help connect the dots, engaging suitable community providers to look into the different needs of our patients to complete the big picture of health.”

Adjunct A/Prof Chong Phui-Nah, Chief Executive Officer, NHGP
With a rapidly-ageing and growing population in Singapore suffering from chronic diseases and the emergence of smaller family units lacking in care support, NHGP recognises that our focus on a patient’s well-being is no longer confined to the walls of the polyclinic. Patient-centric care that takes into account the holistic needs of the individual is essential to ensuring optimal health outcomes.

**Chronic Care Collaborations with Nursing Homes**
The Chronic Care Collaboration at Angsana Home started in October 2013, involving Ang Mo Kio Thye Hua Kwan (AMT-THK) Hospital, Angsana Home@Pelangi Village and NHGP.

As the result of the collaboration, residents of Angsana Home no longer need to visit the polyclinics to refill their chronic medications or have their blood tests done. Doctors from AMK-THK Hospital are empowered to see the residents, whose chronic conditions are stable, at the Home and fax the prescriptions to NHG Pharmacy. The subsidised medications can then be collected the next day by the Home’s staff.

Similarly, for residents who require blood tests, blood specimens are collected by the Home’s nurses and sent to the NHG Diagnostics referral laboratory for processing. Test results are then sent to the Home for follow-up the next day.

This collaboration brings greater convenience to the Home’s residents and cuts the resources required to bring them to the clinic. As a result, the nurses of Angsana Home can spend more time on clinical care. From October 2013 to March 2014, about 50 residents benefited from this initiative.

Following the successful pilot at Angsana Home, NHGP started a similar collaboration with St. Andrew’s Nursing Home — a psychiatric nursing home — in April 2014. More than 200 resident-patients are expected to benefit from this initiative.
Primary Care Community Case Management

Since September 2013, Ang Mo Kio Polyclinic has been partnering with Thye Hua Kwan Moral Charities to improve patients’ access to social and welfare services.

Our doctor and care manager refer patients who have psychosocial and functional needs to Thye Hua Kwan Moral Charities (THKMC). THKMC sends a case manager to the patients’ home to assess their needs in various aspects such as nutrition, mobility and fall risks.

Once their specific needs are established, the case manager from THKMC, together with NHGP, will help these patients apply for the requisite services, such as medical transport services, meals-on-wheels services, home retrofitting to prevent falls, and day rehabilitation. Every month, NHGP and the team from THKMC meet to discuss and follow up on these referred cases. As of May 2014, 11 patients had benefited from this pilot.

Starting in March 2014, NHGP expanded the collaboration to include Ang Mo Kio Family Service Centre. In FY2014, we will engage more partners, such as NTUC Eldercare and Lions Befrienders, to provide similar services to patients at the Hougang and Toa Payoh Polyclinics.

The collaboration is useful in ensuring that patients are given comprehensive care in the community. It also reduces unplanned visits to polyclinics and hospitals due to poorly-controlled health conditions.
Connecting the Dots

Due to an ageing population and smaller family units in which care support is sometimes lacking, NHGP is working with community and social providers to holistically care for chronic patients with multiple care needs.

One such collaboration involves Thye Hua Kwan Moral Charities (THKMC) and Ang Mo Kio Polyclinic. Since last year, the two have jointly provided interventions that look into medical, psychosocial and functional needs of NHGP patients.

Mr Chong Jeen Ktong, 82, is a regular patient at NHGP who has benefited from the collaboration. He suffers from multiple ailments including hypertension, asthma, lower limb weakness and benign prostatic hyperplasia. He operated a stall in a coffee shop from 1988 to 1998, but had to stop due to health reasons.

During one of his regular consultations in September 2013, Dr Djoni Huang, Deputy Head of Ang Mo Kio Polyclinic, noticed that Mr Chong had been admitted to the emergency department seven times and hospitalised three times within the span of a year. Later, he found out that Mr Chong — a wheelchair user — was hindered by a couple of stairs at the doorstep of his home. When he needed to go to the hospital, he would call for an ambulance to transport him using a stretcher. It was equally challenging for him to go to the polyclinic.

His wife, aged 75, also faced challenges as a caregiver. She stopped working in late 2013 after undergoing a knee operation.

Dr Huang believed that one way to help Mr Chong to improve his mobility issue was to encourage him to stay active. Dr Huang, together with a caseworker from THKMC, made a home visit to learn more about Mr Chong’s situation.

In November 2013, Mr Chong started experiencing a turnaround in his situation when NHGP’s financial counsellor helped him to apply for Medifund assistance.

Three months ago, with the help of THKMC, Mr Chong started going for rehabilitation at a day care centre manned by the Asian Women’s Welfare Association (AWWA).

Despite some hesitation he had over the arrangement, Mr Chong soon got accustomed to the routine. Besides making friends at the centre, Mr Chong has seen improvements in his mobility and is now less dependent on the wheelchair. He is able to move around more confidently with a walking frame and desires to be more mobile on his own in the neighbourhood. He even took part in the activities organised by the centre, such as a recent visit to Chinatown during Chinese New Year to soak in the festive mood, something he had been unable to do for many years.

His wife’s load as a caregiver has since lightened, as Mr Chong is well taken care of at the rehabilitation day care centre.

Furthermore, as most of Mr Chong’s specialist outpatient visits at the hospital are now consolidated, he can visit the polyclinic for many of his conditions and does not need to make unplanned visits to the hospital.

Dr Huang explains that medical care accounts for only about 20 per cent of what affects people’s health. Other factors that play a much bigger part — such as diet, exercise, stress, compliance with medication regimes and the home environment — are what doctors have little control over.

Says Adjunct A/Prof Chong Phui-Nah, CEO of NHGP, “There are many providers in the community who could help to look into these non-medical issues. As a primary care provider, our role is to help connect the dots, engaging suitable community providers to look into the different needs to complete the big picture for better health.”
Direct Access to Subsidised Medications and Lab Tests for Home-Bound Patients
Since August 2012, NHGP, NHG Pharmacy and NHG Diagnostics have been working with the Home Nursing Foundation (HNF) to optimise care for home-bound patients.

HNF has a panel of affiliated general practitioners who make house visits to attend to home-bound patients and assess their medical conditions. Through the collaboration, we enabled direct access to subsidised diagnostics and laboratory tests and medications issued by the affiliated GPs.

The collaboration started as a pilot at the Hougang, Toa Payoh and Ang Mo Kio Polyclinics in August 2012. Since July 2013, this direct access has been made available at all nine NHGP polyclinics. Between July 2013 and February 2014, about 280 home-bound patients benefited from the collaboration, charting about 680 visits for medication refilling.

Encouraging the Family to Play a Supporting Role in Caring for Elders
“Because I Love You” (B.I.L.Y.) is a public awareness effort launched by NHGP in 2014 to encourage families of patients to play a bigger role in their loved one’s health journey. Caring as a family can bring about positive outcomes for the elderly suffering from chronic diseases, as well as encourage those who are well to stay healthy and lead more fulfilling lives. This is in line with NHGP’s vision of health promotion within the community and our culture of care.

B.I.L.Y. posters are displayed in our clinics and headquarters to encourage the public to play an active part in caring for the elderly and photo competitions. A website and a Facebook page were also launched on 4 April 2014 to share inspirational stories about family support and provide access to health education and health tips.

NHGP sees this as not only benefiting our patients and families, but also as our corporate responsibility to bring this message to the community at large.

Through providing a supportive home environment of care, promoting an active lifestyle and a healthy diet, or simply being a listening ear, every one of us can make a difference in the lives of loved ones who are ill.”

Dr Peter Chow, Director, Corporate Development, NHGP
Volunteers Help Look Out for Those at Risk of Falls
The Falls Ambassador Volunteer Programme started at Toa Payoh Polyclinic in July 2012. Following the successful pilot, the programme was extended to Hougang Polyclinic in September 2013. With the help of some 20 volunteers, the programme now reaches out to at least 100 patients a day, many of whom are elderly, at both clinics.

The elderly make up 24 per cent of patients across our nine clinics and many visit the clinics unaccompanied. The volunteers help to identify patients who are at risk of falling — such as those walking unsteadily or holding walking aids — and tag them with yellow stickers. This visual cue helps to remind all staff in the polyclinics to look out for those at risk.

They also offer older patients or the visually-impaired the use of a wheelchair. In addition to helping older patients at the clinics, the volunteers take the opportunity to share tips on falls prevention with them. The volunteers also direct elderly patients towards relevant schemes aimed at lowering their risk of falls. For instance, the Seniors’ Mobility Fund can be used to provide subsidies for mobility devices and transportation for elderly patients.

NHGP sponsors our regular volunteers’ participation at workshops on the observation of patients at risk of falls and transfer techniques, in addition to hands-on training provided by dedicated programme coordinators.

Volunteering is a journey of exchange. NHGP wants to build a mutually-beneficial relationship in which our volunteers use their strengths, passion and dedication not only to benefit our patients, but to positively enhance their own lives.”

Dr Peter Chow, Director, Corporate Development, NHGP
Supporting community activities to promote health

NHGP, NHG Diagnostics, and NHG Pharmacy supported health-promoting causes by providing health screening and talks, among other engagement activities, to the community through various events held at community centres and at the workplace. See Table 9 for the list of 35 community activities that we supported.

