“This is not sexy, glamorous medicine but this is how we can help Singaporeans look after their elderly, look after ourselves when we are elderly, look after our healthcare costs. We have to think about the whole system, provide the right treatment at the right place to patients with different needs.”

Prime Minister Lee Hsien Loong
National Day Rally 2009
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This vision departs from merely healing the sick to the more difficult and infinitely more rewarding task of preventing illness and preserving health and quality of life.

NHG is a leader in public healthcare in Singapore, recognised at home and abroad for the quality of its medical expertise and facilities.

Care is provided through an integrated network of primary healthcare polyclinics, acute care and tertiary hospitals, national specialty centres and business divisions. Together, they bring a rich legacy of more than 340 years of medical expertise to our philosophy of patient-centric care.

By designing accessible and seamless healthcare services around patients’ needs, NHG ensures that patient care is fully coordinated within the cluster and is also extended to high level collaboration with other healthcare providers at home and abroad.
OUR VISION

Adding Years of Healthy Life

OUR MISSION

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

OUR VALUES

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

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

RESPECT We treat everyone with honesty, decency and fairness.

INTEGRITY We are committed to the highest standards of ethical conduct.

SOCIAL RESPONSIBILITY We contribute positively to the well-being and welfare of the community.

PROFESSIONALISM We are committed to being the best in what we do, and to achieving the best possible outcome for our patients.
As the National Healthcare Group (NHG) enters our 12th year, we are going full steam ahead with our role as the Regional Health System (RHS) for the Central region of Singapore. Our work continues to be driven by the three pillars of Clinical Service, Education and Research.

Regional Health System
Being a RHS will redefine the way we provide patient care and collaborate with our partners and other stakeholders. We will maintain our patient-centric focus as we attempt to make healthcare smooth and seamless for our patients. What this means is care from the patient’s perspective instead of the provider’s.

While we are the RHS for the Central region, our care reaches out island-wide. Our nine polyclinics, for instance, are also spread across three other regional health clusters namely, Alexandra Health in the north and the National University Health System (NUHS) and Jurong Health Services in the west. and our two national specialty centres – the Institute of Mental Health and National Skin Centre – serve patients from all over Singapore, not just those from the Central zone.

Collaborative Care
With Singapore’s rapidly ageing population and more people developing chronic diseases, the old hospital-centric model of care is no longer sustainable. We need to – and must – work with our partners and stakeholders in the primary, acute and step-down care sectors.

Likewise, a doctor-centric service no longer works today when we need a multi-pronged approach to enhance chronic disease management and improve population health. Now nurses, allied health professionals and others will certainly have more important roles to play as we shift towards team-based care.

Beyond the hospital walls, team-based care is also about collaborating with our RHS alliance partners – who include primary care providers, community hospitals, nursing homes, home care providers, hospices and other social service providers – to support people in the community for as long as possible.

In population health management, we also try to make it easy for the community to get their basic health screening and simple tests conveniently done closer to home. For example, NHG Diagnostics’ Mobile Bone Mineral Densitometry (BMD) service makes it simpler for senior citizens to check their bone health either in one of our nine National Healthcare Group Polyclinics or at a nearby community club.

When it comes to caring for the mental health of our population, NHG is also reaching out to the community. The Institute of Mental Health’s diverse range of programmes and support groups are tailored to help children, troubled teens, women, ex-offenders and problem gamblers.

Reality Training
Such extensive and broad-based population health management would require NHG to have more qualified healthcare workers who are trained and ready to handle any situation. And what better way to prepare such professionals than through realistic simulation training.

We are very proud of NHG’s recently opened Simulation and Integrated Medical Training Advancement Centre (SiMTaC) in Tan Tock Seng Hospital (TTSH). This $8 million state-of-the-art training facility provides realistic scenarios, enabling our healthcare professionals to safely and efficiently experience a diverse range of clinical situations for practical training.

As NHG is the principal clinical training partner for the new Lee Kong Chian School of Medicine (LKCSoM), SiMTaC’s cutting edge facilities and NHG’s excellent clinician educators will add tremendous value to the educational collaboration between NHG and Singapore’s newest medical school. NHG is also proud to have 29 clinicians appointed as LKCSoM faculty. Our clinician educators will also be actively involved in the design and planning of the curriculum on top of their teaching responsibilities.
In population health management, we also try to make it easy for the community to get their basic health screening and simple tests conveniently done closer to home. For example, NHG Diagnostics’ Mobile Bone Mineral Densitometry (BMD) service makes it simpler for senior citizens to check their bone health either in one of our nine National Healthcare Group Polyclinics or at a nearby community club.”

On the Research front, we are grooming a new generation of clinician scientists even as we build up our Research capabilities in ageing/geriatrics, rehabilitation medicine, mental health and metabolic diseases like diabetes.

IN APPRECIATION
We will miss the Board Members who retired this year. Our grateful thanks go to Mr Goh Aik Guan, Mr Pang Kin Keong, Dr Ross Wilson and Dr Wilson Wong who stepped down as Board Members on 15 April 2012. We welcome Mrs Tan Ching Yee, Professor Stephen Smith, Mr Lionel Yeo and Mr Seow Choke Meng who joined our Board on 15 April 2012.

As always, all our achievements would not have been possible without our people and their tireless efforts. We are very grateful to the management team and every single staff member of our 10,000-strong NHG family for their unflagging dedication and contributions to NHG.
In this past year, the National Healthcare Group (NHG) has been busy strengthening our integration of care, clinical and mental health services, professional education and development as well as building capacity.

As the Regional Health System (RHS) for the Central region, NHG is in a unique position to pioneer many firsts that we, as well as our RHS partners and others, may learn from.

One of our key strategies as the Central RHS is to raise the quality of care – by better integrating across different healthcare settings so that we provide the right treatment and care at the right place for patients with different needs. As a larger proportion of our population moves into their golden years, we have several different initiatives dedicated to empowering them to live active and fulfilling lives in the community.

I am particularly pleased with our progress in Tan Tock Seng Hospital (TTSH)’s Community Health Engagement Programme (CHEP), which is designed to keep residents – aged 65 years and above – in the community for as long as possible. This is done by equipping them with skills to monitor and train one another in healthy ageing and self-management of chronic disease. CHEP comprises three programmes; two of which – Chronic Disease Self-Management Programme and Engage in Life – offer healthy ageing in just six weeks. The third is a one-year programme, Stepping Out into Active Life, which screens and advises the elderly on the risks of falls and how to prevent them through exercise and home safety. CHEP also helps to ensure the smooth transition of care for senior citizens in the community – by integrating TTSH with the community services in specific locations.

Besides RenCi Community Hospital, TTSH also works closely with Ang Mo Kio Thye Hua Kuan Community Hospital, St Theresa’s Home, Lions Home for the Elders Toa Payoh, Society for the Aged Sick, Ling Kwang Home for Senior Citizens, Home Nursing Foundation, and Dover Park, Assisi and several other hospices. Our RHS initiatives need to dovetail with programmes from other national agencies such as the Agency for Integrated Care and Health Promotion Board as well.

At NHG, we are committed to achieving better standards for both our healthcare professionals and patients alike. In 2011, both TTSH and the Institute of Mental Health received their respective Joint Commission International (JCI) re-accreditation, while our NHG Polyclinics are undergoing accreditation. The National Skin Centre (NSC) obtained the People Developer accreditation in March 2011. NSC was JCI re-accredited in November 2010. NHG Pharmacy also received both the Singapore Quality Class certification and People Developer recertification in September 2011.

As a healthcare group, we need to align everyone with our Vision, Mission and Values, and refresh NHG’s existing group culture to prepare our organisation for the future of healthcare and to support our role as the Central RHS.

The concept of what a hospital is – and does – is evolving. It is no longer about doing what we do best in acute care, but exploring preventive and continued care across the healthcare continuum and in the community. It is literally about Adding Years of Healthy Life. Even improvements are no longer confined within hospitals or a healthcare group. We must learn to engage and work with partners from the primary care, step-down care, and social and community sectors; to look beyond illness care; and learn about true patient-centredness.

Last year, our people consistently went that extra mile and made significant contributions to healthcare delivery. Their dedication won them recognition and commendation; both within our group and
from the community. These accolades will spur us to achieve greater heights with the ultimate aim of serving our patients and customers even better.

A/Prof Chin Jing Jih is one of the many clinicians who has done NHG proud. This senior consultant and Divisional Chairman of TTSH’s Division of Integrative and Continuing Care was recently voted in as the 53rd President of the Singapore Medical Association.

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 my Senior Management team and our RHS partners and stakeholders for their continued support.

Most of all, I want to thank every one of our 10,000-strong NHG family. Our success and effectiveness are always viewed from the patient’s perspective. Yet all our achievements and accolades would not have been possible without the indefatigable contributions of NHG’s most valuable resource – our people.

We must learn to engage and work with partners from the primary care, step-down care, and social and community sectors; to look beyond illness care; and learn about true patient centredness.”

Professor Chee Yam Cheng
CHIEF EXECUTIVE OFFICER
NATIONAL HEALTHCARE GROUP
Professor Chee Yam Cheng graduated MBBS from the University of Singapore in 1973, served National Service for two and a half years (Best Cadet) after housemanship, and returned to the Ministry of Health (MOH) to train in internal Medicine. He is a General Physician practising in the Department of General Medicine, Tan Tock Seng Hospital. He was the former Head of Department, and former Chairman of the Medical Board. From 1987 to 1998, he served in various administrative positions in the Ministry of Health concurrently with his clinical role. Responsibilities covered included manpower planning, deployment and hospital administration.

In 1995 he attended the Advanced Management Program at Harvard Business School. In 2003 he was appointed the Assistant CEO (Clinical) of the National Healthcare Group, and in Jan 2011 became the CEO of the Group. He remains as Advisor and Senior Consultant to the office of the Director of Medical Services, MOH. He was Past Master of the Academy of Medicine Singapore (1998-2000) and holds Fellowships of several medical colleges of the US, UK and Australia. He was awarded the Public Administration Medal, Silver in 1991, Gold in 2006, and the Public Service Medal, also in 2006. He is Clinical Professor of Medicine, Yong Loo Lin School of Medicine, National University of Singapore since 2000. With the setting up of the Lee Kong Chian School of Medicine (LKCSoM) awarding a joint MBBS degree by Imperial College London and Nanyang Technological University, Singapore, he sits on its ProTem Governing Board as NHG is LKCSoM’s principal clinical partner.
Professor Judith Lea Swain is a physician scientist and cardiovascular specialist, and is executive Director of the Singapore institute for Clinical Sciences (a*STAR), and the Lien Ying Chow Professor of Medicine, NuS Yong Loo Lin School of Medicine. Prof Swain previously served as Dean for Translational Medicine at university of California San Diego, Chair of Medicine at Stanford university and Chief of Cardiovascular Medicine at the university of Pennsylvania. She is a physician scientist who has worked in molecular cardiology and in medical device development. She joined the NHG Board in 2009.