<table>
<thead>
<tr>
<th>No.</th>
<th>Period</th>
<th>Type of Activities</th>
<th>Event / Venue</th>
<th>Supported by</th>
<th>No. of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apr – Jun 2013</td>
<td>Mammogram screening</td>
<td>BEAM15 (Breast Cancer Foundation Encouragement for Active Mammograms)</td>
<td>NHG Diagnostics</td>
<td>3,064</td>
</tr>
<tr>
<td>2</td>
<td>Apr – Aug 2013</td>
<td>Annual dental check-up</td>
<td>Meranti Home</td>
<td>Hougang Polyclinic</td>
<td>220</td>
</tr>
<tr>
<td>3</td>
<td>7 Apr 2013</td>
<td>Guest judges</td>
<td>Sunday Joy at Baby 2013 Singapore by Teck Ghee Community Club</td>
<td>Ang Mo Kio Polyclinic</td>
<td>150</td>
</tr>
<tr>
<td>4</td>
<td>18 – 19 May 2013</td>
<td>Event sponsorship and educational booths</td>
<td>Osteoporosis — An Asian Perspective</td>
<td>NHG Diagnostics</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>13 – 15 Jun 2013</td>
<td>Clothes donation</td>
<td>Electrolux Washing-Thon</td>
<td>NHGP HQ</td>
<td>NA</td>
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<tr>
<td>7</td>
<td>10 Jul 2013</td>
<td>Hand hygiene outreach</td>
<td>Carpe Diem Kindergarten and Childcare Centre</td>
<td>NHGP HQ</td>
<td>100</td>
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<tr>
<td>8</td>
<td>14 Jul 2013</td>
<td>Guest judges</td>
<td>Clementi Community Centre Baby Show</td>
<td>Clementi Polyclinic</td>
<td>NA</td>
</tr>
<tr>
<td>9</td>
<td>29 Jul 2013</td>
<td>Guest judges</td>
<td>Yew Tee Baby Show by Yew Tee Community Club</td>
<td>Choa Chu Kang Polyclinic</td>
<td>NA</td>
</tr>
<tr>
<td>10</td>
<td>Jul 2013</td>
<td>Workplace Smoking Cessation Programme</td>
<td>Langdon &amp; Seah</td>
<td>NHG Pharmacy</td>
<td>9</td>
</tr>
<tr>
<td>11</td>
<td>18 Aug 2013</td>
<td>Health screening and counselling, vision test, oral health instructions, bone mineral densitometry screening, mammogram</td>
<td>Sembawang GRC Healthy Lifestyle and Celebrate Wellness Roadshow</td>
<td>Yishun and Woodlands Polyclinics, Dental Division, NHG Diagnostics</td>
<td>280</td>
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<table>
<thead>
<tr>
<th>No.</th>
<th>Period</th>
<th>Type of Activities</th>
<th>Event / Venue</th>
<th>Supported by</th>
<th>No. of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>31 Aug 2013</td>
<td>Mammogram screening and subsidy vouchers for mammogram</td>
<td>Novena Health City Day 2013 Walkathon</td>
<td>NHG Diagnostics</td>
<td>509</td>
</tr>
<tr>
<td>13</td>
<td>28 Sep 2013</td>
<td>Distributing flyers for a health screening event for elderly residents at Rental Block 9, Teck Whye Lane</td>
<td>Fei Yue Community Services</td>
<td>Choa Chu Kang Polyclinic</td>
<td>NA</td>
</tr>
<tr>
<td>14</td>
<td>28 Sep 2013</td>
<td>Zumba session for residents at Rental Block 165A, Teck Whye Crescent</td>
<td>Block party by Fei Yue Family Service Centre</td>
<td>NHGP</td>
<td>NA</td>
</tr>
<tr>
<td>15</td>
<td>21 – 22 Sep 2013</td>
<td>Health screening for needy elderly</td>
<td>NUS Neighborhood Health Screening</td>
<td>NHG Diagnostics</td>
<td>82</td>
</tr>
<tr>
<td>16</td>
<td>28 Sep 2013</td>
<td>Mammogram screening and subsidy vouchers</td>
<td>Pink Ribbon Walk 2013 by Breast Cancer Foundation</td>
<td>NHG Diagnostics</td>
<td>512</td>
</tr>
<tr>
<td>17</td>
<td>12 Oct 2013</td>
<td>Talk: Healthcare and community support services</td>
<td>Clementi Community Centre</td>
<td>Clementi Polyclinic</td>
<td>120</td>
</tr>
<tr>
<td>18</td>
<td>14 – 26 Oct 2013</td>
<td>Free medications review and talks: Know Your Medicines, Get it Right</td>
<td>Annual Pharmacy Week</td>
<td>NHG Pharmacy</td>
<td>88</td>
</tr>
<tr>
<td>19</td>
<td>19 Oct 2013</td>
<td>Health screening and talks</td>
<td>Hong Kah North Community Centre</td>
<td>Bukit Batok Polyclinic</td>
<td>241</td>
</tr>
<tr>
<td>20</td>
<td>30 – 31 Oct 2013</td>
<td>Basic smoking cessation counselling workshop</td>
<td>Ministry of Defence</td>
<td>NHG Pharmacy</td>
<td>13</td>
</tr>
<tr>
<td>21</td>
<td>14 – 15 Nov 2013</td>
<td>Talk and health screening</td>
<td>Silver Fiesta 2013 by YMCA and Central Singapore CDC</td>
<td>NHG Diagnostics, NHGP</td>
<td>2,000</td>
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<tr>
<td>22</td>
<td>23 Nov 2013</td>
<td>Talk: DASH (Dietary Approaches to Stop Hypertension) Diet</td>
<td>Community health programme</td>
<td>Toa Payoh Polyclinic</td>
<td>100</td>
</tr>
<tr>
<td>23</td>
<td>1 Dec 2013</td>
<td>Health screening</td>
<td>Church of St Mary of the Angels</td>
<td>Bukit Batok Polyclinic</td>
<td>47</td>
</tr>
<tr>
<td>24</td>
<td>7 Dec 2013</td>
<td>Befriender and support</td>
<td>SILRA Home</td>
<td>Hougang Polyclinic</td>
<td>50</td>
</tr>
<tr>
<td>25</td>
<td>11 Dec 2013</td>
<td>Talk: Food &amp; Nutrition</td>
<td>Thye Hua Kwan Seniors Activity Centre</td>
<td>Toa Payoh Polyclinic</td>
<td>40</td>
</tr>
<tr>
<td>26</td>
<td>3 Jan 2014</td>
<td>Organising a New Year Party for seniors</td>
<td>Thye Hua Kwan Seniors Activity Centre</td>
<td>Toa Payoh Polyclinic</td>
<td>80</td>
</tr>
</tbody>
</table>

(continues)
<table>
<thead>
<tr>
<th>No.</th>
<th>Period</th>
<th>Type of Activities</th>
<th>Event / Venue</th>
<th>Supported by</th>
<th>No. of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>16 Jan 2014</td>
<td>Falls prevention talk-cum-volunteer orientation programme</td>
<td>Toa Payoh Polyclinic</td>
<td>NHGP HQ</td>
<td>40</td>
</tr>
<tr>
<td>28</td>
<td>19 Jan 2014</td>
<td>Instructors to provide mass cardio-pulmonary resuscitation and automated external defibrillator training sessions</td>
<td>National Life Saving Day Primary Care Academy</td>
<td></td>
<td>3,000</td>
</tr>
<tr>
<td>29</td>
<td>15 Feb 2014</td>
<td>Talk and educational booths: A Sweet Affair — Forum on Diabetes</td>
<td>Bukit Batok Polyclinic</td>
<td>NHG Pharmacy</td>
<td>65</td>
</tr>
<tr>
<td>30</td>
<td>15 Feb 2014</td>
<td>Food donation and distribution to elders from Lions Befrienders</td>
<td>Clementi Avenue 1</td>
<td>Clementi Polyclinic</td>
<td>32</td>
</tr>
<tr>
<td>31</td>
<td>25 Feb 2014</td>
<td>Dietitian-led supermarket tour</td>
<td>NTUC FairPrice Xtra at Hougang Point</td>
<td>Hougang Polyclinic</td>
<td>7</td>
</tr>
<tr>
<td>32</td>
<td>26 Feb 2014</td>
<td>Talk: Food &amp; Nutrition</td>
<td>Thye Hua Kwan Seniors Activity Centre</td>
<td>Toa Payoh Polyclinic</td>
<td>40</td>
</tr>
<tr>
<td>33</td>
<td>6 – 7 Mar 2014</td>
<td>Infection Control Community Outreach Programme</td>
<td>Lentor Residence</td>
<td>Nursing Services</td>
<td>80</td>
</tr>
<tr>
<td>34</td>
<td>15 Mar 2014</td>
<td>Block party at void deck of Block 305, Yishun Central</td>
<td>Nee Soon GRC</td>
<td>Yishun Polyclinic</td>
<td>NA</td>
</tr>
<tr>
<td>35</td>
<td>19 Mar 2014</td>
<td>Talk: Food and Nutrition</td>
<td>Thye Hua Kwan Seniors Activity Centre</td>
<td>Toa Payoh Polyclinic</td>
<td>40</td>
</tr>
</tbody>
</table>

NA = Data not available

**Figure 56** Senior Physiotherapist Kwok Boon Chong speaking on preventing falls at home at the Silver Fiesta on 14 and 15 November 2013 at Toa Payoh HDB Hub.
Engaging Community and Stakeholders

Figure 57a NHGP, Khoo Teck Puat Hospital and the Agency for Integrated Care collaborated to set up a healthcare booth at the Sembawang GRC Healthy Lifestyle and Celebrate Wellness Roadshow on 18 August 2013.

Figure 57b Health screening at the Sembawang GRC Healthy Lifestyle and Celebrate Wellness Roadshow on 18 August 2013.

Figure 58 Doctors and nurses from Clementi Polyclinic were invited to be judges at a baby show organised by the Clementi Community Centre on 14 July 2013.

Figure 59 NHGP Infection Control nurses demonstrating hand-washing steps to children at the Carpe Diem Kindergarten and Children Care on 10 July 2013.
Figure 60  Staff from Bukit Batok Polyclinic supported the health screening and talks held in conjunction with World Stroke Day 2013 at Hong Kah North Community Club on 19 October 2013.

Figure 61  Staff from Clementi Polyclinic helping to pack and distribute food items to the elderly at the Lions Befriender Activity Centre on 15 February 2014.

Figure 62  Dr Simon Lee, Head of Yishun Polyclinic, interacting with residents from Yishun at a block party on 15 March 2014.

Figure 63  The nursing team from Toa Payoh Polyclinic organised a New Year party for seniors at the Thye Hua Kwan Seniors Activity Centre on 3 January 2014.
Engaging the Community through Media and Communication Efforts

NHGP plays an important role in helping to educate the community to stay healthy. Reaching out to the community through news articles that promote health and wellness is our ongoing media effort.

In 2013, the Corporate Communications Department worked with our doctors, nurses and allied health professionals to feature 29 health-promoting articles in the media.

We also started our bi-monthly community newsletter *Transform Care* in August 2013 to keep our stakeholders and partners abreast of the latest developments at NHGP.

Last year, NHGP generated about 300 media stories profiling our work to the community at large.

### SHARING OUR KNOWLEDGE AND EXPERIENCE

#### Courses for GP Assistants and Caregivers

To support capability building at the community level, the Primary Care Academy conducts courses for GP assistants and caregivers. In FY2013, 31 clinic assistants from various clinics in Singapore, including Fullerton Healthcare, KK Women’s and Children’s Hospital and Orthopaedic Sports Medicine Pte Ltd, attended the course. Separately, about 50 caregivers attended the quarterly “Care for the Elderly” programme in 2013.

![Figure 64](image_url) NHGP engages our community partners and stakeholders through *Transform Care*.

![Figure 65](image_url) Primary Care Academy Training Consultant Ms Angeline Yeo demonstrating bed bathing to participants of a Care for the Elderly Course.
NHGP hosts 14 visits to Facilitate Learning

In 2013, NHGP hosted 14 visits from various sectors to facilitate learning about Singapore’s healthcare system and NHGP. Please refer to the table below for the list of visits.

Table 11 Visits hosted by NHGP in FY2013

<table>
<thead>
<tr>
<th>Date</th>
<th>Delegation</th>
<th>Hosting Polyclinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 May 2013</td>
<td>National Health Insurance Scheme, South Korea</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>4 Jul 2013</td>
<td>Healthcare Services Employee Union</td>
<td>Yishun Polyclinic</td>
</tr>
<tr>
<td>26 Jul 2013</td>
<td>Guangdong Human Resource and Social Security Department, Guang Dong Province, China</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>22 Aug 2013</td>
<td>SGP International Management Academy (SiMA), Tian Jin Province, China</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>30 Aug 2013</td>
<td>Health Bureau of Henan Province, China</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>6 Sep 2013</td>
<td>Temasek Foundation, Indonesia</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>20 Sep 2013</td>
<td>Temasek Foundation, Indonesia</td>
<td>Choa Chu Kang Polyclinic</td>
</tr>
<tr>
<td>23 Oct 2013</td>
<td>NHG Board induction for A/Prof Er Lau Joo Ming</td>
<td>Ang Mo Kio Polyclinic</td>
</tr>
<tr>
<td>29 Oct 2013</td>
<td>States Administration of Traditional Chinese Medicine of China</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>21 Nov 2013</td>
<td>Ministry of Health, Brunei</td>
<td>Ang Mo Kio Polyclinic</td>
</tr>
<tr>
<td>3 Dec 2013</td>
<td>Chief Naval Medical Officer and The Republic of Singapore Navy Medical Service</td>
<td>Toa Payoh Polyclinic</td>
</tr>
<tr>
<td>18 Jan 2014</td>
<td>Girl Guides, American International School and Overseas International School</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>12 Mar 2014</td>
<td>Department of Health, healthcare institutions and hospitals of Africa, South Asia and South America</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>26 Mar 2014</td>
<td>Nurses from Shandong, China, under the Executive Training Programme for Nursing Management</td>
<td>Yishun Polyclinic</td>
</tr>
</tbody>
</table>

Figure 66 NHGP CEO
Mr Leong Yew Meng sharing key insights on Singapore’s healthcare system and NHGP’s operations and services with the foreign government officials on 12 March 2014 at Bukit Batok Polyclinic.
Chapter 7:

Leveraging on Technology

“I would like to thank the polyclinic for the hassle-free visit, from registration and consultation to appointment and payment. Well done!”