Mr. R. Sinnakaruppan is presently Chairman/CEO of Singapore Education Academy (AsiaPac) Pte Ltd, a holding company for a group of education companies involved in a wide range of products and services for children and adult education. He has served and continues to serve in statutory boards/community organisations/listed companies including HDB, CAAS, MDA, ITE, Singapore Polytechnic, Nanyang Technological University (NTU), NTU Alumni Club, Singapore Polytechnic, TTS8, SINDA Board of Trustees, Accel Frontline Ltd, SLF Leisure Pte Ltd and many more. He also served as a Member of Parliament from 1991 to 2001. He is a Foreign & Commonwealth Scholar and has been educated in Harvard Business School, Loughborough University and NTU (NTI).

Mrs Tan Ching Yee has been the Permanent Secretary of the Ministry of Health, Singapore since April 2012. In addition to board memberships in public healthcare institutions, she is a board member of the Competition Commission of Singapore, the National Research Foundation and the Singapore Totalisator Board. She joined the Singapore Civil Service in 1986, holding posts with the Ministry of Trade and Industry and Ministry of Education (MOE). In July 2002, she became the Chief Executive of the Infocomm Development Authority, Singapore. Concurrently, she also held the post of Deputy Secretary (Infocomm and Media Development) at the Ministry of Information, Communications and the Arts. She returned to MOE as its Second Permanent Secretary in January 2005, and as its Permanent Secretary in April 2007.

Mr Soh Gim Teik advises corporations through his firm, Finix Corporate Advisory LLP and has more than 34 years of experience in accounting, finance and strategic management. Currently serving as an independent director on the boards of several SGX-listed companies, he had previously held directorship appointments in a Hong Kong listed company as well as various private companies in Singapore, Malaysia, Thailand, Taiwan, PRC and India. Additionally, he is also a director and finance committee chairperson in a number of charitable and non-profit organisations and regularly participates as panelist and speaker for various organisations. Mr Soh is a member of the Institute of Certified Public Accountants of Singapore (ICPAS) and a Fellow of the Singapore Institute of Directors (SID). He was the immediate past Chairman of the CFO Committee of ICPAS and was previously a committee member of the Professional Accountants in Business Committee of the International Federation of Accountants (IFAC). Currently, he is a board member of the SID and serves as a member of its Governing Council. He was named the Best CFO of the Year at the inaugural Singapore Corporate Awards in 2006 in the ‘Main Board Listed Companies by Market Capitalization of below $500 million’ category. Mr Soh holds a Bachelor of Accountancy degree from the University of Singapore.
Ms Anita Fam was formerly a partner of Khattar Wong & Partners and thereafter Senior Legal Counsel, Enron Capital & Trade Resources before she retired 12 years ago to devote herself to her family. Since then, she has immersed herself in community work and is a full-time volunteer, both at charity and national level in the areas of disability, palliative care, family, marriage and international volunteering. Ms Fam chairs Marriage Central. She is also Co-Chairman of the Community Silver Trust Evaluation Panel (Health), Vice President of the Asian Women’s Welfare Association and Deputy Chairman of Assisi Hospice. Ms Fam also serves as board member of the National Family Council, Singapore International Foundation, St Andrew’s Autism Centre, St Andrew’s Autism School and Sembawang Family Service Centre among others. Ms Fam was conferred the Public Service Medal (PBM) in 2008 for her work in the community. She joined the NHG Board in 2009.

Mr Paul Chan was appointed to the Board in November 2006. He is also Director of SIA Engineering Company Ltd and Integrated Health Information Systems Pte Ltd and the Chairman of SP Services Ltd. Mr Chan had previously served on the boards of various companies including Singapore Power Ltd, Singapore Telecommunications Ltd, the Singapore Economic Development Board, Verigy Ltd, and the Advisory Board of the Lee Kong Chian School of Business, Singapore Management University. Formerly the Senior Vice President & Managing Director (Asia Pacific & Japan) of Hewlett-Packard Asia Pacific Pte Ltd and the Vice President & Managing Director (Asia Pacific) of Compaq Computer Asia Pacific Pte Ltd, his leadership and foresight contributed greatly to their business excellence. Mr Chan was awarded the Public Service Star in 2005.

Mr Cavinder Bull is a Director at Drew & Napier LLC. He studied at Oxford University where he took first class honours and at Harvard Law School which he attended on a Lee Kuan Yew Scholarship. He has also been called to the Bar in England and Wales as well as in New York. The Chief Justice of Singapore appointed Mr Bull as Senior Counsel in January 2008. Mr Bull is an active member in the legal fraternity. He is the Deputy Chairman of the Singapore International Arbitration Centre and has served on several committees such as the Law Reform Committee and the Singapore Law Committee of the Singapore Academy of Law. Mr Bull is also a Director of Ascendas Property Fund Trustee Pte Ltd and ST Electronics Ltd.

Mrs Lim Joke Mui is an accountant by training and has served as Group CFO in various corporate groups, including DBS Land Limited, Capitaland Commercial Limited and Sembcorp Industries Limited. She retired from Sembcorp Industries on 30th June 2010. She oversaw various functions in the groups including the corporate finance, accounting, tax, treasury, risk management, company secretarial and mergers & acquisitions. Besides being a director on the various non-listed companies within the various corporate groups, her past directorships included listed companies in Singapore, Australia and Malaysia such as Sembcorp Marine Limited, The Ascott Limited, The Insurance Corporation of Singapore, Australand Holdings Limited and United Malayan Berhad. She is currently a member of the Investment and Audit Committees of MOHH and a member of the Finance and HR Committee of the Singapore Cheshire Home.
Professor Stephen K. Smith (DSc, FMedSci) is Vice-President (Research) at the Nanyang Technological University (NTU) and the Founding Dean of the Lee Kong Chian School of Medicine. He was the Principal of the Faculty of Medicine at Imperial College London and was Chief Executive of Imperial College Healthcare National Health Service Trust since its inception, the largest such trust in the United Kingdom. He left Imperial College Healthcare NHS Trust from 30 September 2011 to focus on his role as Vice President (Research) and Foundation Dean of the Lee Kong Chian School of Medicine. A gynaecologist by training, Prof Smith has published over 225 papers on reproductive medicine and cancer. It was for his work in Cambridge on the complex gene pathways that regulate the growth of blood vessels in reproductive tissue that he was awarded his Doctor of Science in 2001. In addition to his academic and clinical work, he is a Fellow of the Institute of Biology, the Academy of Medical Sciences, the New York Academy of Sciences and the Royal Society of Arts. Prof Smith led the formation of the United Kingdom’s first Academic Health Science Centre (AHSC), launched in October 2007 from the merger of Hammersmith Hospitals National Healthcare Service Trust and St Mary’s National Healthcare Service Trust and its integration with Imperial College London. Prof Smith was an academic at University of Edinburgh and went on to join Reproductive Biology Unit of Medical Research Council, Edinburgh. He also held academic appointments at National Healthcare Service, as well as clinical appointments at Hammersmith Hospital, Addenbrooke’s in Cambridge, the Northern General and Jessop Hospital in Sheffield, and the Royal Infirmary in Edinburgh. Before joining Imperial College London, Prof Smith was Head of the Department of Obstetrics & Gynaecology at the University of Cambridge.

Mr Seow Choke Meng has been with the newspaper group for the last 33 years after spending five years in the airline industry. He has held various positions, among which were as General Manager, Human Resource Operations, and General Manager, Circulation cum General Manager of Chinese Newspapers’ Editorial Services Department. Mr Seow is currently Executive Vice-President of Cultural Industry Promotion of Chinese Newspapers Division and Times Properties. He is also the Executive Director of Times Development Pte Ltd. Apart from serving in grassroots and community organisations, he also serves as the Chairman of the Promote Mandarin Council and a Board Member of the National Healthcare Group. Mr Seow graduated from the University of Singapore with a Bachelor of Science (Honours) degree.

Mr Lionel Yeo has been the Chief Executive of the Singapore Tourism Board since June 2012. Mr Yeo was formerly Dean & CEO of Singapore’s Civil Service College, and Deputy Secretary (Development) in the Public Service Division of the Prime Minister’s Office. A career civil servant, he has also worked in the ministries of trade and industry, finance, information and the arts, and community development. Mr Yeo also serves on the boards of the Urban Redevelopment Authority and on the Board of Governors of Raffles Institution.

Our Thanks to former Board Members
Mr Goh Aik Guan, Mr Pang Kin Keong, Dr Ross Wilson and Dr Wilson Wong – who stepped down on 15 April 2012.
SENIOR MANAGEMENT

Prof Chee Yam Cheng  
CHIEF EXECUTIVE OFFICER  
National Healthcare Group

Assoc/Prof Chua Hong Choon  
ASSISTANT CHIEF EXECUTIVE OFFICER  
Institute of Mental Health/ Woodbridge Hospital

Mr Leong Yew Meng  
CHIEF EXECUTIVE OFFICER  
National Healthcare Group Polyclinics

Prof Roy Chan  
DIRECTOR  
National Skin Centre

Assoc/Prof Thomas Lew  
CHAIRMAN MEDICAL BOARD  
Tan Tock Seng Hospital

Assoc/Prof Daniel Fung  
CHAIRMAN MEDICAL BOARD  
Institute of Mental Health/ Woodbridge Hospital

Ms Lim Yee Juan  
CHIEF FINANCIAL OFFICER  
National Healthcare Group

Mrs Olivia Tay  
CHIEF HUMAN RESOURCE OFFICER  
National Healthcare Group
Mr Linus Tham  
CHIEF CORPORATE DEVELOPMENT OFFICER  
National Healthcare Group  
CHIEF OPERATING OFFICER  
Institute of Mental Health/Woodbridge Hospital

Adjunct Assoc/Prof Nellie Yeo  
CHIEF QUALITY OFFICER  
National Healthcare Group  
EXECUTIVE DIRECTOR  
National Healthcare Group College

Ms Wong Fong Tze  
CHIEF CORPORATE COMMUNICATIONS OFFICER  
National Healthcare Group

Ms Tan Ming Chu  
CHIEF INFORMATION OFFICER  
National Healthcare Group

Dr Eugene Fidelis Soh  
CHIEF OPERATING OFFICER  
Tan Tock Seng Hospital

Ms Grace Chiang  
CHIEF OPERATING OFFICER  
National Healthcare Group Polyclinics

Dr Tyrone Goh  
EXECUTIVE DIRECTOR  
National Healthcare Group Diagnostics

Assoc/Prof Tai Hwei Yee  
DEPUTY CHIEF QUALITY OFFICER  
National Healthcare Group

Dr Lew Yi Jen  
DIRECTOR CLINICAL SERVICES  
National Healthcare Group Polyclinics

Ms Chan Soo Chung  
EXECUTIVE DIRECTOR  
National Healthcare Group Pharmacy

Assoc/Prof Nicholas Chew Wuen Ming  
DESIGNATED INSTITUTIONAL OFFICIAL  
NATIONAL HEALTHCARE GROUP RESIDENCY
PATIENTS FIRST

From hospital to research lab, the National Healthcare Group (NHG) is driven by a common vision: *Adding Years of Healthy Life*. We realise this vision in our role as the Regional Health System (RHS) for Singapore’s central region. NHG is now a patient-centric healthcare ecosystem comprising partners from the primary, acute and step-down care sectors. Manpower and resources are shared via such alliances to deliver integrated healthcare services for our patients.

Our innovations are designed with the patient’s needs in mind. Within clinical care, we have continued our efforts in improving treatments and facilities, shortening the length of hospital stays and speeding recovery times.

An integral part of a successful ecosystem is the patient. Our evolving programmes empower him or her to take an active role in preventing and managing diseases as we work together towards *Adding Years of Healthy Life*. 
At Tan Tock Seng Hospital (TTSH)’s expanded Emergency Diagnostic and Therapeutic Centre (eDTC), more patients with serious but stable conditions like asthma, appendicitis and pneumonia now enjoy shorter stays and lower costs. The eDTC provides standardised treatment protocols for 18 conditions. It is designed to provide care in such a way that patients do not need to be hospitalised for more than a day. Besides the savings in time and costs, it also frees up beds in TTSH’s main wards.

**OPAT: BRINGING CLINICAL CARE CLOSER TO HOME**

With the launch of TTSH’s Outpatient Parenteral Antibiotic Therapy (OPAT) programme, patients who are clinically stable can now continue their antibiotic therapy at outpatient clinics or in the comfort of their own homes. Besides being more convenient for patients, it also reduces the length – and cost – of hospital stays, and frees up hospital beds for more critical cases. OPAT runs 365 days a year.

**LESS PAIN, LOWER COSTS, SHORTER HOSPITAL STAYS**

TTSH’s Department of General Surgery uses a revolutionary technique to remove small tumours from the colon with less pain and a shorter recovery time. It is a modified technique of the single port surgery, replacing the conventional surgical instrument with a common glove to similar effect. The modified port costs just 10 per cent of the price of the commercial port.

**RENAL CARE WITH EXPERT CONSULT**

The new B. Braun Avitum Dialysis Centre (BBADC) at RenCi Hospital, linked to TTSH via a sheltered link way, means that TTSH patients can move seamlessly between appointments with their primary care physicians and haemodialysis sessions. The centre, which is Singapore’s first, opened its doors in March thanks to a partnership between TTSH, B. Braun and RenCi.

Nurses attend to the centre’s patients while TTSH doctors monitor and order medical tests for them. BBADC’s location next to an acute-care hospital puts it in a unique position to treat high-dependency cases and also allows urgent cases to be seen to immediately. This cooperation demonstrates a move towards creating a regional health cluster in Novena for those who need long-term care.

**WHEN FRIENDS CAN HELP**

The Institute of Mental Health’s (IMH) Department of Child and Adolescent Psychiatry has introduced the Forensic Rehabilitation, Intervention, Evaluation and Network Development Services, or FRIENDS, to help abused, conduct-disordered or delinquent children who have mental health problems or who may have a risk of developing these problems later.

Multi-disciplinary teams of psychiatrists, psychologists and medical...
social workers have, since March 2010, been assessing and treating juvenile offenders, child abuse victims and children involved in complicated custody and access disputes in divorce proceedings.

Besides being an early detection, intervention and prevention programme, FRIENDS also trains community partners such as Ministry of Community Development, Youth and Sports (MCYS) Homes. IMH psychiatrists also visit homes to assess and treat their clients directly and discuss patient-relevant issues with their immediate caregivers. In FY2011, the team assessed and treated about 1,000 patients.

HELPING TROUBLED TEENS
The adolescent team at National Addictions Management Service (NAMS) has rebranded and relaunched its flagship treatment programme as RELIVE. RELIVE offers individual and group counselling to teens with substance and behavioural addictions. It also works closely with schools, REACH counsellors and various youth organisations to provide advice on how to manage adolescents, through training and consultancy.

In November 2011, NAMS moved to make RELIVE available to teens in the Singapore Boys’ and Singapore Girls’ Homes by establishing a counselling service with MCYS. This service includes weekly counselling at the two Homes and monthly case conferences.

REACHING OUT TO WOMEN AT RISK
Recognising the unique challenges and experiences faced by women in addiction and recovery, NAMS launched a psycho-educational and support group in October 2011 specifically to meet the needs of female patients. Called Women in Recovery through Support, Education and Empowerment, or WISE, the group provides a safe and supportive environment for female patients in recovery.

RAISING THE ODDS OF GAMBLERS’ RECOVERY
NAMS has rolled out two new initiatives to reach out to problem gamblers who are not ready or unwilling to seek treatment. One targets the gamblers themselves, and the other, their family members. The first initiative is an online interactive self-help

“The primary care fraternity which includes General Practitioners or GPs, family physicians, nurses, allied health professionals and others will certainly have more important roles to play as we shift towards team-based care. We need a multi-pronged approach to transform primary care and enhance chronic disease management in the community. Taking better care of the silver generation will also redefine the way we provide patient care and collaborate with our partners and other stakeholders in the primary, acute and step-down care sectors.”

– Professor Chee Yam Cheng
Chief Executive Officer
National Healthcare Group
workbook, the first of its kind in Singapore, which guides users to look at the triggers for their gambling.

The second initiative is a psycho-education group open to the public called Families in Recovery through Education & Empowerment (FREE-PG). As gamblers themselves are often resistant or reluctant to seek help, the family becomes an important avenue of intervention. NAMS started FREE-PG as a pilot outreach programme in May 2010. The pilot received good feedback and the programme was officially launched in August 2011.

HELPING EX-OFFENDERS
In January 2012, IMH launched a new programme that will continue the treatment and aftercare of mentally ill inmates after they are released from prison. The Forensic Psychiatry Community Service programme was set up as a response to an IMH study that implied a high rate of recidivism for this group. Inmates who meet the programme’s criteria are interviewed by a case manager and a medical social worker prior to their release date to assess their needs and risks. The team also liaises with prison staff and social service agencies to provide holistic after-release care. The initiative is funded under the Ministry of Health (MOH) Health Services Development Programme (HSDP).

INTEGRATED CARE, FASTER TURNAROUNDS
Jointly managed by TTSH and Johns Hopkins Singapore, Clinic 5A successfully integrates Medical Oncology, General Medicine, Haematology and Palliative clinics in a newly-renovated facility at TTSH. The clinic promises greater convenience and an enhanced experience for our patients through integrated care. Several new concepts to reduce patient turnaround time and congestion have been tested at the clinic, resulting in a 38 per cent improvement in turnaround time. The clinic also has optimised consultation rooms to foster better face-to-face doctor-patient interaction.

EARLIER DETECTION, HOLISTIC TREATMENT

From its early beginnings as a clinic helmed mainly by doctors, the HMCs have now evolved to embrace a model of team-based care. A network of family physicians, nurses, psychologists and medical social workers now make up the Health and Mind Care Team (HMCT), which identifies and manages these common mental conditions.

Starting in 2012, HMCTs have begun to work with psychiatrists from the Institute of Mental Health under the Assessment and Shared Care Teams (ASCAT) programme. This allows patients with mental conditions to be treated by psychiatrists at a polyclinic near them instead of having to seek treatment in the hospital. Today, more patients with common mental disorders such as anxiety, depression and insomnia can be treated in polyclinics.

CCK POLYCLINIC’S ELDERLY-FRIENDLY FACILITIES
The newly-renovated Choa Chu Kang (CCK) Polyclinic was officially opened by Minister for Health Mr Gan Kim Yong in September 2011 – with a layout that improves patient flow and processes, and minimises walking for patients. The Polyclinic also houses two laboratories: the laboratory on level one serves those who are frail or wheelchair-bound. The laboratory on level two is fitted with a biochemistry analyser, which serves as a mini back-end lab that allows for a faster turnaround time. In fact, the waiting time for lab results has been reduced from six hours to two and a half hours.

Mindful of Singapore’s greying population, CCK Polyclinic’s new design includes several disabled-friendly features. Its enlarged waiting areas have designated spaces for wheelchair parking, and there is a special dispensing counter in its Pharmacy for wheelchair-bound patients. The counselling room has also been expanded so that patients and their caregivers can comfortably attend counselling sessions together.
RIGHT SITING FOR PSORIASIS PATIENTS
Under a new programme launched by the National Skin Centre (NSC), psoriasis patients whose conditions are stable and well-controlled by topical treatment can be referred to a GP near their homes for long-term follow-up care. As a shared care programme, the Psoriasis Right Siting Management Programme (PRiSM) allows NSC specialists and GP alumni who are graduands of the Graduate Diploma in Family Practice Dermatology to work together. For our patients, it means high quality care with greater convenience at lower cost.

NURSES: FIRST LINE OF DEFENCE IN WART TREATMENT
Patients with viral warts can now be assessed by senior dermatology nurses, saving them time and the cost of unnecessary follow-up visits to doctors at the NSC. With the January 2012 launch of the Nurse-Led Warts Clinic in subsidised clinics, senior dermatology nurses are now empowered to accept internal referrals from doctors. Besides assessing new and repeat patients, they can also treat viral warts with liquid nitrogen cryotherapy and provide patient education and counselling.

IMPROVED SCREENING FOR CERVICAL CANCER
The first real improvement to the Pap smear since it was introduced 50 years ago was made available at the DSC (Department of STI Control) Clinic from July 2011. Pap smears are used to detect pre-cancerous changes in the tissue of the cervix, allowing them to be treated before they become cancerous. The Thinprep Pap Test is easier for laboratory specialists to read, and more reliable. Instead of being smeared on a glass slide, the collected cells are rinsed into a vial filled with a preservation solution, which prevents clumping. This makes it easier to analyse and process the cells in the laboratory.

FASTER ECG TURNAROUND, SHORTER WAITING TIMES
Electrocardiograms (ECGs) at all nine NHG Diagnostics centres in the nine NHG polyclinics went paperless from January 2012. Images are now sent via TraceMaster Vue (TMV) to the Cluster Patient Report Sharing system (CRPS) for uploading onto doctors’ computers. From there, they can be easily and instantly downloaded. Besides the environmental benefits, digitised ECGs also spell convenience for doctors and nurses, allowing more time for quality consultation and counselling. For patients, it translates into faster turnaround and shorter waiting times.
At NHG, Education is one of the three pillars – together with Clinical Care and Research – that drives our work as a Regional Health System. Besides training the minds of our clinical staff, we also provide further education for administrative and ancillary staff, ensuring a strong culture of life-long learning. At the same time, we continually invest in the quality of our training, ensuring that we remain one step ahead of the rapidly-evolving healthcare landscape.
In our courses, trainees no longer operate purely within their specialties but are often exposed to related fields to stretch their professional development. The Institute of Mental Health’s (IMH) Graduate Diploma in Mental Health (GDMH) programme, for example, equips General Practitioners (GPs) to deal with common mental illnesses such as anxiety and mild depression.

REALITY TRAINING FOR BETTER PATIENT CARE

Singapore’s newest simulation training centre opened its doors at Tan Tock Seng Hospital (TTSH) in July 2012, providing healthcare professionals a platform for hyper-realistic training scenarios. The Simulation and Integrated Medical Training Advancement Centre (SiMTAC) is equipped with computerised interactive simulation mannequins that mimic physiological responses in a human being – from breathing and blinking to bleeding and even cold, clammy skin – as well as advanced integrated audio-visual systems.

Participants will also work with emotionally distraught ‘patients’, who are trained actors. The 1,000 m² state-of-the-art training facility houses an operating theatre, emergency room, intensive care unit, wards and outpatient consultation rooms; each a near-identical replica of the real thing. SiMTAC will provide continual training for doctors, nurses and allied health professionals across disciplines and work environments, and will also be used to train students from the new Lee Kong Chian School of Medicine (LKCSoM). Besides practical training, participants will refine their ability to collaborate effectively across disciplines in a team. Simulation will also be used for experimentation and research innovation, so new or improved treatment procedures or care delivery can be tested and refined in a simulated environment.