Ms Shima, a patient at Yishun Polyclinic, 3 July 2013
NHGP Goes Mobile!
via miHealthCare App

It’s Fast & Convenient
- Book an appointment*
- Refill medication
- Provide feedback and more services...

*For selected nursing and consultation appointments.

Download Now!

miHealthCare
Available on iOS and Android devices
A key part of quality healthcare involves the use of technology to address a number of issues such as accessibility, value and cost. Over the years, NHGP has harnessed technology to improve care delivery, facilitate communication among our healthcare teams and with patients, and enhance the patient experience at every visit to our clinics.

TECHNOLOGY FOR CLINICAL EXCELLENCE

Complete rollout of CPSS2
Following a pilot at the Yishun and Ang Mo Kio Polyclinics, the Computerised Physician Support System 2 (CPSS2) was rolled out at all NHGP polyclinics in September 2013.

The system pulls all relevant clinical information from multiple data sources (such as eRx and C-Doc), and presents the information to clinicians through a single user interface. The Patient Summary view has four portlets that display the problem list (diagnosis), medications list, laboratory results and key events such as previous and upcoming visits or appointments.

The system serves as a launch pad for other clinical applications, and improves patient safety through context-switching to ensure that only one patient record is opened across all active clinical applications. The system was well-received by our clinicians for the improvements in safety and efficiency that it brought.

New Prescription Module (eRx) in CPSS2
eRx is a new prescription module in CPSS2 which replaced the previous CPSS prescription system. It consolidates all NHGP prescriptions into a single database instead of separate databases for each clinic. The patient’s medication history is obtained from the Cluster Clinical Data Repository. The eRx system was piloted at the Yishun and Ang Mo Kio Polyclinics in October and December 2013, respectively, and rolled out to the rest of the clinics on 7 May 2014. The module is linked to the Clinical Decision Support System, which includes capabilities such as alerts on drug allergy, drug-drug interaction and maximal-dose for paediatric prescribing. More alerts, such as prescribing and maximal dose alerts for patients with renal impairment or renal failure, will be included.

New Clinical Documentation Module (C-Doc)
C-Doc is a new clinical documentation module in CPSS2 that replaces the eNotes module in the Computerised Clinician Order Entry (CCOE).

The C-Doc module was designed to facilitate medical record-keeping, inter-professional collaboration, chronic disease documentation, preventive care, healthcare evaluation and healthcare integration. It includes a problem list capture and reconciliation, a new care plan module, non-medical diagnoses for patient problems, a new module for structured significant history, general screening and chronic disease management items.

The first batch of clinician templates and care plan module was piloted at the Ang Mo Kio and Bukit Batok Polyclinics in November 2013. The second batch of templates, including the new multidisciplinary team templates, and the new structured history module were piloted in June 2014 and subsequently rolled out to all nine polyclinics.
TECHNOLOGY FOR BETTER PROCESSES AND AN ENHANCED PATIENT EXPERIENCE

A New Smartphone Application To Help Patients Manage Appointments
To improve the patient experience and add convenience, NHGP launched a smartphone application on 15 December 2013. The app allows patients to make same-day appointments for doctor consultations and selected nursing services such as wound dressing. Using the app, patients are also able to reschedule selected appointments like vaccinations, make enquiries, give feedback, refill their medications and obtain information about NHGP’s various services.

Our Contact Centre receives more than 15,000 calls a month for same-day appointment booking. The app provides an alternative to the hotline and encourages patients to make appointments instead of walking in. Making an appointment helps patients better manage their time, as they can come to the clinic nearer to the allotted time, and rest or run their own errands while awaiting their appointment.

The app has a simple user interface and making an appointment takes only three steps. As of May 2014, close to 2,000 patients a month were using the app to make same-day booking.

An X-Ray System for Elderly and Wheelchair-using Patients
In December 2013, Woodlands Polyclinic implemented the first ceiling-suspended X-ray system with a height-adjustable examination table, which facilitates imaging for elderly and wheelchair-using patients.

For elderly patients, the examination table is lowered for them to sit comfortably on before being elevated for the imaging procedure. This negates the need for patients to climb up and lowers the risk of falling. For patients using wheelchairs, certain X-rays, such as those on the chest and extremities, can now be done with the patients seated in their chairs.

The new system is safer and easier for both patients and staff and has helped to improve the examination’s turnaround time.
Outpatient Pharmacy Automation System (OPAS)

To improve the accuracy and safety of medication dispensing process, NHG Pharmacy has been installing automated machines to pick and pack the high volume of prescription orders at the clinics. The pharmacy at Choa Chu Kang Polyclinic was the pilot site for this, and was renovated from December 2013 to January 2014 for the installation of the machines. The pilot started on 30 June 2014. As this system will transform the work processes in the pharmacy, the Outpatient Pharmacy Automation System (OPAS) is being tested vigorously along with new software to integrate with the existing workflow. The system is expected to be rolled out at all polyclinics by 2015.

First Full-Field Digital Mammography System in Primary Care

In December 2013, a Full-Field Digital Mammography (FFDM) system was implemented at Jurong Polyclinic — the first time such technology has been implemented in a primary care setting. The rest of our polyclinics will be equipped with the digital mammography system over the next two to three years.

The FFDM system reduces the examination’s turnaround time by negating the need to process images externally. This doubles the throughput for screening and shortens the appointment waiting time for mammogram examinations.

The current Computed Radiography Mammography system requires images to be captured in a cassette before it is manually transferred to a digital processor. The image is subsequently erased from the cassette so that it can be reused to capture images for the next patient. In contrast, the FFDM processes the images directly within the system, which eliminates the
time spent by the radiographer transferring the cassette between the mammography machine and digital processor.

**Upgraded Radiology Information System**

The Radiology Information System (RIS) at all NHG Diagnostics X-ray centres was upgraded in October 2013 to include new functions, such as trending of results and selecting areas of examination through pictorial illustration of the human body (intuitive design).

**eMEMO to Improve Communication Among NHGD Staff**

NHG Diagnostics implemented eMEMO in March 2013 to improve communication among staff members. eMEMO is a customised communication platform to broadcast messages to all staff at NHG Diagnostics. The system alerts users to incoming messages, and the users are then able to acknowledge the messages electronically. This system reduces the hassle of printing and passing messages to staff who don’t have email access. An SMS reminder to mobile phones is also available for urgent situations, which is particularly important for messages involving changes in work instructions and workflow.

**Preparing for the Future of Healthcare – NHG Care Transformation Project**

NHGP staff have been participating in the NHG Care Transformation Project since November 2013. The IT envisioning exercise involves all NHG institutions, including NHGP, to gather and review requirements for a new generation of Electronic Health Records that is in line with the National Health IT Master Plan.

Twenty focus groups were formed to look into different domains such as Clinical Documentation and Protocol Design; Results Management; Prescription, Medication Ordering and Administration; Clinical Analytics and Research; Population Health and Disease Prevention; Social-Environment and Community Support; and Privacy, Security and Access Control.

The focus groups participated in a series of workshops to review the current patient care journey and care processes, and document functional requirements and patient scenarios for the future integrated system. The workshops culminated in a World Café event on 11 April 2014, which featured a presentation on how the integrated EMR system would complement the future of healthcare.
Chapter 8:

Caring for Our People

\[\text{I would like to thank the management for having good staff who attended to me throughout the process. The clinic visit was a good experience. Splendid staff!} \]

Mr Muhammad Sanusi Bin Abdul Rahim, a patient at Woodlands Polyclinic, 6 April 2013
Whether it is advancing family medicine or transforming primary care, it is our people’s dedication and efforts that make the difference in delivering quality healthcare. NHGP is continuously working to create a culture of care. We invest in the development of our staff through continual training, effective mentoring and assimilating best global practices so that they can deepen their knowledge and excel in their respective professions. We celebrate their achievements at the institutional, national and international levels.

The results of the 2013 Employee Climate Survey affirm our efforts. NHGP’s overall score rose to 72 per cent, up from 67 per cent in the 2010 survey. The survey indicates that we have made significant improvements in learning and development, rewards and recognition, work organisation and working relationships.

BUILDING A CULTURE OF CARE

NHGP Celebrates Our Second Culture DNA Day
Some 300 NHGP staff gathered at SAFRA Yishun on 5 September 2013 to celebrate NHGP’s second Culture DNA Day. The occasion was marked with a carnival to commemorate our culture transformation, which started in 2012. Themed “The Heart Way”, the celebration highlighted that care and change “must come from our heart”.

We believe that improvement to the “heart-ware” is a fundamental aspect of our culture transformation. Our culture framework, “Culture DNA”, is made up of process improvement (OurCare) and service quality (iCARE), anchored by the “Way of Being” principle of “seeing people as people”. This principle guides our staff in providing excellent care in a supportive environment in which they feel empowered and fulfilled.

An awards ceremony was held to honour the winners of the Way of Being Award, iCARE Champion (Star) Award, iCARE HQ Partners Award, iCARE Service Partners Award and OurCare Champion Award. The winners were staff members who had contributed to the organisation by providing great service or improving care processes.

In a symbolic moment, the closing ceremony saw invited guests from NHG and NHGP senior management coming together to complete the final pieces of a 300-piece jigsaw puzzle. The process symbolised the importance of everyone, from staff to the leadership, in building and strengthening our organisational culture.
Publication of the Culture DNA Newsletter and Video
Since August 2013, NHGP has been publishing a monthly electronic newsletter to help staff better understand and appreciate our Culture DNA. The newsletter features editorials contributed by our senior management, improvement projects, iCARE stories, staff compliments and improvement ideas contributed by staff.

An educational video about Culture DNA was also produced in July 2013. The video has since been used to introduce Culture DNA to new staff during their orientation.

CARE Acts to Appreciate and Energise Service Staff
Four CARE Acts were organised in 2013. Each CARE Act serves as an opportunity to communicate appreciation to our service staff and to energise them in delivering care and service good that is enough for their loved ones.

The CARE Acts were generally coupled with hands-on learning activities that reiterate our service messages to remind and encourage staff of how to practise the iCARE attributes of service quality at work.
Patient centricity and teamwork in an organisation

Find out how Singapore's National Healthcare Group Polyclinics ensures good clinical outcomes for its patients.

The National Healthcare Group Polyclinics (NHGP) is a primary healthcare service provider that is faced with a high volume of patients daily, each with different needs. Given the high patient load, it is possible for healthcare personnel to view things with a single dimension that is – seeing patients as statistics and as workload. This viewpoint can dehumanise patients, making some staff view service initiatives as a superficial effort that could be just about exchanging pleasantries with patients and nothing more.