“As NHG is the principal clinical partner for the new Lee Kong Chian School of Medicine, we look forward to more exciting developments with SiMTAC, which will add tremendous value to the educational collaboration in this partnership and benefit future medical students.”

– Minister of Health Mr Gan Kim Yong, who recently opened NHG’s state-of-the-art Simulation and Integrated Medical Training Advancement Centre (SiMTAC) at Tan Tock Seng Hospital.
The Lee Kong Chian School of Medicine (LKCSoM) is poised to open its doors, with NHG as its principal clinical training partner. Singapore’s newest medical school, a collaboration between Imperial College London and the Nanyang Technological University (NTU), will welcome its pioneer batch of 50 students in August 2013.

NHG’s cutting-edge facilities, excellent clinician-educators and large patient volume, combined with our focus on education, research and collaboration will enable LKCSoM students to have a fulfilling and exciting learning journey.

We strive to produce outstanding doctors of tomorrow who are able to integrate medicine and sciences with research and technology, enabling them to provide our patients with even higher standards of integrated care in the future.

In addition to teaching, 29 clinicians hand-picked from NHG institutions – including Tan Tock Seng Hospital (TTSH), Institute of Mental Health (IMH), National Healthcare Group Polyclinics (NHGP) and National Skin Centre (NSC) – will also hold key faculty positions at the new school and be actively involved in the design and planning of the curriculum.

TTSH will be the main teaching hospital. But students will also be taught at IMH, selected NHG Polyclinics and at NSC. By tapping into NHG’s wide range of expertise in acute, step-down and primary care services, as well as its full range of clinical settings, LKCSoM students will have a holistic learning experience that is linked to NHG’s integrated Regional Health System.

At LKCSoM, the way ahead for medicine lies in the integration of ideas and the

“Medicine is not just about making star diagnoses. Students need to understand the value of integrated care and the wide spectrum of clinical practice. This requires their appreciation of care that is delivered in the community and hospital.”

– Clinical Associate Professor Tham Kum Ying, Assistant Chairman, Medical Board (Education) and Senior Consultant, Emergency Medicine at TTSH, and Assistant Dean at the new Lee Kong Chian School of Medicine
marrying of the minds of doctors, health professionals, researchers and engineers.

**PIONEER BATCH OF GPs GRADUATE WITH MENTAL HEALTH DIPLOMAS**

In February 2012, the pioneer batch of 19 GPs received their Graduate Diploma in Mental Health (GDMH) after completing a one-year programme.

The GDMH trains GPs in psychiatry and counselling and ensures they are equipped to detect and treat patients with minor mental health problems like mild anxiety and depression. Having more GPs trained in mental health care also means more accessible care for the community.

The GDMH programme is jointly offered by IMH and the Division of Graduate Medical Studies, National University of Singapore (NUS). It was launched in 2010 and is in line with IMH’s commitment to educate and train the next generation of mental health professionals and leaders. Another 27 GPs from the second cohort are currently undergoing GDMH training, and registration for the third cohort took place in June 2012.

**DEVELOPMENTS IN GRADUATE MEDICAL EDUCATION**

In November 2011, NHG Residency received international accreditation for another six programmes. The Accreditation Council for Graduate Medical Education International (ACGME-I) accreditation recognised the high quality of our Anaesthesiology, Diagnostic Radiology, Family Medicine, Ophthalmology, Orthopaedic Surgery and Otorhinolaryngology programmes.

In 2010, NHG Residency was the first sponsoring institution to achieve full institutional accreditation from ACGME-I, as well as full accreditation for our Internal Medicine, General Surgery, Emergency Medicine, Psychiatry (National Programme), Pathology and Transitional Year programmes.

NHG Residency also broadened our offerings with the introduction of the Surgery-in-General (SIG) Programme. The SIG Programme prepares residents for the Surgical Specialties of Urology, Hand Surgery and Plastic Surgery.

**NEW MINDSET IN PRIMARY CARE**

The Primary Care Forum 2011 – a satellite conference of the 2nd Singapore Health & Biomedical Congress (SHBC) – took a timely look at “Reinventing Primary Care: Shaping the Future”. The intent of the forum was to tackle the challenges of a greying population with innovative solutions. The theme set the stage for re-examining current models of care and pushing for new mindsets on several fronts. Areas of focus included patient-centric care, the management of chronic illnesses, prevention and maintenance, and novel approaches to care integration.

**RESIDENTS GET NEW TRAINING LOCATIONS IN NATIONAL HEALTHCARE GROUP POLYCLINICS**

NHGP has launched six Family Medicine Centres - Resident Continuity Clinics (FMC-RCC) which act as training grounds for residents participating in the NHG-AHPL Family Medicine Residency Programme. The three-year programme is for graduate doctors who want to advance their knowledge in Family Medicine.

The six centres are located in the Bukit Batok, Hougang, Toa Payoh, Choa Chu Kang, Jurong and Woodlands polyclinics. The programme is presently into its second run. Both batches of Family Medicine Residents from the NHG-AHPL Family Medicine Residency Programme, comprising 26 doctors, have begun conducting clinic sessions at these locations. The programme received full accreditation by the Accreditation Council for Graduate Medical Education International (ACGME-I) in May 2012.

**IN-CLINIC DERMATOLOGY TRAINING FOR MEDICAL STUDENTS**

Six batches of undergraduates from the Medical Faculty of NUS’ Yong Loo Lin School of Medicine have received in-clinic training from the National Skin Centre.
The 250 students attended a two-week, full-time clinical posting focused on a core curriculum of common dermatological diseases, their presentation and practical management. Their in-clinic training was complemented by lectures at the university to ensure a good foundation in dermatology. Assessments were held at the end of the postings to ensure competency.

NSC also had 17 overseas elective undergraduate medical students from universities in eight countries.

**NHG COLLEGE TRAINS RNS PARTNERS**
NHG College has collaborated with Agency for Integrated Care (AIC) and various community hospitals and Voluntary Welfare Organisations (VWOs) from the Intermediate and Long-Term Care (ILTC) sector to train their care and support staff. The ultimate goal is to integrate the acute care and the ILTC sectors into one seamless healthcare system and thus deliver quality patient care.

We have worked with Kwong Wai Shiu, RenCi, St Andrew’s and Bright Vision Community Hospitals to train their nurses to be clinical instructors and coaches for student-enrolled nurses as well as to equip them with the knowledge and skills in risk management and patient safety. In addition, we have also worked with other VWOs such as the Home Nursing Foundation, Tai Pei Social Service, Sunlove Home and Econ Medicare Centre to train more nurses in risk management and patient safety.

With the dynamic ILTC challenges ahead, NHG College will continue to work closely with AIC to further identify the training needs and develop relevant programmes to strengthen the capability of the ILTC sector.

**EDUCATING THE NEXT GENERATION OF**

**CLINICIAN RESEARCHERS**
In February 2012, NHG became the first public healthcare institution in Singapore to be accredited by the Workforce Development Agency (WDA) as an Approved Training Organisation (ATO) for clinical research education.

Under its Proper Conduct of Research (PCR) programme, NHG invites experienced speakers and trainers from various research backgrounds to train research professionals island-wide. PCR trains clinical researchers to better manage data, collate information and ask the right questions for better research results.

The accreditation allows NHG to equip more clinical research coordinators to work alongside medical professionals, ensuring a smoother, higher quality research process. NHG was accredited under the Workforce Skills Qualification (WSQ) Clinical Research Framework, established in 2010 as a manpower development initiative for clinical research.
Besides Clinical Care and Education, Research is the third pillar that underpins NHG’s work as a Regional Health System. Here, too, we take a more collaborative, multi-disciplinary and team-based approach, harnessing the expertise of specialists from different disciplines to seek innovative solutions to complex problems.
ILLUMINATING THE WAY FORWARD

In 2011, NHG’s Health Services & Outcomes Research (HSOR) continued its mission of providing the best available evidence to stakeholders and partners to inform decisions, policy and planning. Apart from supporting the operations, planning and management of NHG institutions, HSOR focused on supporting the planning and evaluation of programmes for care integration and our studies covered community health, home and end-of-life care.

In the next three years, we aim to push the research boundaries on ageing/geriatrics, rehabilitation medicine, mental health and metabolic diseases. Our goal is to help advance medical knowledge and practice so as to equip our doctors, nurses and healthcare professionals for future challenges.

BITTEN BY THE RESEARCH BUG

In 2011, the STOP dengue translational clinical research programme accomplished key research endeavours. Our research collaborators from NUS established a dengue mouse model manifesting severe vascular leakage – an invaluable tool for testing potential therapeutics or vaccines. They also characterised the first fully-humanised dengue monoclonal antibody that has strong prophylactic and therapeutic potential and validated biomarkers from clinical samples in order to predict severe dengue disease.

Lead Principal Investigator A/Prof Leo Yee-Sin and her colleagues at the Communicable Disease Centre are embarking on the use of a dengue point-of-care test in the clinical setting for rapid diagnosis of dengue.

STOP dengue also marked the inaugural ASEAN Dengue Day on 15 June 2011 together with the Minister for the Environment and Water Resources, Dr Vivian Balakrishnan, and the World Health Organization’s Regional Director for the Western Pacific, Dr Shin Yong Soo. This preceded an educational dengue symposium attended by the local and international scientific community and Singapore GPs. STOP dengue is working actively in 2012 to prepare for new events and research projects.

MEASURING A POSITIVE ATTITUDE

Separately, as part of the SMHS, IMH’s Research Division has developed and validated an instrument to measure the positive mental health of Singapore residents. It is one of the first validated scales developed in Asia that is culturally and locally relevant to our population. The instrument can be self-applied, covers all key and culturally appropriate domains of mental health and can be used to compare levels of mental health across different age, gender and ethnic groups.

It can be used to collect data on individuals and various subgroups in the population which would be crucial when reviewing existing mental health policy and services. The information may also contribute to adequate mental health training, education and public awareness.

RECOGNITION FOR STELLAR RESEARCH

NHG’s dedication to research resulted in our group’s researchers clinching more than half of the 35 awards handed out at the Scientific Competition during the 2nd...
Singapore Health & Biomedical Congress (SHBC) in November 2011. The Scientific Competition is a key SHBC element and steadily emerging as a national-level competition for the interdisciplinary research community. The 35 finalists were shortlisted from 334 submissions from nine major institutions covering major disciplines in medicine and healthcare.

Our seven gold, six silver and six bronze Scientific Competition awards were won by doctors, nurses, allied health professionals and research analysts, reflecting the diverse range of research interests within our group. NHG also dominated several categories, sweeping all the prizes in the Singapore Nursing Award, the Quality & Health Services Research segment of the Singapore Young Investigator Award, and the Nursing segment of the SHBC Best Poster Award.

MORE COLLABORATIVE RESEARCH

The National Skin Centre collaborated with the Epithelial Biology Laboratory, Institute of Molecular Biology A*STAR, for continued research into the genetics of various dermatological conditions. One of the significant areas of research was in skin barrier genes in atopic dermatitis (AD).

Two noteworthy laboratory-based studies conducted in 2011 include evaluating a Polymerase Chain Reaction (PCR) kit for the rapid diagnosis of dermatophytes nail infections compared to conventional microscopy and fungal cultures, and a study on the prevalence of different human papilloma viruses (HPV) genotypes causing genital warts locally. The latter is conducted by the team at the Department of STI Control (DSC), which hopes that with the identification of the different subtypes of HPV, a more targeted approach may be possible for the future treatment of genital warts.

STIMULATING RESEARCH

One of the ways we stimulate research is through grants and awards. To help our staff bring nascent research ideas to maturity so that they may bid for larger grants and to raise the profile of research, TTSH launched our inaugural Pitch-for-Fund Programme in 2011.

TTSH staff literally “pitch” for funds to back small research projects. These projects provide the preliminary data to support grant proposals at the competitive national level. Some 26 submissions were received and 10 shortlisted applicants presented their proposals to a panel of respected professionals. Each shortlisted applicant had five minutes to make their case (without the use of projected slides) after which they endured five minutes of grilling questions from the three judges. Five were able to persuade our panel of the potential of their ideas and received $10,000 each.

Our new HOMeR (Health Outcomes and Medical Education Research) unit spearheads education research for NHG. In addition to our main mission of conducting high-quality outcomes-focused education research, we also launched the inaugural HOMeR Grant in November 2011 to encourage not only clinicians but also nurses and allied-health professionals to do education research. Grant awards serve as seed funding to test out novel ideas in health profession education in four strategic areas i.e. teaching and learning; professional identity formation; simulation-based medical education; and inter-professional collaboration and education.

At NHG, we also recognise that biomedical research today demands that individuals look beyond the confines of their own individual disciplines and explore collaborative models which are often multi-disciplinary and inter-disciplinary in nature. It is not uncommon to see a research project—that is highly innovative and has the most direct impact on patient care and delivery—comprising a multi-disciplinary team of clinicians, scientists and engineers with each contributing his or her ideas, knowledge and expertise to the research.”

– Professor Chee Yam Cheng
Chief Executive Officer
National Healthcare Group
Technology and Innovation

HARNESSING TECHNOLOGY

Across NHG, we have leveraged on technology to deliver better and more integrated care to our patients, and to improve efficiency and quality of care. Our use of technology spans a broad spectrum of our operations – from maintaining electronic medical records to sophisticated robotics and Virtual Reality therapy for patients. With technology, an improved flow of information among the acute, primary and step-down sectors enables all members of the care team to work efficiently to offer seamless integrated care.
Today, Tan Tock Seng Hospital (TTSH) is one of the pioneers and the first in Asia to incorporate robotics and Virtual Reality (VR) in therapy re-training to help patients with complex disabilities. Patients treated at the new Centre for Advanced Rehabilitation Therapeutics (CaRT) are those with neurological conditions such as stroke, brain injury or spinal cord injury.

Open since August 2011, CaRT is an expansion of TTSH’s rehab centre, providing outpatient neuro-rehabilitation services. These are designed to increase patient engagement and interest in therapy through fun and interactive ways via Innovative Robotics and VR technologies. Research and studies have shown that innovative therapy is effective in complementing conventional therapy to achieve good and realistic rehabilitation goals for patients. This in turn improves patients’ quality of life.

As a “living laboratory” where clinicians, therapists and researchers come together to develop novel rehab technology platforms, CaRT is a one-stop centre with the latest equipment that transform the rehabilitation paradigm.

CaRT programmes are customised to suit patients’ functional level and specially designed to increase patients’ participation and interest in therapy. The technologies used at CaRT also augment feedback to patients so they know if they have done the tasks correctly. This allows patients to gauge their own ability and correct their movements wherever possible; thereby increasing functional independence.

The services offered at CaRT include:

- **Total-Walk using LOKOMAT**, a robotic gait-trainer and electronic GAIT-RITE gait analysis system suitable for adults and children
- **Re-Arm using a suite of technological devices** (ARMEO Spring, ARMEO Boom, and MIT MANUS wrist robot) tailored to improve use of the arm function at various stages of recovery.
- Virtual Reality (NINTENDO Wii and KINECT systems) technologies to increase motivation during movement retraining.
- Neuro-visual rehabilitation for treatment of visual field problems and eye-hand incoordination using DYNAVISION 2.
- Comprehensive spasticity management and neuro-rehabilitation medicine clinics.

NEW SYSTEMS FOR SEAMLESS CARE AND GREATER MEDICATION SAFETY

Institute of Mental Health (IMH) patients benefit from smoother and more seamless care with two new electronic systems that went live in May 2011. The new Electronic Hospital Inpatient Discharge System (eHIDS) and Medical Certificate System (eMC) are built on web-based platforms and facilitate the sharing of patient information. The systems also automatically retrieve post-discharge follow-up appointments and validate e-signed results before discharge summaries are completed. All this provides clinicians with timely information and allows better continuity and improved quality of care for our patients.

A system that greatly enhances medication safety is now entrenched at IMH. The Electronic Inpatient Medications Records (eIMR), first piloted in IMH in September 2011, turns the whole process electronic: doctors prescribe medications electronically for patients in the wards, pharmacists review the list electronically and nurses administer the medications electronically. Duplications and drug allergies are checked during the prescription process and any missed dosages are highlighted. Enhancements were made to the system in March 2012 so that it also processes ward requests for drug supplies. This has streamlined ward processes tremendously.

**BETTER TECHNOLOGIES, BETTER PATIENT CARE**

National Healthcare Group Polyclinics (NHGP) has leveraged on technology in several ways to improve the flow of data between its nine polyclinics and other healthcare institutions.

NHGP’s eReferral worklist helps track the appointment booking status of patients who were referred to Specialist Outpatient Clinics. A programme piloted in March 2012 gives TTSH and Alexandra Hospital access to the eReferral worklist, improving the efficiency of the appointment booking process by doing away with the need to fax over printouts of referral letters.
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The National Skin Centre (NSC)’s patients have—since December 2011—been able to communicate with their healthcare team and access their health records through a secure, free-of-charge online portal. The NSC is the first healthcare institution in Singapore, and possibly Asia, to introduce the Patient Health Portal, an online system that allows patients to access aspects of their health records including dates of visits, diagnosis, medication history, allergies and procedures done at the NSC.

Patients can email their healthcare team about their medications, treatment and procedures done. They are also able to access information related to their medical condition or medications by linking their diagnosis and prescriptions to the NSC’s database of patient information leaflets. More than 2,400 patients have signed up for this online service since it was piloted.

SAFER AND EASIER MEDICATION THANKS TO CONVIDOSE™

NHG Pharmacy’s ConviDose™ makes it easier for the elderly and those with long-term illnesses to take their medication safely. The service—first piloted in May 2010 and recently launched in May 2012—is Singapore’s first Multi-dose Medication Management Service. It pre-packages medicine dosages into individual sachets, according to the stipulated quantity and time the pills need to be consumed.

ConviDose™ also frees nursing staff and caregivers from hours of packing medicines daily, increasing time for interacting with patients. Medication inventory wastage and costs are also reduced. Some 3,100 patients in 16 nursing homes and four IMH long stay wards are currently using the service. ConviDose™ Safer, Easier Medicines won a Merit Award under the Ministry of Health’s EXCEL Best Innovative Project in 2010.

NHGP’s Dental Clinics, together with TTSH and Khoo Teck Puat Hospital, launched a new e-referral system in January 2012 that allows dentists from the three institutions to communicate in a more efficient manner. They can use the system to track correspondence for follow-up treatments and transfer X-ray images electronically from one institution to another. This not only allows a more seamless transfer of care between institutions but also minimises communication errors.

The NHG Eye Institute can now view and make reports on NHGP’s Diabetic Retina Photography (DRP) images online by using the Diabetic Eye Screening Programme. With online sharing, we no longer need to print hardcopy retinal photos for patients who are referred to the hospital for further care.

The Electronic Polyclinic Outpatient System (ePOS) was launched across NHG’s nine polyclinics and five Dental Services facilities in August 2011. This system integrates patient administration, billing and accounts receivable functions into one common platform. It speeds up workflows and enables self-service in registration, appointments and billing.

NHGP also launched its Appointment System (APS) in Clementi Polyclinic in July 2011 and Yishun Polyclinic in February 2012. With APS, NHGP is now able to inform patients of the estimated wait time for their visit. Patients can return to the clinic closer to the estimated time given or call NHGP’s Contact Centre on the day of treatment to take a queue ticket and come in closer to the stated time. Chronic patients also benefit from this by fixing their follow-up appointments at their preferred time and date. This enables our patients to reduce the amount of time spent waiting at the clinics.

NHGP leveraged on the Electronic Medical Records (EMR) system to deliver better team-based care and empower patients in chronic disease management. These include patients with diabetes, chronic kidney disease, dementia and mental health conditions.

CIO 2012 AWARD

In 2010, a revolutionary medication system was introduced at three public hospitals, including TTSH. Known as the Closed Loop Medication Management (CLMM) system, it was developed by the Integrated Health Information Systems (iHiS) in collaboration with NHG and the other health clusters.

The system ensures safer administration of medicines by utilising barcode technology. Patients are given wristbands with unique barcodes. Barcodes are also allocated to the patient’s medications. Nurses will scan the corresponding barcodes before medication is given to ensure that the right drug is administered to the right patient at the right time. For greatly reducing medication errors and boosting productivity, the CLMM system won the prestigious CIO 2012 Award, a regional award that recognises the best in healthcare information technology.
Community impact

EMPOWERING THE COMMUNITY

The community we live, work and play in is a key partner in our Regional Health System. We actively engage the members of our community, empowering them to help themselves and one another. Several different initiatives across the spectrum of our care continuum are targeted at different groups of people with different needs. This will enable us to help them to continue

*Adding Years of Healthy Life.*
BRINGING HEALTHCARE TO THE PEOPLE

One of our key strategies as the Regional Health System of the Central region is to raise the quality of care – by better integrating across different healthcare settings so that we provide the right treatment and care at the right place for patients with different needs. As a larger proportion of our population moves into their golden years, we have several different initiatives dedicated to empowering them to live active and fulfilling lives in the community.

Depending on their current state of health, a range of programmes exist, including initiatives that equip patients with skills needed for an independent life or that teach them how to manage chronic diseases with confidence. Our polyclinics also run workshops on healthy living, while our community partners join us in providing team-based care and rehabilitation to patients at home.

We work closely with Intermediate and Long Term Care (LTTC) partners such as RenCi, Kwong Wai Shiu and Ang Mo Kio Community Hospitals, nursing homes, Dover Park and Assisi hospices and other Voluntary Welfare Organisations (VWOs) to support people in the community for as long as possible.

As part of population health management, we also try to make it easy for the community to get their health screening and basic tests conveniently done – outside the hospital or clinic. With NHG Diagnostics’ Mammobus, women are able to do breast screening close to their homes or workplace. NHGD’s Mobile Bone Mineral Densitometry (BMD) also makes it easier for senior citizens to check their bone health.

SUPPORTING THE COMMUNITY
Tan Tock Seng Hospital’s (TTSH) Community Health Engagement Programme (CHEP) is designed to keep residents aged 65 years and above in the community for as long as possible. This is done by equipping them with skills to monitor and train one another in healthy ageing and self-management of chronic diseases. CHEP also aims to ensure a smooth transition of care for the elderly residents in the community by integrating TTSH with the community services in specific locations.