It was thus a challenge to ensure that every patient receives holistic and efficient clinical care that is delivered, with sincere concern and empathy. NHGP also needed to provide our patients with a good and genuinely caring experience. It is not easy to constantly meet these challenges.

Our corporate culture called the Culture DNA, reminds staff that, good care could not be about complying with the company's rules or meeting KPIs.

but NHGP has started to take its first steps via a transformational journey which aims to change every employee's mindset through its culture programme.

Embedding Values for Change
To break away from old ways of thinking and move more towards patient-centricity, NHGP sought better processes to optimise our resources, help us to function efficiently and ensure good clinical outcomes for our patients. While many organisations rely on various service initiatives, quality improvement projects, and key performance indicators (KPI) to motivate staff to provide better services and improve work processes, NHGP management believed that it was more important to engage their staff holistically through a values framework.

"We needed to constantly remind our staff of their purpose of joining the healthcare sector. Most people, if not all, join the sector because they wanted to care for others. Somehow, people forgot about it along the way due to the heavy workload. Our corporate culture called the Culture DNA, reminds staff that, good care could not be about complying with the company's rules or meeting KPIs; it has to stem from an innate desire to look beyond personal agenda and boundaries, and take initiatives to do what is right and empower others instead of serving one's own interest. This sustains the meaning at work," explained Mr Simon Tan, Director of Human Resource and Finance at NHGP.

This is a system of thinking that encourages staff to put others first, focus on relationships, and emphasises the 'right' outcomes and results, which may not be of the usual statistical variety. It encourages employees to base their decisions from a perspective that puts another person first and to design work processes to meet their needs. NHGP calls this the "Way of Being" (WOB) which is an overarching framework to encourage its staff to 'see people
as people, putting themselves in another’s shoes.

NHGP’s senior management team takes an active lead in this transformation journey. 16 of them, including senior staff like its Chief Executive Officer (CEO), Mr Leong Yew Meng, personally train NHGP’s staff through the WOB workshop programme. Mr Leong Yew Meng adds, “The difference starts from us, inwardly. To see everyone we meet (be it a patient or co-worker) as an individual with different needs and challenges, and to pause a moment so as to understand their behaviour instead of being judgmental. This helps us to take ownership and rise above our challenges to help them.”

Today, most, if not all of NHGP’s staff has attended the culture workshop programme. All new and existing staff are introduced to the key concepts of our culture during orientation with NHGP’s CEO or at staff engagement sessions. To better the service for every patient, all service staff have also undergone training in the service framework called iCARE, which reminds them to be Confident, Attentive, Respectful, and Empathetic. Every clinic also has a network of iCARE service leaders and ambassadors, who encourage staff to keep practising NHGP’s key service principles.

Embracing values for patient-centricity and teamwork, naturally leads to the next pillar of NHGP’s Culture DNA, known as OurCare. Through OurCare, teams are inspired to implement Work Improvement Projects to do better for our patients and their co-workers. Some projects have explored how patient information can be shared with the next clinician better, improving workflows between colleagues and bettering outcomes for the patient. Others focus on how we can improve a clinic visit for the patient, making each visit pleasanter and more effective. The number of such projects within NHGP has grown by over 50% in just one year, from 55 in 2011 to 87 in 2012.

NHGP management also embarks on monthly walkabouts in clinics to look at issues ranging from service safety and improving operations. During each visit, service “stars” are recognised and quality efforts encouraged as they are spotted in action or practice.

Mr Leong and his team also visit the nine polyclinics to conduct lunchtime talks for staff, to share plans, insights and stories to inspire staff. These serve to constantly energise staff in making a difference to every patient. Staff stories are also shared through a culture newsletter, where trainers give tips and staff contribute their own experiences in practicing NHGP’s Way of Being to encourage each other. NHGP also celebrated its Culture DNA Days, on 31 October 2012, and 5 September 2013 where recognition was given to staff who have consistently improved our care either through great service or process improvement.

Resonating Values
The NHGP Culture Transformation programme has resonated well with its staff’s internal values, and helped them realise their desire to contribute effectively as a team and help patients. Through these efforts, NHGP has improved in its Employees’ Climate Surveys (ECS) and Patient Satisfaction Surveys. In its ECS conducted in early 2013, overall staff rating for the organisation went up by five percentage points to 72%. This is a testament that the organisation is moving in the right direction. Good care also touches the hearts of patients as evidenced in NHGP’s score of 82.2% in the Ministry Of Health’s Patient Satisfaction Survey in 2012. This is an improvement of about 2% from the last survey in 2010.

NHGP understands that this is a long-term journey and management continues to share culture principles among staff. As NHGP keeps pressing ahead, it hopes to touch the lives of even more patients and staff.
Inaugural NHGP Family Appreciation Day

Our inaugural Family Appreciation Day, held on 28 November 2013, brought together more than 30 families. The event was dedicated to the families of NHGP staff and NHGP showed our appreciation to them through the NHGP Book Prize and Stand By Me Award. Children from 13 families received the NHGP Book Prize contributed by our senior management. The prize is designed to encourage the children of NHGP staff to succeed in school.

NHGP CEO Mr Leong Yew Meng also presented the Stand By Me Award to 24 family members for their unwavering support, which allowed staff to give their best at work and to patients.

ENGAGING STAFF AND BUILDING RELATIONSHIPS

CEO Townhall Sessions

The annual CEO Townhall is an important opportunity for NHGP CEO to present the past year’s achievements and share future plans for the organisation with fellow staff. This year’s townhall sessions were held between 20 February and 27 May 2014. The sessions were attended by staff from NHGP, NHG Pharmacy and NHG Diagnostics, and were organised at the nine polyclinics while the HQ townhall session was held at Temasek Club.
This year’s theme focused on how NHGP had embarked on the 3 “Rs” of strategy — attract the right people, build the right culture and do the right thing — for the past year and that, moving forward, NHGP needed to transform in four key areas. These are, developing a new model of care; building a new generation of polyclinics; supporting and integrating with the community; and creating a happier, better place for employees to work in.

Keeping Staff Informed of Our Directions and Happenings
NHGP published a corporate handbook in January 2014. Each NHGP staff received a copy of the handbook, which serves as a reference manual about our vision, strategy and plans.

Our staff newsletter was revamped in September 2013. “NHGP Connection” features bite-sized and catchy updates to keep staff informed of happenings within the organisation.

NHGP Senior Management Team Building
A team bonding session for NHGP’s Senior Management was held at Changi Cove on 28 February and 1 March 2014 to review existing work, as well as prepare the team for potential challenges in the coming years.
Building Bonds at Work
Over the course of 2013, we organised various activities to foster bonds among staff. These included festive celebrations, a Dinner and Dance, and Active Day.

The annual Dinner and Dance was held on 26 October 2013 at the Marina Bay Sands Grand Ballroom. Themed “Starry Starry Night”, the event saw about 1,000 NHGP staff attend, dressed as their favourite movie characters. Stunning performances were staged, and teams from the Woodlands, Ang Mo Kio, and Choa Chu Kang Polyclinics emerged as winners of the performance competition.
HR Clinic
To engage our staff regularly, the HR Clinic initiative was introduced in April 2013. The HR Clinic is held every two weeks at the polyclinics during lunch hours, with the aim of reaching out to staff and providing them with a platform to share their views and seek clarification on HR issues. In addition, our HR team also meets with new staff to ensure that they are settling well in the organisation. This initiative has been very well-received by staff.

Updated HR Practices for Better Work-Life Quality
Being a forward-looking organisation, NHGP launched the Sick Leave without Medical Certificate Scheme in February 2014, where staff enjoy the privilege to call in sick and rest at home without the need to consult a doctor. A flexible benefits plan was also introduced with the needs of staff in mind.

AWARDS AND ACCOLADES

Healthcare Humanity Award 2014
The Healthcare Humanity Award (HHA) is a continuing legacy of the Courage Awards that were given out in 2003 after the SARS (Severe Acute Respiratory Syndrome) outbreak in Singapore. The HHA recognises frontline healthcare workers who exemplify values like courage, extraordinary dedication, selflessness, steadfastness in ethics, compassion and humanity. In 2014, four staff from NHGP and another from NHG Diagnostics were honoured with the award.

Low Kang Yih
Family Physician, Ang Mo Kio Polyclinic

Richard Low Sai Yin
Nurse Manager, Woodlands Polyclinic

Doris Ang Chye Lian
Health Attendant, Hougang Polyclinic

Katherine Tan Gek Tee
Senior Staff Nurse, Clementi Polyclinic

Janet Teng
Senior Medical Technologist, NHG Diagnostics
**PS21 Star Service Award 2013**
The PS21 Star Service Award recognises the good work of public officers and agencies as well as members of the public who have been helpful and have made significant contributions to public agencies.

**Jenny Tan Hong Mui**
Health Attendant, Bukit Batok Polyclinic

**National Day Awards 2013**
Twelve staff from NHGP, NHG Pharmacy and NHG Diagnostics received the National Day Awards at the Investiture Ceremony on 19 November 2013.

The Commendation Medal is awarded to selected individuals who have demonstrated efficiency, competence and devotion to duty for special performance under difficult circumstances. 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 Efficiency Medal recognises individuals who have demonstrated exceptional efficiency or exceptional devotion to duty or for work of special significance.

**Long Service Medal**

**Ang Ah Han**
Senior Pharmacy Technician, NHG Pharmacy

**Appadurai Rajeswathy**
Patient Service Associate, Woodlands Polyclinic

**Chin Siew Hong**
Senior Staff Nurse, Yishun Polyclinic

**Chiterra w/o P Tirugnanan**
Senior Patient Service Associate, Ang Mo Kio Polyclinic

**Krishnaammal Karuppiah**
Pharmacy Health Attendant, NHG Pharmacy

**Maria Binte Matawi**
Senior Assistant Nurse, Bukit Batok Polyclinic

**Wong Lee Peng**
Pharmacy Executive, NHG Pharmacy

**Zuraidah Binte Zaini**
Senior Pharmacy Technician, NHG Pharmacy

**Commendation Medal**

**Ng Soh Mui**
Senior Nurse Clinician, Jurong Polyclinic

**Peggy Tan Paik Geok**
Senior Radiographer, NHG Diagnostics

**Efficiency Medal**

**Anna Tan Soo Cheng**
Senior Executive, NHG Pharmacy

**Neo Lay Choo**
Pharmacy Executive, NHG Pharmacy
Figure 84  NHGP recipients received the National Day Awards at the Investiture Ceremony on 19 November 2013 at Concorde Hotel. From left: Mdm Chiterra w/o Tirugnanan; Mdm Chin Siew Hong; Mdm Maria Binte Matawi; Mr Leong Yew Meng, CEO, NHGP; Ms Appadurai Rajeswathy; Mdm Ng Soh Mui; and Ms Chen Yee Chui, Director, Nursing Services, NHGP.

Figure 85a  Ms Er Lian Hwa, Senior Nurse Clinician, Ang Mo Kio Polyclinic, NHGP, received the MOH Nurses’ Merit Awards from Dr Amy Khor, Minister of State for Health and Manpower, on 3 July 2013.

Figure 85b  Ms Wendy Ong Kim Leng, Senior Staff Nurse, Woodlands Polyclinic, NHGP, is among the 77 nurses who received the Nurses’ Merit Ward.