CHEP has three programmes, namely Stepping Out into Active Life, Engage in Life (EIL) and Chronic Disease Self-Management Programme (CDSMP). Stepping Out Into Active Life screens and advises the elderly on the risks of falls and how to prevent them through exercise and home safety over one year. To date, this programme has travelled to various locations in Toa Payoh and Ang Mo Kio.

SIX WEEKS TO HEALTHY AGEING
EIL helps over-50 year-olds to identify changes they can make in their daily routines and learn new skills for happier, healthier and more independent lives. Topics covered include successful ageing, social networking, healthy eating, osteoporosis prevention, home safety and physical activity. The programme uses the Plan-Do-Check-Act (PDCA) cycle to help participants move from “knowing” to “doing” and “monitoring”.

CDSMP imparts the skills and motivation necessary for people who have one or more chronic conditions as well as their caregivers to manage chronic diseases with confidence. Many people with chronic illnesses suffer fatigue, pain, loss of energy and even difficulty in breathing. Insomnia and depression are common too, combined with worry about the future and finances. In six weeks, participants will learn about everything from goal setting and problem-solving to nutrition and exercise as well as communication skills, relaxation techniques, medication usage, cognitive symptom management and techniques using the mind influences such as distraction and positive thinking.

HEALING AT HOME
The Post Acute Care at Home (PACH) programme is a post-discharge supportive care service formed by a team of doctors, nurses, therapists and medical social workers. PACH helps to stabilise and rehabilitate patients in the sub-acute phase of illness in their homes. It helps to provide appropriate home care support to promote better self-care and helps caregivers to be competent in caring and managing home-bound patients so as to reduce the need for institutionalised care. This in turn lessens the strain on acute hospital beds.
receive a $10 NHGD mammogram subsidy. They then pay just $40 for a mammogram at any NHGD centre in the nine National Healthcare Group Polyclinics island-wide.

**RECORD MAMMOGRAM SCREENINGS**

As the official mammogram screening partner for Breast Cancer Foundation’s (BCF) launch event to kick start Breast Cancer Awareness Month in October 2011, NHGD brought its Mammobus down to the Watsons Pink Ribbon Walk 2011 at Marina Bay Waterfront Promenade. NHGD also collaborated with various partners such as the Singapore Cancer Society, numerous community clubs, corporate organisations, Health Promotion Board, and the People Association’s WINGS (Women inspiring, Nurturing and Grooming Singaporeans) sector to give further subsidies for mammograms from October through December 2011.

With this intense community outreach initiative, a record number of over 30,000 women were screened at both NHGD centres and the Mammobus last year. This marked an increase of 18% in the total number of women screened for breast cancer compared to the year before. NHGD and all our stakeholders have progressively increased their outreach on breast cancer awareness.

**KEEPING DEMENTIA PATIENTS ENGAGED AND ACTIVE**

Started in April this year, TTSH Cognition and Memory Disorders Service’s MindVital (Vitality in Thoughts and Living) Programme targets patients with mild dementia and keeps them engaged and active.

The weekly three-hour session consists of 45-minute physiotherapist-led exercise programme, including light aerobic and resistance training, followed by two hours of cognitive stimulation and rehabilitation exercises conducted by an experienced nurse co-ordinator, dementia nurse clinician, neuro-psychologist and occupational therapist. It is targeted at high-functioning, mild dementia patients to help them maintain community-level activities.

The MindVital sessions even use the iPad in an innovative way – for the patients to play games, improve balance and boost their memory based on the various applications available. Counting during stretching exercises is often done in English and/or Cantonese or Hokkien for the elderly patients who look forward to their weekly Wednesday afternoon sessions.

As dementia is a progressive disease, MindVital will also act as a bridge for caregivers to consider more regular daycare programmes should a patient’s condition deteriorate or if they believe the patient would benefit from regular stimulation from daily attendance of the daycare programmes. The programme is now into its second run.

**SUBSIDISED MAMMOGRAM SCREENING**

In March this year, NHG Diagnostics (NHGD) tied up with the Singapore Cancer Society (SCS) in a joint bid to help more than 2,000 women yearly detect breast and cervical cancer early. Under the programme, women interested in getting screened can approach the SCS for their free Pap smear and at the same time receive a $10 NHGD mammogram subsidy. They then pay just $40 for a mammogram at any NHGD centre in the nine National Healthcare Group Polyclinics island-wide.

**COMMUNITY CONNECTIONS**

As part of our role in the Regional Health System, TTSH’s Division of Integrative & Community Care also provides medical consultancy services to augment the existing services at three nursing homes (St Theresa’s Home, Thong Teck Home for the Senior Citizens and Ling Kwang Home for Senior Citizens) as well as RenCi, Kwong Wai Shiu and Ang Mo Kio-Thye Hua Kwan Community Hospitals. The intent is to reduce unnecessary visits to Specialist Outpatient Clinics and/or hospital admissions.

We also work with nursing homes in the Central region for Project CARE (Care At the end of life for Residents of Elderly Homes), which aims at improving Advance Care Planning and end-of-life care in nursing homes with support by TTSH doctors, nurses and social workers.

**MEDISAVE ACCREDITATION FOR ALL NHGD MAMMOGRAM SCREENING CENTRES**

Women aged 50 and above who fulfil the BreastScreen Singapore programme...
criteria can now use their own Medisave account or the Medisave account of any of their immediate family members for mammogram screening.

**BRINGING BMD INTO THE HEARTLANDS**

In August 2011, NHG Diagnostics added a mobile Bone Mineral Densitometry (BMD) service to its fleet, bringing affordable BMD screenings closer to the community. The mobile BMD service helps to detect and curb osteoporosis early. The mobile BMD service is a retrofitted bus with a brand-new Hologic Discovery Dual Energy X-ray Absorptiometry (DEXA) machine – the gold standard in osteoporosis assessment globally. On-board screening is conducted by a trained NHGD radiographer.

**SAFER, MORE CONVENIENT MEDICATION MANAGEMENT**

NHG Pharmacy has been working closely with the Agency for Integrated Care (AIC) to extend our Medication Management Services to nursing homes. This includes regular reviews of the medication prescribed for the residents, quality audits for medication storage and administration systems as well as the supply and packing of the medication for the residents. The set up of the services was partially funded by the Singapore Tote Board.

**CONTINUING CARE IN THE COMMUNITY**

NHG’s Disease Management department has also been working closely with our hospitals, polyclinics as well as community partners to help patients continue healing, stay healthy and even be active again after they leave the hospital. Hip fracture patients, for example, can now return to their pre-injury lifestyles after just one year due to a new programme that provides coordinated and cohesive care. Under the Integrated Hip Fracture Care Programme, initiated in TTSH in October 2011, patients are seamlessly transferred along the care continuum – from hospital admission, inpatient and day rehabilitation, to discharge and follow-up telephone care – for one whole year following the date of injury. Within a year, a patient should be able to regain much of his/her pre-injury independence. As of March 2012, 248 hip fracture patients had benefited from this coordinated care. The programme administered at TTSH is in collaboration with community partners and is funded by the Ministry of Health’s Health Services Development Programme (HSDP) for five years.

A newly-extended programme works with community agencies to support stroke patients as they move from an inpatient to a long-term community setting. The Integrating Services and Interventions for Stroke (iSiS) programme coordinates the care of stroke patients between hospitals’ Specialist Outpatient Clinics and polyclinics, and helps detect complications like depression. It works with community agencies such as AIC, the Home Nursing Foundation, and homecare providers to ensure a smooth patient experience. Between February 2008 and March 2012, the iSiS programme provided integrated care to 4,600 stroke patients, improving the post-stroke experiences both for the patients and their caregivers.

With the revival and expansion of our eCare programme, now fewer asthma patients may need emergency help. eCare is an electronic home-monitoring service that keeps an eye on patients’ asthma control in between clinic visits. The Asthma nurse is notified via eCare of patient’s asthma control and will provide education and advice promptly. A pilot study in 2008 saw an 85% reduction in Emergency Department visits among eCare patients.

**CHAT OUTREACH TO YOUTH AND THE COMMUNITY**

IMH’s Community Health Assessment Team (CHAT) partnered the Health Promotion Board, Silver Ribbon Singapore and Samaritans of Singapore to launch the first Singapore local mental health peer support programme on 20 February 2012. The Youth Support Youth (YSY) programme provides customised, holistic mental health training to empower youths aged between 17-25 years to provide appropriate support to their peers in the community.

**SUICIDE PREVENTION CAMPAIGN “ONE LAST BREATH” TARGETS YOUTH**

“One Last Breath” was conceptualised by CHaT as the theme of a campaign to raise awareness among youths and young adults about suicide prevention, reduce stigma of common mental health concerns and suicide in youths and encourage troubled youths to seek help. As part of the campaign, information on resources and helplines were also highlighted. A campaign website (http://youthinmind.sg/onelastbreath.aspx) was set up for youths to submit encouraging words to those in distress. CHaT also conducted roadshows at schools and in the community (e.g. ITE, NYP, SMU and *SCaPe) to engage youths.

**CHAT CAMPAIGN “BURST THE SILENCE” RAISES MENTAL HEALTH AWARENESS**

“Burst the Silence” is a social movement to raise awareness of mental health concerns that Singaporean youths face. CHaT aims to have youths open up and chat about their troubles instead of suffering in silence. By doing so, they are taking the first step in preventing their troubles from turning into mental health problems.

Over the weekend of 2-4 March 2012, CHaT held a guerrilla stunt outside Shaw Lido where young actors acted out scenes about issues faced by youths in a “bubble of silence”. Passers-by were encouraged to pledge their support on CHaT’s facebook page: www.facebook.com/chatfans and their website: www.burstthesilence.sg.

The finale of the campaign was a “Burst the Silence” event on 17 March 2012 at *SCaPe. Performances by young local artistes and off-stage activities all served to encourage youths to ‘burst the silence’ and open up about their emotional and mental health problems and to seek help early instead of suffering in silence.

**PUBLIC EDUCATION AND OUTREACH ON PROBLEM GAMBLING**

National Addictions Management Service (NAMS) held a public forum on Problem Gambling on 18 February 2012 to educate the public on how problem gambling affects the family and where to seek help. This third annual forum by NAMS reached out to more than 300 people.
Our People

NURTURING TALENT

At NHG, we value our people, and we let them know this in many ways – from awards to employee development and mentorship programmes. We continually tap new talent and invest in our pool of dedicated professionals and future leaders, spreading the group’s vision and commitment to Adding Years of Healthy Life.
During the year, National Healthcare Group (NHG) stepped up the recruitment of healthcare professionals, adding 128 doctors, 668 nurses and 515 allied health professionals to our healthcare family.

We also went overseas – to complement our local workforce and meet the increasing demand for healthcare staff to ensure we continue to provide seamless patient-centric care. NHG joined the Ministry of Health’s trips to China, Malaysia, Myanmar, Indonesia and Vietnam to recruit registered nurses, enrolled nurses and students under the Asia Nursing Scholarship Scheme. We also gave out local scholarships with MOH support.