MOH Nurses’ Merit Award
Two nurses were recognised at the annual Ministry of Health’s Nurses’ Merit Awards Ceremony on 3 July 2013. They were among the 77 nurses honoured for their consistent and outstanding performance over the past three years, for having participated in professional advancement courses, and for promoting a professional image of nursing.

Er Lian Hwa
Nurse Clinician, Ang Mo Kio Polyclinic

Wendy Ong Kim Leng
Senior Staff Nurse, Woodlands Polyclinic
7th Tan Chin Tuan Nursing Award
The Tan Chin Tuan Nursing Award is a national award sponsored by the DS Lee Foundation. It recognises promising and talented enrolled nurses for their significant contributions in the profession and for elevating the standards of nursing and healthcare practice in Singapore.

Norherawati Binte Mohd Yasin
Senior Enrolled Nurse, Yishun Polyclinic

Figure 86 Ms Norherawati Binte Mohd Yasin is one of the top ten recipients of the 7th Tan Chin Tuan Nursing Award for Enrolled Nurses 2013. She received her award from Dr Lam Pin Min, Chairman, Government Parliamentary Committee (Health), Member of Parliament, Sengkang West SMC, at the ceremony on 11 November 2013 at the Della & Seng Gee Guild Hall in the Kent Ridge Guild House.

NHG Excellence in Action Award 2013
The Excellence in Action (EIA) Award honours staff from the NHG family who have made significant contributions and displayed outstanding qualities aligned with NHG’s CARE values: Confidence, Attentiveness, Respect and Empathy. The following staff were recognised for providing exceptional services to both internal and external customers, as well as exhibiting outstanding customer service through work practices. A total of 29 staff from NHGP received the award on 29 July 2013 at the Institute of Mental Health.

Individual Awards
Adeline Koh Shuhan
Executive, Service Leadership & Patient Relations, Operations

Amy Ng Sok Hoon
Senior Staff Nurse, Jurong Polyclinic

Chua Chew Tee
Senior Health Attendant, Choa Chu Kang Polyclinic

Esther Seah Swee Khoon
Senior Radiographer, NHG Diagnostics

Esther Zhang Kejing
Senior Staff Nurse, Clementi Polyclinic

Eunice Lee Yin Ping
Retail Supervisor, NHG Pharmacy

Fanny Tan
Operations Executive, Pharmacy Services Centre, NHG Pharmacy

Harbhajan Kaur d/o Surjan Singh
Nurse Manager, Clementi Polyclinic

Jimmy Chew Kwong Yik
Family Physician, Senior Staff, Woodlands Polyclinic

Kim Tan Lay Khim
Senior Pharmacist, NHG Pharmacy

Lee Ching Lian
Senior Nurse Clinician, Hougang Polyclinic

Magdalene Lian Siew Yong
Senior Patient Service Associate, NHG Diagnostics

Rosna Bte Sabani
Senior Nurse Manager, Jurong Polyclinic

Selina Ong
Senior Assistant Nurse, Clementi Polyclinic

Sharon Tan Hui Xian
Pharmacy Technician, NHG Pharmacy

Tan Sing Ying
Executive, Clinical Services

Yeo Hui Nan
Family Physician, Associate Consultant, Jurong Polyclinic
Leadership Award

Anna Liew
Principal Pharmacist, NHG Pharmacy

Gowri Doraisamy
Head, Woodlands Polyclinic

Jancy Mathews
Deputy Director, Nursing Services

Team Award

Ang Mo Kio Family Medicine Clinic
Nurse Triage Initiative for Upper and Lower Limb Injuries in a Primary Healthcare Facility

Pharmacy, Bukit Batok Polyclinic

NHGP Way of Being Award 2013

NHGP started the Way of Being Award in 2012 to recognise and honour our exemplary staff who have consistently demonstrated NHGP’s Way of Being — that is, seeing people as people and holding ourselves accountable to our patients, co-workers, team members and supervisors. Six staff received the award in 2013.

Aminah Binte Mohamed
Senior Staff Nurse, Jurong Polyclinic

Ang Wei Wei
Oral Health Therapist, Woodlands Polyclinic

Chua Chew Tee
Senior Health Attendant, Choa Chu Kang Polyclinic

Jenny Tan Hong Mui
Health Attendant, Bukit Batok Polyclinic

Katherine Tan Gek Tee
Senior Staff Nurse, Clementi Polyclinic

Low Kang Yih
Family Physician, Ang Mo Kio Polyclinic

Figure 87 The EIA Award winners from NHGP and Prof Chee Yam Cheng, Group CEO, NHG (back row, first from left); Dr Lew Yii Jen, Senior Director, Clinical Services, NHGP (back row, second from left); Adjunct A/Prof Nellie Yeo, Chief Quality Officer, NHG (back row, first from right); and Mr Leong Yew Meng, CEO, NHGP (front row, first from right).

Figure 88 The Way of Being Award winners in 2013 with NHGP CEO (third from left). From left: Ms Jenny Tan Hong Mui, Ms Ang Wei Wei, Mr Leong Yew Meng, Dr Low Kang Yih, Ms Katherine Tan Gek Tee, Ms Aminah Binte Mohamed. Not in this photo: Ms Chua Chew Tee.
NHGP OurCare Champions 2013
Started in 2011, the OurCare Champion Award recognises individuals who have participated actively in our journey towards improving care delivery as a facilitator, project leader, co-leader or team member.

Anthony Wong Teck Boon
Executive, Lean Office, Operations

Chan Cheuk Ying
Senior Staff Nurse, Hougang Polyclinic

Christopher Chong Wern Siew
Resident Physician, Ang Mo Kio Polyclinic

Djoni Huang Sian Wei
Family Physician, Principal Staff, Ang Mo Kio Polyclinic

Nirmala Nair
Senior Nurse Manager, Ang Mo Kio Polyclinic

Richard Low Sai Yin
Nurse Manager, Woodlands Polyclinic

Sazalina Binte Samat
Senior Staff Nurse, Bukit Batok Polyclinic

Seah Hui Min
Nurse Manager, Clementi Polyclinic

Sharon Foo Chee Ling
Senior Staff Nurse, Hougang Polyclinic

Siti A’eshah Binte Abdullah
Coordinator, Hougang Polyclinic

Tan Chia Hui
Operations Executive, Toa Payoh Polyclinic

Winnie Poh Siew Huay
Nurse Clinician, Hougang Polyclinic

Yan Chau Chain
Senior Nurse Manager, Nursing Services
NHGP iCARE Awards
The iCARE Awards, started in 2012, recognise 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 award 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 endorsed by their respective reporting officers. The iCARE HQ Partners and iCARE Service Partners are nominated by staff.

In FY2013, 66 NHGP, NHG Diagnostics and NHG Pharmacy staff and service partners received the award.

iCARE Service Champions (Star)
Gary Si Khin Yuen
Family Physician, Senior Staff, Clementi Polyclinic
Jenny Tan Hong Mui
Senior Health Attendant, Bukit Batok Polyclinic
Nicholas Lin Shengyang
Family Physician, Senior Staff, Clementi Polyclinic
Vasanthi d/o Ganesan
Principal Assistant Nurse, Hougang Polyclinic
Vasanthi d/o Suppiah
Patient Service Associate, NHG Diagnostics

Figure 90  iCARE Champions (Star)
with Adjunct A/Prof Chong Phui-Nah, Senior Director, Family Medicine Development and Primary Care Academy (centre). From left: Dr Gary Si Khin Yuen, Ms Jenny Tan Hong Mui, Adjunct A/Prof Chong Phui-Nah, Ms Vasanthi d/o Ganesan, Ms Vasanthi d/o Suppiah. Not in this photo: Dr Nicholas Lin Shengyang.
iCARE Service Champion (Gold)

Alice Tan Ai Teen  
Senior Health Attendant, Hougang Polyclinic

Amanda Tung Yoke Choo  
Patient Service Associate, Bukit Batok Polyclinic

Aminah Binte Mohamed  
Senior Staff Nurse, Jurong Polyclinic

Ann Lau Gaik Hiang  
Senior Health Attendant, Hougang Polyclinic

Dharshni  
Retail Pharmacy Assistant, NHG Pharmacy

Donna Tee Ah Lan  
Senior Healthcare Assistant, Clementi Polyclinic

Jaclyn Pang Nget Moie  
Patient Service Associate, Toa Payoh Polyclinic

Jane Soh Sio Hoon  
Health Attendant, Hougang Polyclinic

Judy Tan Guat Mui  
Senior Patient Service Associate, Hougang Polyclinic

Lolita B Nabong  
Medical Technologist, NHG Diagnostics

Mamidala Varsha Rajesh  
Physiotherapist, Bukit Batok Polyclinic

Mary Choo Geok Lan  
Senior Patient Service Associate, Hougang Polyclinic

Susan Teo Hoon Kheng  
Patient Service Associate, NHG Diagnostics

Suzana Binte Yunus  
Patient Service Associate, Ang Mo Kio Polyclinic

Tan Kaili  
Oral Health Therapist, Hougang Polyclinic

Yvonne Tan Ah Lan  
Health Attendant, Bukit Batok Polyclinic

iCARE Service Champion (Silver)

Abbiramy d/o Suburaminam  
Patient Service Associate, Choa Chu Kang Polyclinic

Aernira Irawanni Binte Azman  
Assistant Nurse, Clementi Polyclinic

Angelia Chua Hwee Ling  
Family Physician, Consultant, Yishun Polyclinic

Angie Teo Ai Keng  
Patient Service Associate, Woodlands Polyclinic

Asiah Binte Dakok  
Senior Staff Nurse, Jurong Polyclinic

Candy Ng Hwee Meng  
Senior Health Attendant, Hougang Polyclinic

Chittu Anjeli  
Health Attendant, Hougang Polyclinic

Choi Lai Hah  
Senior Health Attendant, Bukit Batok Polyclinic

Chris Chuah Chong Leng  
Senior Customer Service Associate, Contact Centre
Cindy Peh Xin Ni  
Pharmacy Technician, NHG Pharmacy

Dacillo Diane Soria  
Pharmacy Technician, NHG Pharmacy

Destinee Yeo Chai Ling  
Oral Health Therapist, Hougang Polyclinic

Doris Ang Chye Lian  
Health Attendant, Hougang Polyclinic

Elaine Ng Beow Im  
Health Attendant, Hougang Polyclinic

Evageline A Agraviador  
Radiographer, NHG Diagnostics

Glenn Neo Wenfeng  
Resident Physician, Choa Chu Kang Polyclinic

Heather Woo Soon Chee  
Patient Service Associate, Choa Chu Kang Polyclinic

Jennifer Lim Soo Geok  
Health Attendant, Bukit Batok Polyclinic

Jocelyn Chee  
Retail Pharmacy Assistant, NHG Pharmacy

Koh Siew Keng  
Senior Health Attendant, Hougang Polyclinic

Lau Poh Chng  
Health Attendant, Hougang Polyclinic

Lee Kwang How  
Family Physician, Bukit Batok Polyclinic

Lee Siam Kiang  
Health Attendant, Bukit Batok Polyclinic

Lim Meow Choo  
Senior Patient Service Associate, NHG Diagnostics

Lim Moi Moi  
Senior Health Attendant, Hougang Polyclinic

Lim Wan Nee  
Senior Healthcare Assistant, Hougang Polyclinic

Linda Tan Chio Mui  
Health Attendant, Bukit Batok Polyclinic

Manimekalai  
Senior Assistant Nurse, Hougang Polyclinic

Marvin Chan Chee Leong  
Family Physician, Hougang Polyclinic

Mohanambal d/o Sundravelu  
Staff Nurse, Hougang Polyclinic

Narayanasamy Revathi  
Senior Assistant Nurse, Clementi Polyclinic

Neo Lay Choo  
Pharmacy Executive, NHG Pharmacy

Ong Ah Bek  
Therapy Assistant, Bukit Batok Polyclinic

Ong Siew Leng  
Senior Staff Nurse, Hougang Polyclinic

Siti Aisah Binte Mustafah  
Assistant Nurse, Jurong Polyclinic

Susan Lim Siew Cheng  
Senior Health Attendant, Hougang Polyclinic

Susan Lim Siew Chin  
Retail Pharmacy Assistant, NHG Pharmacy

Wong Swee Nee  
Pharmacy Technician, NHG Pharmacy

Zarina Binte Salleh  
Patient Service Associate, Choa Chu Kang Polyclinic
iCARE HQ Partner

Anthony Wong Teck Boon
Executive, Lean Office, Operations

Eddie Tong Wei Xian
Senior Executive, Operations Support Services, Operations

Jonathan Chew Kim Teck
Senior Executive, Service Leadership & Patient Relations, Operations

iCARE Service Partners

Koh Hoe
Cisco Officer, Certis Cisco

Kumaran Mahalingam
Deskside Support Engineer, IT Department

Thet Aung
Facility Supervisor, Woodlands Polyclinic

Profiling Our Talents

To share the good work of our staff with the public and encourage more to consider NHGP as an employer, NHGP has been actively profiling our staff in the media. For instance, through an editorial profile of Dr David Tan Hsien Yung, Family Physician, Associate Consultant and Deputy Head of Jurong Polyclinic in TODAY Online on 18 May 2013, we shared the diverse roles and immense career opportunities of a family physician.

Family Physician, Associate Consultant Dr Darren Seah Ee-Jin also contributed a commentary in TODAY on 21 May 2013 about the emerging challenges family physicians face, and how our doctors help to improve patients’ health outcomes.

Our staff who have received awards were also profiled in the mainstream media. These include Dr Djoni Huang, Dr Tung Yew Cheong, and Dr Lee Eng Sing who won the Healthcare Humanity Award in 2013; Patient Service Associate Ms Jenny Tan who won the Public Service Excellence Award; and Senior Staff Nurse Ms Wendy Ong and Senior Nurse Clinician Ms Er Lian Hwa who received the Nurses’ Merit Award.

The expanded role of our nurses was also featured. For instance, our nurses’ efforts to triage patients with limb fractures so that they can get their X-rays done while waiting for doctors’ consultations was featured in TODAY on 14 August 2013. Lianhe Zaobao also featured on 23 August 2013 our Advanced Practice Nurse Carolyn Chan Mei Fong’s research into managing chronic patients with improvements to their blood pressure and cholesterol level. All these stories aimed to profile the significant roles our nurses play in patient care.
NURTURING OUR TALENTS AND DEVELOPING LEADERSHIP

748 Staff Attend Core Programmes

NHGP’s Core Programmes are aimed at inculcating organisational values and alignment. These comprise Staff Orientation, Way of Being (WoB), iCARE and Core Safety Programme. All new NHGP employees are required to attend staff orientation within the first three months of employment. Through these Core Programmes, employees are able to gain a better appreciation and understanding of the existing systems, processes and values within NHGP.

The attendances of Core Programmes in 2013 are as follows:

<table>
<thead>
<tr>
<th>Core Programme</th>
<th>Number of Runs</th>
<th>Number Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Orientation</td>
<td>9</td>
<td>167</td>
</tr>
<tr>
<td>WoB</td>
<td>17</td>
<td>183</td>
</tr>
<tr>
<td>Embrace iCARE (for non-executives)</td>
<td>12</td>
<td>149</td>
</tr>
<tr>
<td>Inspire iCARE (for executives &amp; above)</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>Core Safety Programme</td>
<td>11</td>
<td>174</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>748</strong></td>
</tr>
</tbody>
</table>

19,600 Training Places Utilised

A total of 19,615 training places were utilised by staff attending various clinical, functional, technical and workplace competencies programmes locally. In addition, 55 staff attended overseas conferences in both clinical and non-clinical related areas. Please refer to pages 39 to 41 for some of the conferences attended.

Foundation Programme for New Nurses

In 2012, NHGP put in place a foundational programme for new nurses. The competency-based curriculum, which includes didactic sessions and skill demonstrations, equips our new hires with the knowledge and skills to provide quality nursing care. Participants are required to pass a competency assessment at the end of the programme to ensure that they are able to carry out core nursing procedures confidently and competently. As of May 2014, 135 nurses completed the programme and found the programme useful in building up their confidence in a new environment.

Figure 92 The Way of Being workshop facilitated by NHGP COO Ms Grace Chiang and Head of Hougang Polyclinic, Dr Lee Eng Sing.
Electronic Feedback System for Nursing Students
Student evaluations of their clinical postings are critical to improving the quality of their training. In April 2013, NHGP replaced the paper-based feedback system with an electronic system that allows nursing students to provide feedback about their clinical postings at NHGP. The initiative streamlined the data collection, analysis and sharing.

Nursing Training Calendar
To help nurses identify their own learning needs, the Nursing Services Division developed a nursing training calendar that reflects the courses available throughout the year, as well as the learning objectives, training hours and Continuing Nursing Education points of the courses. The calendar was incorporated into the NHGP Human Resource training calendar for easy reference by staff.

SAP Learning & Development Module
To enable staff to better manage and take greater ownership of their development, an SAP Learning & Development (L&D) Module was launched in November 2013.

Prior to the launch, the team had sat through blue-printing sessions to gather requirements for the system. Data migration, transition and communication plans were also drawn up to ensure the smooth user transition from Prosoft to SAP L&D module.

Roadshows were conducted in October 2013 at all nine polyclinics and NHGP Headquarters to communicate the system’s functionalities, including course application and records-keeping.

As supervisors are able to view the training records of staff, the system also enables them to be more effective in managing their subordinates’ development. Staff members are also able to harness the system to effectively track and manage their own development.

40 staff receive training sponsorships
A total of 40 staff received training sponsorships in 2013 (Table 13).

Dental Surgeon Dr Melissa Guay received the Healthcare Manpower Development Programme (HMDP) sponsorship under the Medical category to pursue the Master of Science in Special Care Dentistry. It was the first time this sponsorship was awarded to a dental surgeon in the history of NHGP. The Master’s degree provides relevant education and training to meet the oral health care requirements of patients with special needs.

<table>
<thead>
<tr>
<th>Type of Sponsorship</th>
<th>No. of Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHG and MOH Sponsorship</td>
<td></td>
</tr>
<tr>
<td>NHG Clinician-Administrator Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>HMDP – Medical/Dental</td>
<td>5</td>
</tr>
<tr>
<td>HMDP – Nursing</td>
<td>7</td>
</tr>
<tr>
<td>HMDP – Allied Health</td>
<td>1</td>
</tr>
<tr>
<td>HMDP – Administrator</td>
<td>1</td>
</tr>
<tr>
<td>MOH Strategic Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NHGP Sponsorship</td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>15</td>
</tr>
<tr>
<td>Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Dental</td>
<td>2</td>
</tr>
<tr>
<td>Admin</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
</tr>
</tbody>
</table>
Ongoing Leadership Training

To enhance the leadership and supervisory competencies of employees, NHGP’s HR Division has developed a Managerial Development Training Roadmap to equip employees at various levels with essential supervisory skills.

The HR Division also works closely with department heads to identify high-performing staff to undergo NHG and MOH-coordinated leadership programmes. These leadership programmes not only allow NHGP to grow a pipeline of leaders at various levels, but also provide opportunities for nominated employees to be exposed to the thoughts and considerations of the wider NHG community and MOH with regard to policies’ intent and considerations taken for their implementation.

In 2013, a total of 24 staff attended the NHG Leadership Moments, a platform to bring staff from the various institutions together to learn from thought leaders, engage with senior management, and build networks. The sessions comprised learning visits to Best Performing Units (e.g. Singapore Prisons Services) and sharing of leadership topics by guest speakers.

In total, there were 37 attendances at NHG’s and MOH’s leadership programme in 2013 (Table 14).

Table 14  Attendances at Leadership Programmes in FY2013

<table>
<thead>
<tr>
<th>Leadership Programme</th>
<th>No. of Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHG College Leadership Programmes</td>
<td></td>
</tr>
<tr>
<td>Aspiring SEAL Programme (ASP)</td>
<td>5</td>
</tr>
<tr>
<td>Inspiring SEAL Programme (ISP)</td>
<td>4</td>
</tr>
<tr>
<td>NHG Leadership Moments</td>
<td>24</td>
</tr>
<tr>
<td>MOHH Healthcare Leadership College (HLC) Healthcare Policy and Governance (HPG) Programme</td>
<td>2</td>
</tr>
<tr>
<td>Real Leadership Programme</td>
<td>2</td>
</tr>
</tbody>
</table>

OFFICE RELOCATION

NHG Headquarters, NHGP Headquarters, NHG Pharmacy and NHG Diagnostics moved to a new office at Nexus@one-north on 22 November 2013. Thanks to the extensive coordination efforts by the Facilities Management team, the transition was smooth. An opening ceremony was held on 24 November 2013.
## APPENDIX A