To boost our pool of allied health professionals, we conducted:
- Three recruitment trips to United Kingdom, Taiwan and Malaysia
- Campus recruitment and talks at Victoria Junior College, Innova Junior College, Anglo-Chinese Junior College, Jurong Junior College, Temasek Junior College and Dunman High School
- Career talks at National University of Singapore, UniSim, Nanyang Polytechnic and Temasek Polytechnic; and
- Presented Clinical Attachment Training Awards (CATA), a new one-week attachment programme for graduating students in the Allied Health disciplines.

We also continued our Management Associate Programme (MAP), aimed at developing individuals skilled in hospital administration and operations. The Management Associates went through a one-year programme that included structured training courses and two job rotations.

Growing Our Talent Pool

Developing and Nurturing Our Talent

At NHG, we invest in our people via various development programmes. In 2011, we presented 165 Health Manpower Developmental Plan (HMDP) awards. These included both individual and team awards. The awardees have undergone...
attachments or taken part in structured training programmes to build specific skill sets that will support the developmental plans of their institutions.

Under the MOH-NHG Nursing Development Scholarships (MNDS), we also offered 18 in-service employees Nursing scholarships for Advanced Diploma, Degree, Master and PhD programmes.

We have also awarded an NHG Postgraduate Scholarship (NPS) to a highly promising staff with an outstanding track record. This is our most prestigious award, and sponsors the awardee through full-time post-graduate studies in healthcare management. Four Postgraduate Self-Development Award (PSDA) awards were also presented during the year to staff pursuing post-graduate studies.

NHG also launched the pilot run of a Mentorship Programme in 2011. This programme offers promising staff access to a role model within the NHG cluster. Both mentors and mentees received training to prepare them for their mentoring journey together.

MAKING HEALTHCARE A CAREER

More than 1,200 secondary and tertiary students, as well as their families and friends, got a taste of the diverse career options available at the Healthcare – You Make a Difference Careers Fair. Spearheaded by NHG, the one-day event was jointly organised by MOH, MOH Holdings, together with the six healthcare clusters. Nurses and allied health professionals representing the participating organisations were on hand to talk about how their work helped make a difference to their lives, as well as those they have cared for. Guest-of-Honour and Minister of State Dr Amy Khor, also lent her support to the event and interacted with participants.

AWARDS AND ACCOLADES

Our people continued to go that extra mile, and made significant contributions to healthcare delivery over the year. Their dedication won them recognition and commendation, both within the group and from the community.

Among them were awardees of the NHG Awards, who collectively have over 170 years of medical and healthcare service. The recipients all share a passion to provide quality healthcare to our patients.

NHG Awards
- Two Distinguished Achievement Awards
- Six Outstanding Citizenship Awards
- One Distinguished Contributor Award
- 18 Healthcare Humanity Awards
- 108 National Day Awards
- Five Commendation Medals,
- 11 Efficiency Medals
- 92 Long Service Medals
- Two MOH Nurses Merit Awards
- Tan Chin Tuan Nursing Award 2010 – one finalist from NHGP
- One NHG Excellence in Action (Staff)
- PS21 Awards
- One Distinguished Star Service Award
- One Star Service Award
ASIAN HOSPITAL MANAGEMENT AWARDS (AHMA) 2011

The Institute of Mental Health clinched the inaugural Grand Award for the Hospital of the Year at the 2011 AHMA. The AHMA recognises and honours hospitals that carry out best hospital practices across Asia.

We clinched a Winner and two Excellence awards:

- Re-engineering Case Management Service to Improve Inpatient and Outpatient Follow-up Care won the Most Outstanding Project in the Service Improvement for Internal Customers Project category.
- An Effective Primary Care Model of Stable Psychiatric Outpatients within the Community – the Mental Health-General Practitioner Partnership Programme won the Excellence Awards in the Operational Customer Service Project and the Marketing, PR or Promotional Project categories.

These projects were selected from more than 300 other projects from 84 hospitals in 11 countries.

INSPIRATION FROM JÖNKÖPING

Some 30 management staff from across NHG institutions and our Union partner visited the Swedish city of Jönköping, whose County Council has made impressive improvements in its healthcare system over the past 12 years. Besides providing timely access to primary and specialty care, the council has improved care for a number of chronic illnesses without increasing expenditure. The progress made is supported by the council’s organisational arm “Qulturum”, whose purpose is the active promotion of continuous improvements.

The visiting group from NHG, which included clinicians, administrators, HR personnel and our Union representatives, witnessed first-hand the results of Qulturum’s improvement strategy, which is based on three principles: Learning is key to improvement; improvement needs to be broad and deep; and improvement must be both bottom-up and top-down. The delegation also attended the Clinical Micro-system Festival and visited Swedish hospitals.

“…so that they can be better informed about the various paths available to them when they choose a career in healthcare.”

– Ms Wong Fong Tze, Chair for the national level Joint Publicity Committee for Nursing and Allied Health Professionals, and Chief Corporate Communications Officer, National Healthcare Group

AN EMPLOYER OF CHOICE

In line with our corporate policy to become the employer of choice for job seekers, NHG continues to inculcate a corporate culture that rewards excellence, and promotes individual as well as team growth and development. In this respect, NHG received the Nanyang Polytechnic Outstanding Industry Partner Award.

We also strive to take a holistic approach towards employee well-being and maintaining family-friendly practices.
Just as NHG believes in empowering elderly patients, we also believe in empowering the silver workforce. NHG supports the re-employment of post-retirement staff and we currently have 218 employees above the age of 62. They play various roles across the group, ranging from healthcare professionals to administrative staff. Re-employed seniors enjoy the same medical and financial benefits as their younger counterparts.

Developing a strong culture in NHG is key to helping us achieve our vision of *Adding Years of Healthy Life*. To support this, National Healthcare Group Polyclinics (NHGP) launched a new Culture DNA programme during our Annual Strategic Retreat in 2011, incorporating the “Way of Being” (WoB) philosophy as part of our culture transformation. WoB forms the key foundation of NHGP’s organisational culture by encouraging staff to “see people as people” and to be accountable for their actions. It also helps our staff deliver more efficient and higher-quality clinical care and service for our patients.

At NHG, we are committed to achieving better standards for both our healthcare professionals and patients alike. In 2011, Tan Tock Seng Hospital (TTSH) and IMH received their respective Joint Commission International (JCI) re-accreditation, while NHGP is undergoing the accreditation process. The commission is a globally-recognised leader in healthcare quality and patient safety and accreditation decisions are made by an international panel of healthcare experts. The National Skin Centre (NSC) obtained People Developer accreditation in March 2011. NSC was JCI re-accredited in November 2010.

NHG Pharmacy received both the Singapore Quality Class (SQC) Certification and People Developer (PD) Recertification in September 2011.

A national certification scheme, the Singapore Quality Class (SQC) recognises our commendable performance against an internationally benchmarked model for managing a business in the areas of Leadership, Planning, Information, People, Processes, Customers and Results.
The People Developer Recertification recognises NHG Pharmacy’s commitment to managing its people well and helping them achieve high levels of performance.

**GIVING BACK TO THE COMMUNITY**

Besides their dedication within the healthcare setting, our people also contributed to the community we work and live in via a variety of ways, from carrying pink umbrellas for the breast cancer cause to giving out hampers to the needy.

**GOING PINK IN A BIG WAY**

About 1,000 people carrying pink umbrellas turned up at TTSH on 3 June 2011 to set a Singapore record for the largest human ribbon. The fund-raising initiative, aimed at raising awareness of breast cancer, was part of an event marking the first anniversary of the Breast Clinic @ TTSH. The theme “We Are One” denoted how long the Breast Clinic had been in service, and emphasised the holistic approach it takes to battle breast cancer.

**$8,000 RAISED FOR HIV PATIENTS**

TTSH partnered community artists from Whampoa Clay Art and our HIV patients to organise a charity pottery exhibition in December 2011, in commemoration of World Aids Day. More than 150 art pieces by both patients and artists were displayed. Almost $8,000 was raised for HIV patients to help in their medication, therapy and nutrition.

**PEDALLING FOR CHARITY**

Some 260 cyclists pedalled over two days, covering a distance of 300 km to raise more than $340,000 for needy patients at the inaugural TTSH Charity Ride 2011. The ride was our first community sports and philanthropy project, and was in celebration of our 167th Founder’s Day. Minister Dr Vivian Balakrishnan and Minister of State Mr Teo Ser Luck sportingly led the contingent, riding in together with the hand cyclists from the Singapore Disability Sports Council.

**ENABLING DISABLED ATHLETES**

In November, TTSH signed an MOU with the Singapore Disability Sports Council (SDSC) to support 20 disabled athletes with sports medicine and rehabilitative services. TTSH will provide services including sports injury management and fitness testing as well as exercise prescription for health and sports performance enhancement. The MOU was signed on the first anniversary of our Sports Medicine and Surgery Clinic.

**KEEPING SENIORS AT THE WHEEL**

In February 2011, TTSH’s Occupational Therapy Department partnered the Land Transport Authority to kick start a programme that will allow seniors to continue driving longer. To date, the “Assessment on Fitness to Drive for Minibus License Holders aged 70 years and above” programme has assessed 56 minibus drivers as fit to continue driving until they are 73. This service helps senior drivers to stay employed while ensuring the safety of the community at large.

**HAMPERs FOR THE POOR**

April 2012 saw more than 50 NSC staff delivering provision hampers to needy one-room households in Kampong Kapor. The hampers were put together using $3,300 raised from the NSC Food and Jumble Sale in January 2011.

**RAISING PSORIASIS AWARENESS**

NSC doctors and nurses were among the volunteers at the World Psoriasis Day in October 2011 at Downtown East. Activities on that day were aimed at raising awareness of psoriasis and giving people with this illness the support they need.

**GOING GREEN FOR CHARITY**

NSC’s Green Committee collected more than 1,000 pieces of used clothing during a month-long initiative to promote reuse and recycling. The clean clothes collected between 14 November and 16 December 2011 were donated to The Salvation Army and Kong Meng San Phor Kark See Monastery.
ABOUT OUR INSTITUTIONS

Tan Tock Seng Hospital (TTSH) was established in 1844 and named after its founder, Mr Tan Tock Seng, a philanthropist. Over the years, TTSH has grown from strength to strength to become Singapore’s second largest acute care general hospital with 1,481 beds.

TTSH is accredited by the Joint Commission International (JCI) in recognition of its world-class patient care and the comprehensive range of high-quality holistic healthcare services at its main hospital complex, the Communicable Disease Centre (CDC), TTSH Rehabilitation Centre and specialist clinics.

TTSH has 27 clinical departments and a full range of sub-specialties to meet the healthcare needs of patients. Of these, TTSH’s strengths are in Infectious Diseases, Geriatric Medicine, Rehabilitation Medicine, Respiratory Medicine and Rheumatology, Allergy and Immunology. It is also a major referral centre for Emergency Medicine, Diagnostic Radiology, Ophthalmology, Otorhinolaryngology (ENT), Orthopaedic Surgery, Gastroenterology, General Medicine and General Surgery. The hospital also encompasses two major specialty centres in rehabilitation medicine and communicable diseases.