### List of Improvement Projects Completed in FY2013

<table>
<thead>
<tr>
<th>No.</th>
<th>QI tool</th>
<th>Project Title</th>
<th>Clinic / Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CPIP</td>
<td>Reducing unnecessary antimicrobial treatment in patients with chronic diseases</td>
<td>Ang Mo Kio Polyclinic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>presenting with asymptomatic bacteriuria from 20 per cent to 5 per cent monthly in six months</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CPIP</td>
<td>Increasing uptake of Cervarix vaccine package within six months</td>
<td>Ang Mo Kio Polyclinic</td>
</tr>
<tr>
<td>3</td>
<td>Lean</td>
<td>Reducing high medication extension load</td>
<td>Ang Mo Kio Polyclinic</td>
</tr>
<tr>
<td>4</td>
<td>CPIP</td>
<td>Increasing the percentage of complete referrals for procedures from Tan Tock Seng Hospital to NHGP</td>
<td>Tan Tock Seng Hospital</td>
</tr>
<tr>
<td>5</td>
<td>CPIP</td>
<td>Increasing dispensing ratio of preventer inhaler to reliever inhaler for asthma patients</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>6</td>
<td>Lean</td>
<td>Managing patient workload better during pre- and post-holiday periods</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>7</td>
<td>Lean</td>
<td>Improving the refund process of a vaccination package</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>8</td>
<td>Lean</td>
<td>Reducing the number and turnaround time of omitted lab orders</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>9</td>
<td>Lean</td>
<td>Improving the workflow in organising group education</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>10</td>
<td>Lean</td>
<td>Reducing expired items in the service rooms</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>11</td>
<td>Lean</td>
<td>Improving the dispensing process for patients under the Directly Observed Therapy</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>12</td>
<td>Lean</td>
<td>Preventing wastage and contamination of paper towels for patient use in Pap smear room</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>13</td>
<td>Lean</td>
<td>Reducing audit findings of expired food items in the staff fridge</td>
<td>Bukit Batok Polyclinic</td>
</tr>
<tr>
<td>14</td>
<td>CPIP</td>
<td>Increasing the referral rate of patients with gout to dietitians</td>
<td>Choa Chu Kang Polyclinic</td>
</tr>
<tr>
<td>15</td>
<td>Lean</td>
<td>Reducing congestion at the pre-registration area during peak periods</td>
<td>Choa Chu Kang Polyclinic</td>
</tr>
<tr>
<td>16</td>
<td>Lean</td>
<td>Reducing the time taken by Health Attendants to find essential items in the pre-registration area</td>
<td>Choa Chu Kang Polyclinic</td>
</tr>
<tr>
<td>17</td>
<td>Lean</td>
<td>Implementing Systematic Health Risk-Profiling Project (SHARP) Phase 1</td>
<td>Choa Chu Kang Polyclinic</td>
</tr>
<tr>
<td>18</td>
<td>Lean</td>
<td>Reducing errors in Medisave form submission</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>19</td>
<td>Lean</td>
<td>Reorganising the treatment room</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>20</td>
<td>Lean</td>
<td>Improving the internal triage workflow for patients</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>21</td>
<td>Lean</td>
<td>Improving the store management process</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>22</td>
<td>Lean</td>
<td>Optimising the uptake of Pap smear</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>23</td>
<td>Lean</td>
<td>Improving the infection control audit scores</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>24</td>
<td>Lean</td>
<td>Improving referral of all newly diagnosed diabetic patients to dietitians</td>
<td>Clementi Polyclinic</td>
</tr>
<tr>
<td>25</td>
<td>Lean</td>
<td>Increasing the utilisation of CHAS dental benefits by Blue CHAS patients</td>
<td>Dental Division</td>
</tr>
<tr>
<td>26</td>
<td>CPIP</td>
<td>Increasing the percentage of correct procedural time-out for patients requiring extractions in the dental clinic</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>27</td>
<td>CPIP</td>
<td>Increasing the percentage of diabetes patients with comprehensive assessment done from 11 per cent to 50 per cent over six months</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>No.</td>
<td>QI tool</td>
<td>Project Title</td>
<td>Clinic / Department</td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>28</td>
<td>CPIP</td>
<td>Increasing the provision of written asthma action plans from 26 per cent to 100 per cent to asthma patients on inhalers in six months</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>29</td>
<td>Lean</td>
<td>Reducing erroneous submission in Medisave documentation in the dental clinic</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>30</td>
<td>Lean</td>
<td>Reducing motion waste of dental patients who need to do X-ray</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>31</td>
<td>Lean</td>
<td>Reducing the time spent on counselling of immunisation packages while maintaining its standards</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>32</td>
<td>Lean</td>
<td>Eliminating errors in the first-in-first-out system for sterile items in the dental clinic</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>33</td>
<td>Lean</td>
<td>Reducing waste in the patient billing process for dental clinicians</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>34</td>
<td>Lean</td>
<td>Reorganising the health education materials in the care manager’s rooms</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>35</td>
<td>Lean</td>
<td>Organising the referral counters using 6S</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>36</td>
<td>Lean</td>
<td>Implementing a flip chart for health teaching on childhood immunisation</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>37</td>
<td>Lean</td>
<td>Organising the &quot;Referral&quot; shared drive using 6S</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>38</td>
<td>Lean</td>
<td>Developing health information materials for diabetic foot screening</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>39</td>
<td>Lean</td>
<td>Minimising waiting time at the payment counter</td>
<td>Hougang Polyclinic</td>
</tr>
<tr>
<td>40</td>
<td>CPIP</td>
<td>Reducing the number of triaged patients who were given a non-priority queue number but were later deemed as medical priority by an attending doctor</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>41</td>
<td>CPIP</td>
<td>Reducing the percentage of patients who defaulted their second Pap smear</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>42</td>
<td>CPIP</td>
<td>Reducing Pharmacy capturing errors in Jurong Polyclinic</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>43</td>
<td>Lean</td>
<td>Improving efficiency of the specialist outpatient clinic (SOC) referral process and reducing missed SOC appointments</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>44</td>
<td>Lean</td>
<td>Reducing 95th percentile consult wait time to below 60 minutes for chronic patients with an appointment.</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>45</td>
<td>Lean</td>
<td>Improving the handling of unreachable critical result cases by nurses in the treatment room</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>46</td>
<td>Lean</td>
<td>Reducing time spent by Senior Patient Service Associates and Operations Executive in managing enquiries related to services and consult rooms</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>47</td>
<td>Lean</td>
<td>Preventing picking up of wrong documents from nursing stations and improving work environment for staff in the dressing room</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>48</td>
<td>Lean</td>
<td>Mitigating potential customer complaints on refund due to the change of MOH’s child immunisation policy</td>
<td>Jurong Polyclinic</td>
</tr>
<tr>
<td>49</td>
<td>CPIP</td>
<td>Reducing repeated urine microscopy tests by 50 per cent in six months</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>50</td>
<td>Lean</td>
<td>Achieving one-hour turnaround time for all internal performance indicators at Ang Mo Kio Polyclinic’s laboratory</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>51</td>
<td>Lean</td>
<td>Reducing near misses of wrong patient identification during laboratory registration in Hougang Polyclinic</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>52</td>
<td>Lean</td>
<td>Eliminating manual data entry error of HbA1c results in Hougang Polyclinic’s laboratory</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>53</td>
<td>Lean</td>
<td>Reducing laboratory recall cases due to known haemoglobin variant</td>
<td>NHG Diagnostics</td>
</tr>
<tr>
<td>54</td>
<td>CPIP</td>
<td>Eliminating prescription keying near misses in Bukit Batok Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
</tbody>
</table>
## APPENDIX A

<table>
<thead>
<tr>
<th>No.</th>
<th>QI tool</th>
<th>Project Title</th>
<th>Clinic / Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>CPIP</td>
<td>Reducing medication picking error rate in Clementi Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>56</td>
<td>Lean</td>
<td>Reducing the number of picking and packing near misses and dispensing errors of insulin in Bukit Batok Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>57</td>
<td>Lean</td>
<td>Improving the workflow for recommending blood pressure monitors in Bukit Batok Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>58</td>
<td>Lean</td>
<td>Improving patients’ waiting time in Choa Chu Kang Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>59</td>
<td>Lean</td>
<td>Enhancing the packing and dispensing processes in Clementi Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>60</td>
<td>Lean</td>
<td>Reducing waiting time at the queue counter in Hougang Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>61</td>
<td>Lean</td>
<td>Reducing waiting time in Jurong Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>62</td>
<td>Lean</td>
<td>Improving efficiency of appointment booking for the Smoking Cessation Clinic at Jurong Polyclinic</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>63</td>
<td>Lean</td>
<td>Reducing turnaround time and improving timeliness and accuracy of retail items delivered to customers’ home from Jurong Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>64</td>
<td>Lean</td>
<td>Increasing efficiency of the wastage reporting system</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>65</td>
<td>Lean</td>
<td>Increasing efficiency of the de-blistering station</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>66</td>
<td>Lean</td>
<td>Achieving high patient satisfaction score and retention rate for the Outpatient ConviiDose™ Service</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>67</td>
<td>Lean</td>
<td>Improving efficiency of quality control and medication safety of the dispensing process at NHG Pharmacy Services Centre</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>68</td>
<td>Lean</td>
<td>Minimising insufficient stock situation in Toa Payoh Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>69</td>
<td>Lean</td>
<td>Improving medication adherence for patients with adjusted dosage for angiotensin converting enzyme inhibitors or angiotensin receptor blockers at Woodlands Polyclinic</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>70</td>
<td>Lean</td>
<td>Improving accuracy of charging for sales of Pharmacy (P) and retails items at Yishun Polyclinic’s pharmacy</td>
<td>NHG Pharmacy</td>
</tr>
<tr>
<td>71</td>
<td>Lean</td>
<td>Improving efficiency in generating the service time report for NHG Diagnostics</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>72</td>
<td>Lean</td>
<td>Organising the repository library for easy navigation</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>73</td>
<td>Lean</td>
<td>Improving response time for data generation during pandemic situations</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>74</td>
<td>Lean</td>
<td>Improving data accuracy and turnaround time for critical lab reporting</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>75</td>
<td>Lean</td>
<td>Improving the Waiting Time Report for NHG Diagnostics</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>76</td>
<td>Lean</td>
<td>Improving efficiency in data request, retrieval, and archival</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>77</td>
<td>Lean</td>
<td>Improving security of sensitive survey using the customised SharePoint survey module</td>
<td>Operations – Lean Office</td>
</tr>
<tr>
<td>78</td>
<td>CPIP</td>
<td>Achieving 80 per cent transfer rate of chronic patients on Community Health Assist Scheme (CHAS) to the surrounding CHAS-certified GPs</td>
<td>PEACE &amp; Ang Mo Kio Polyclinic</td>
</tr>
<tr>
<td>79</td>
<td>CPIP</td>
<td>Increasing completion rate of fall risk questionnaire for elderly chronic patients from 30 per cent to 100 per cent within six months</td>
<td>Toa Payoh Polyclinic</td>
</tr>
<tr>
<td>80</td>
<td>CPIP</td>
<td>Increasing mammography screening among women aged 40 and above</td>
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<td>81</td>
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<td>Increasing uptake of pneumococcal vaccine among children below six years old</td>
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<td>82</td>
<td>Lean</td>
<td>Improving the workflow for weight, height, and blood pressure measurements at the chronic cluster at Level 2</td>
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<td>83</td>
<td>Lean</td>
<td>Improving workflow and eliminating waste in the referral process</td>
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<tr>
<td>No.</td>
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<td>Project Title</td>
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<td>84</td>
<td>Lean</td>
<td>Redesigning Simple Chronic Value Stream</td>
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<td>85</td>
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<td>Reorganising patient information materials in the immunisation room for one-month-old baby</td>
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<td>86</td>
<td>Lean</td>
<td>Reorganising syringes in the injection trolley in the treatment room</td>
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<tr>
<td>87</td>
<td>Lean</td>
<td>Improving the filing of appointments by patients on “Hope” Scheme</td>
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<td>88</td>
<td>Lean</td>
<td>Designing compartments for daily consumable dressing items using 6S</td>
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<td>89</td>
<td>Lean</td>
<td>Organising the filing trays in the care management room</td>
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<td>90</td>
<td>Lean</td>
<td>Standardising the workflow in tracking the space chambers sent from the treatment room to the Central Sterile Services Department</td>
<td>Toa Payoh Polyclinic</td>
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<td>91</td>
<td>Lean</td>
<td>Improving display of signage on examination couches</td>
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<td>92</td>
<td>Lean</td>
<td>Improving training of Falls Ambassadors</td>
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<td>93</td>
<td>Lean</td>
<td>Organising the stationary tray in the treatment room</td>
<td>Toa Payoh Polyclinic</td>
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<td>94</td>
<td>QI Clinical</td>
<td>Increasing uptake of influenza vaccination among patients with chronic obstructive pulmonary disease</td>
<td>Toa Payoh Polyclinic</td>
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<tr>
<td>95</td>
<td>QI Clinical</td>
<td>Improving smoking cessation advice rates among patients with chronic obstructive pulmonary disease</td>
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<td>96</td>
<td>QI Clinical</td>
<td>Streamlining referrals to TTSH’s Geriatric Medicine Department</td>
<td>Toa Payoh Polyclinic</td>
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<td>97</td>
<td>QI Clinical</td>
<td>Streamlining evaluation of patients with asymptomatic microscopic hematuria in TTSH’s Urology Department</td>
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<td>98</td>
<td>QI Clinical</td>
<td>Reducing prescribing errors for patients seen by other healthcare institutions</td>
<td>Toa Payoh Polyclinic, NHG Pharmacy</td>
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<td>99</td>
<td>CPIP</td>
<td>Increasing the percentage of patients with chest pain being triaged by nurses from 50 per cent to 100 per cent within six months</td>
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<td>100</td>
<td>Lean</td>
<td>Developing a mobile multi-purpose storage solution for dental materials and instruments</td>
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<tr>
<td>101</td>
<td>Lean</td>
<td>Improving ergonomics at doctors’workstations</td>
<td>Woodlands Polyclinic</td>
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<td>102</td>
<td>Lean</td>
<td>Reducing waiting time for a referral letter for patients in the dental clinic</td>
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<td>103</td>
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<td>Reducing turnaround time for patients with chronic medication extension</td>
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<td>104</td>
<td>Lean</td>
<td>Reducing patient movement in the event of missed lab orders</td>
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<td>105</td>
<td>Lean</td>
<td>Increasing awareness of infection control and hand hygiene among health attendants</td>
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<td>106</td>
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<td>Organising the storage area for consumables in consultation rooms using 6S</td>
<td>Woodlands Polyclinic</td>
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<td>107</td>
<td>CPIP</td>
<td>Reducing the percentage of diabetic patients with HbA1c &gt; 9 per cent from 15 per cent to 10 per cent in six months</td>
<td>Yishun Polyclinic</td>
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<td>108</td>
<td>Lean</td>
<td>Improving communication between nurses through a standardised handover communication process</td>
<td>Yishun Polyclinic</td>
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<td>109</td>
<td>Lean</td>
<td>Improving work processes to minimise loss of instruments from the dressing rooms</td>
<td>Yishun Polyclinic</td>
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<td>110</td>
<td>Lean</td>
<td>Increasing the use of the satellite pharmacy by patients with upper respiratory tract infection</td>
<td>Yishun Polyclinic</td>
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<tr>
<td>111</td>
<td>Lean</td>
<td>Reducing the risk of vaccination error through structured on-the-job training and continuous education process</td>
<td>Yishun Polyclinic</td>
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</table>
## NHGP Best 6S Competition 2013: Winning Projects

<table>
<thead>
<tr>
<th>No.</th>
<th>Title of Entry</th>
<th>Clinic</th>
<th>Team Leader</th>
<th>Award</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Improving workflow for dental cases</td>
<td>Hougang Polyclinic</td>
<td>Keithy Paquera Mumar, Senior Dental Assistant, Benjamin Yap Baojie, Dental Officer</td>
<td>Distinction</td>
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<tr>
<td>2</td>
<td>Applying 6S to registration counters</td>
<td>NHG Diagnostics</td>
<td>Sherry Ann Maniam, Medical Lab Technician</td>
<td>Distinction</td>
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<tr>
<td>3</td>
<td>Becoming a more effective team</td>
<td>NHG Diagnostics</td>
<td>Norfaizah Binte Mohd Saparen, Patient Service Associate</td>
<td>Distinction</td>
</tr>
<tr>
<td>4</td>
<td>Using 6S to organise the keypress</td>
<td>Ang Mo Kio Polyclinic</td>
<td>Emma Poon Mui Kim, Executive Assistant</td>
<td>Outstanding</td>
</tr>
<tr>
<td>5</td>
<td>Applying 6S to referral counters: Stamps No More!</td>
<td>Hougang Polyclinic</td>
<td>Celestine Cheng Bee Peng, Senior Patient Service Associate</td>
<td>Outstanding</td>
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<tr>
<td>6</td>
<td>Applying 6S to sterilisation room in the dental clinic</td>
<td>Hougang Polyclinic</td>
<td>Suyriati Binte Mohd Isa, Senior Dental Assistant</td>
<td>Outstanding</td>
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<tr>
<td>7</td>
<td>Organising storage cabinets for the Medical Records Office</td>
<td>Hougang Polyclinic</td>
<td>Kanjinamala d/o Vengadsalam, Senior Patient Service Associate, Selene Teo Lan Yun, Patient Service Associate</td>
<td>Outstanding</td>
</tr>
<tr>
<td>8</td>
<td>Applying 6S to Segregation Room and cupboards</td>
<td>Jurong Polyclinic</td>
<td>Siti Noraini Binte Johari, Assistant Nurse, Siti Aisah Binte Mustafa, Assistant Nurse</td>
<td>Outstanding</td>
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<tr>
<td>9</td>
<td>Applying 6S to electrocardiography room</td>
<td>NHG Diagnostics</td>
<td>Janet Teng, Senior Medical Technologist</td>
<td>Outstanding</td>
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<tr>
<td>10</td>
<td>Creating an organised working environment to enhance productivity</td>
<td>NHG Diagnostics</td>
<td>Eileen Lim Ying Chun, Senior Patient Service Associate</td>
<td>Outstanding</td>
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<tr>
<td>11</td>
<td>Improving office courier</td>
<td>NHG Diagnostics</td>
<td>Bertina Bay, Executive</td>
<td>Outstanding</td>
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<tr>
<td>12</td>
<td>Improving arrangement of consumables in pre-packing area</td>
<td>NHG Pharmacy</td>
<td>Piao YinZhen, Storekeeper</td>
<td>Outstanding</td>
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<tr>
<td>13</td>
<td>Improving efficiency of the pre-packing area</td>
<td>NHG Pharmacy</td>
<td>Daphne Yee, Pharmacy Technician</td>
<td>Outstanding</td>
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<tr>
<td>14</td>
<td>Organising our stationery cupboards at NHGP Headquarters</td>
<td>Nursing Services</td>
<td>Jancy Mathews, Deputy Director</td>
<td>Outstanding</td>
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<tr>
<td>15</td>
<td>Organising administrative cupboards at Dental Care Counters</td>
<td>Ang Mo Kio Polyclinic</td>
<td>Joanne Woo Sing Yi, Dental Surgeon</td>
<td>Excellence</td>
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<tr>
<td>16</td>
<td>Improving follow-up recalls in Women Health Clinic</td>
<td>Bukit Batok Polyclinic</td>
<td>Sazalina Binte Samat, Senior Staff Nurse</td>
<td>Excellence</td>
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<tr>
<td>17</td>
<td>Improving intravenous cannulation and injection trolley in Treatment Room 32</td>
<td>Choa Chu Kang Polyclinic</td>
<td>Michelle Chng, Staff Nurse</td>
<td>Excellence</td>
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<tr>
<td>18</td>
<td>Improving storage of consumable items in Clean Utility Treatment Room</td>
<td>Choa Chu Kang Polyclinic</td>
<td>Sim Kok Huay, Senior Staff Nurse</td>
<td>Excellence</td>
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<tr>
<td>19</td>
<td>Ensuring first-in-first-out process in the immunisation room</td>
<td>Clementi Polyclinic</td>
<td>Katherine Tan Gek Tee, Senior Staff Nurse</td>
<td>Excellence</td>
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## APPENDIX B

<table>
<thead>
<tr>
<th>No.</th>
<th>Title of Entry</th>
<th>Clinic</th>
<th>Team Leader</th>
<th>Award</th>
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</thead>
<tbody>
<tr>
<td>20</td>
<td>Improving storage for space chambers and spacer masks</td>
<td>Clementi Polyclinic</td>
<td>Selina Ong, Senior Assistant Nurse</td>
<td>Excellence</td>
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<tr>
<td>21</td>
<td>Applying 6S to a staff notice board</td>
<td>Hougang Polyclinic</td>
<td>Jolene Sng Yian Ping, Senior Patient Service Associate</td>
<td>Excellence</td>
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<tr>
<td>22</td>
<td>Ensuring compliance in updating the Electronic Immunisation System Vaccine Maintenance Records</td>
<td>Hougang Polyclinic</td>
<td>Rajoo Thilaga Rani, Staff Nurse</td>
<td>Excellence</td>
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<tr>
<td>23</td>
<td>Standardising registration counters</td>
<td>Jurong Polyclinic</td>
<td>Berine Tan Poh Yuen, Executive Assistant Lim See Yee, Executive</td>
<td>Excellence</td>
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<tr>
<td>24</td>
<td>Applying 6S to patient-reserved-medication area</td>
<td>NHG Pharmacy</td>
<td>Lee Mee Lin Linda, Executive</td>
<td>Excellence</td>
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<tr>
<td>25</td>
<td>Categorising smoking cessation booklets on shelves</td>
<td>NHG Pharmacy</td>
<td>Ng Ying Ru, Senior Pharmacist Dahlia Liew, Principal Pharmacist</td>
<td>Excellence</td>
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<tr>
<td>26</td>
<td>Facilitating staff communication on logging in of training hours in Learning Space</td>
<td>NHG Pharmacy</td>
<td>Ng Ying Ru, Senior Pharmacist</td>
<td>Excellence</td>
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<tr>
<td>27</td>
<td>Improving picking accuracy for uncommonly prescribed medications</td>
<td>NHG Pharmacy</td>
<td>Liu Li Hong, Pharmacy Technician</td>
<td>Excellence</td>
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<td>28</td>
<td>Improving the arrangement of clips and labels in the pharmacy keying area</td>
<td>NHG Pharmacy</td>
<td>Alice Chin, Senior Pharmacy Technician</td>
<td>Excellence</td>
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<td>29</td>
<td>Improving the arrangement of dressing products in the retail cabinets</td>
<td>NHG Pharmacy</td>
<td>Dharshni, Retail Assistant</td>
<td>Excellence</td>
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<td>30</td>
<td>Improving the process of updating doctors’ consultation rooms and telephone extension numbers</td>
<td>NHG Pharmacy</td>
<td>Alice Chin, Senior Pharmacy Technician</td>
<td>Excellence</td>
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<td>31</td>
<td>Improving the storage of food items in the pantry fridge</td>
<td>NHG Pharmacy</td>
<td>Sharon Tan, Pharmacy Technician</td>
<td>Excellence</td>
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<td>32</td>
<td>Improving workflow for returning ready-to-collect medications</td>
<td>NHG Pharmacy</td>
<td>Weng Wanyu, Senior Pharmacist Gary Wiratama Chandra, Pharmacist</td>
<td>Excellence</td>
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<td>33</td>
<td>Organising stationery cupboard</td>
<td>NHG Pharmacy</td>
<td>Saeadah Ahamed, Executive Assistant</td>
<td>Excellence</td>
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<td>34</td>
<td>Redesigning Counter 1 in the pharmacy at Bukit Batok Polyclinic</td>
<td>NHG Pharmacy</td>
<td>Clara Ching Shi Si, Pharmacy Technician Nur Aqidah Bte Latif, Pharmacist</td>
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<td>35</td>
<td>Improving leave application process for operations staff</td>
<td>Toa Payoh Polyclinic</td>
<td>Soh Li Yun, Executive</td>
<td>Excellence</td>
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<td>36</td>
<td>Reorganising the working desk in the treatment room</td>
<td>Toa Payoh Polyclinic</td>
<td>Chow Peng Ying, Senior Staff Nurse</td>
<td>Excellence</td>
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List of Our Polyclinics

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<thead>
<tr>
<th>NHGP Polyclinics</th>
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<tbody>
<tr>
<td><strong>Ang Mo Kio Polyclinic</strong></td>
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<tr>
<td>Blk 723 Ang Mo Kio Avenue 8</td>
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<td>#01-4136</td>
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