In March 2003, when Severe Acute Respiratory Syndrome (SARS) struck in Singapore, the Ministry of Health (MOH) declared TTSH the designated hospital for SARS screening and treatment. Today, the hospital continues to conduct research on emerging infectious diseases and finds the best treatments for them.

The hospital has continually played a significant role in the development of medical services and in the provision of healthcare to patients. State-of-the-art facilities and medical equipment, as well as the latest communication and information technology tools support its top-class clinical expertise. The “Art of Healing”, a programme that employs all forms of art for their therapeutic qualities, was launched in 2006. Held monthly during lunch time, the programme uses the arts to achieve holistic healing of the mind and body. Over the years, local and international artistes have performed for patients and staff at TTSH as part of this programme.

In April 2009, TTSH launched the CSI (Clean, Safe, infection-free) campaign. The hand-washing drive was aimed at educating the public on proper hand hygiene to prevent the transmission of germs that cause influenza and other serious illnesses.
Aside from services for the mentally ill, IMH also runs mental health education programmes for the public. These programmes aim to promote mental wellness and raise awareness of the importance and benefits of prevention, early detection and treatment of mental disorders.

Aside from services for the mentally ill, IMH also runs mental health education programmes for the public. These programmes aim to promote mental wellness and raise awareness of the importance and benefits of prevention, early detection and treatment of mental disorders. Within corporate settings, the Corporate Consulting Services unit supports corporations in their efforts to ensure the mental wellbeing of their workforce.

IMH has also established a significant reputation for quality psychiatric research, as exemplified by its $25 million research grant from the Ministry of Health in 2008 to implement translational and clinical research into the causes of schizophrenia and related psychotic disorders. IMH currently plays lead roles in two national healthcare initiatives, namely, the National Mental Health Blueprint and the National Addiction Management Service. The National Mental Health Blueprint aims to transform the mental healthcare delivery system into a more balanced system, incorporating both institution-based and community-based models of care. The National Addictions Management Service (NAMS) encompasses the provision of high-quality care that is evidence-based and appropriate for the local population, and public education on addiction prevention and treatment.
The focus of NHGP’s care is on disease prevention, early and accurate diagnosis, disease management, health promotion, and continued care for patients after their discharge from hospitals.

National Healthcare Group Polyclinics (NHGP) forms the primary healthcare arm of the National Healthcare Group (NHG). Its nine polyclinics serve a significant proportion of the population across northern and western Singapore.

The focus of NHGP’s care is on disease prevention, early and accurate diagnosis, disease management, health promotion and continued care for patients after their discharge from hospitals. NHGP actively works with NHG hospitals and institutions to develop integrated and seamless healthcare services for patients, as typified by the Direct Access Scheme which has since served as the model for a similar healthcare network developed with NHG’s GP Partners.

NHGP provides a comprehensive range of health services for the family, including treatment for acute medical conditions, chronic diseases, dental care and selected specialist services. Its clinics are one-stop family health centres, equipped with high-quality support facilities such as laboratories that provide X-ray services, mammography and ultra sonograms; and pharmacies that carry a wide range of drugs and non-medical items.
The Johns Hopkins Singapore International Medical Centre (JHSiMC) was established as a geographical alternative to the Johns Hopkins Hospital in the USA. Its healthcare team works together to meet each and every patient’s physical, psychological and emotional needs, hence providing high standards of oncology services and care to its local and foreign patients.

JHSiMC was first opened in 2000 as a specialised oncology medical centre within the National University Hospital. It moved to its new and bigger premises at Tan Tock Seng Hospital in May 2005. With the increase in space, it has been able to expand the number of chemotherapy treatment beds from 10 to 12 and the number of inpatient beds from 18 to 30.

JHSiMC treats a wide range of cancers that include but are not limited to breast, ovarian, uterine, cervical, lung, throat, nasopharynx, stomach, liver, kidney, colon, prostate, multiple myeloma and lymphoma.

Its services include inpatient care in a private oncology ward, outpatient consultations and chemotherapy, internal medicine, consultations and executive health screenings, as well as providing second opinions on complex medical conditions, treatment of cancers unique to Asians, and consultations with referring physicians for specialty services.

In addition, the International Patient Liaison Office at JHSiMC offers personalised services – such as interpretation, appointment co-ordination, travel arrangements and concierge services – for international patients.

In August 2004, the JHSiMC achieved a monumental milestone in becoming the first private hospital in Singapore to be awarded the JCI Accreditation with outstanding overall performance.
Moving forward, the JHSiMC aims to continually improve itself so as to fulfill its commitment in providing the highest quality healthcare standards to the local and international community.

NHG College
NHG College was officially established on 19 July 2002. Its mission is to support NHG’s continuing efforts in talent development, education, training and raising the professionalism of NHG staff. In doing so, NHG College enables NHG’s healthcare institutions to improve the quality of care they offer, and add years of healthy life for patients.

Over the years, while building up expertise and capabilities in clinical training, new focus areas including healthcare quality, and intermediate and long-term care have been introduced. To better reflect and support these key areas for healthcare transformation, NHG College has been structured into five institutes, namely the Institute of Healthcare Leadership (iHL), the Institute of Healthcare Quality (iHQ), the Institute of Clinical Education (iCe), the Institute of Healthcare Workskills (iWS) and the Institute of Intermediate and Long Term Care (iLTC).

Moving beyond its role as a training provider, NHG College will be the centre for providing thought leadership in healthcare training, bridging local and regional healthcare knowledge networks, and driving a culture of excellence in healthcare leadership, quality and lifelong learning.

NHG Diagnostics
National Healthcare Group Diagnostics (NHGD) is a business division of the National Healthcare Group (NHG). Founded in 2000, NHGD is currently the leading provider of imaging and laboratory services in primary healthcare, with 15 static imaging centres, eight professional service centres in Singapore, Indonesia and Vietnam, 14 laboratories, and four mobile service centres.

Aligned with NHG’s vision of “Adding years of healthy life”, the mission of NHGD is to provide imaging and laboratory services that are accessible, cost-effective, seamless, timely and accurate. It provides a comprehensive range of services at its centres, which includes general X-ray, mammography, spirometry, ultrasound and laboratory work. Each centre has a team of dedicated, well-trained radiographers and laboratory technologists.

It also provides four mobile services, which consist of a Mobile X-ray container, a Mammobus, a Mobile Clinic and a Mobile Bone Mineral Desitometry (BMD). These in turn provide diagnostics services at the doorsteps of the community and corporate organisations.

NHGD spearheaded the teleradiology project in Singapore and today provides teleradiology reporting and integration services as well as healthcare consultancy services for setting up full healthcare facilities from planning and design to project management.

NHGD is certified under ISO 9001 and ISO 15189, which fall under the Singapore Accreditation Council-Singapore Laboratory Accreditation Scheme (SAC-SINGLAS).

Laboratory and imaging services are available in all nine NHG Polyclinics, Ang Mo Kio-Thye Hwa Kuan Hospital, Buangkok Green Medical Park, Jurong Medical Centre, MW Medical Centre @ The Shoppes at Marina Bay Sands, NUS University Health Centre, St Luke’s Hospital and West Point Hospital. Its service projects can be found at Dr W K Koo & Associates, Pier Medical Centre, Radlink Diagnostics Imaging and Singapore International Medical Centre. NHGD’s overseas consultancy and teleradiology projects are also found in Jakarta and Bali, Indonesia and Hanoi, Vietnam.

NHG Eye Institute
The NHG Eye Institute was set up to meet the increasing demand for eye care services. By combining the clinical expertise and facilities across NHG institutions, it is able to achieve greater synergy and provide quality eye care to patients.

There are 10 sub-specialities within the ophthalmology services provided by NHG Eye Institute to adequately cover all aspects of the eye, its diseases and treatment.

Among these services, NHG Eye Institute treats cataracts using modern methods with high rates of success. The Institute also places great emphasis on
training and research to ensure a high standard of clinical care for patients.

It also works with various organisations – such as the Singapore Eye Research Institute, the National University of Singapore and clinical research organisations – to undertake clinical research programmes relevant to its patients.

NHG PHARMACY

National Healthcare Group Pharmacy, a business unit of NHG, manages the pharmacy services and retail pharmacies at all NHG polyclinics. Established in 2001, its mission is to make a difference in the care of customers by supporting them to achieve the best results for their prescribed therapy and promoting the safe and responsible use of medication.

At NHG, polyclinics work together with physicians and other healthcare professionals to manage patients with chronic illnesses. Among its pharmaceutical care services are Smoking Cessation Clinics, pharmacist-led anti-coagulation clinics (ACC) and Hypertension-Diabetes-Lipidemia Clinics (HDL-C). Patients also regularly consult its pharmacists on the best treatment for their minor ailments.

Visitors to its retail pharmacies have the convenience of obtaining essential healthcare products that have been carefully selected by its merchandise team for their quality, efficacy and affordability. Customers can also make use of home delivery services for both prescription and retail purchases.

Beyond the polyclinic patients, its pharmaceutical care services extend to Voluntary Welfare Organisations like nursing homes. It offers total medication management solutions that include medication supply, weekly review of residents’ medication charts and medication use audits. In 2003, NHG Pharmacy pioneered the provision of medication supply to nursing homes in “ready-to-administer” calendar blister packs. This has helped to significantly improve the safety and the management of medications at long-term care facilities. To date, 16 nursing homes are using this service.

NHG Pharmacy has been one of the Singapore Pharmacy Council’s accredited pre-registration pharmacists’ training centres since 2002.

PRIMARY CARE ACADEMY

Established in April 2007, the Primary Care Academy (PCA) was set up to meet the professional training needs of primary healthcare professionals in Singapore and the region. Its team of dedicated trainers and facilitators are senior healthcare practitioners with a wealth of experience in the delivery and management of community healthcare. As a leading primary care training provider, PCA reaches out to the public and corporate sector through its community-centred health promotion talks and workshops. Since its inception, PCA has conducted more than 550 public talks and 250 courses and workshops, which includes the ‘Patient Service Assistant’ course conducted for 138 trainees from the Health Management International (HMI) Institute of Health Sciences.

PCA also attained the Training Organisation accreditation and the Automated External Defibrillation (AED) Training Centre accreditation. These milestones are foundational as PCA moves closer to its vision of being an accredited regional training centre that is synonymous with quality primary care training.
# Statistics 11/12

## Bed Complement

### By Hospital & Class of Bed

**as at 31 March 2012 (FY2011)**

<table>
<thead>
<tr>
<th>Class</th>
<th>Class A</th>
<th>Class B1</th>
<th>Class B2</th>
<th>Class C</th>
<th>Classless</th>
<th>FY 2011</th>
<th>FY 2010</th>
<th>Change</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMH</td>
<td>22</td>
<td>8</td>
<td>176</td>
<td>1,712</td>
<td>92</td>
<td>2,010</td>
<td>2,010</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Johns Hopkins</td>
<td>26</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>26</td>
<td>26</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>TTSH</td>
<td>55</td>
<td>216</td>
<td>454</td>
<td>595</td>
<td>135</td>
<td>1,455</td>
<td>1,426</td>
<td>29</td>
<td>2%</td>
</tr>
<tr>
<td>TTSH-CDC</td>
<td>2</td>
<td>4</td>
<td>26</td>
<td>84</td>
<td>189</td>
<td>305</td>
<td>305</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total NHG</strong></td>
<td><strong>105</strong></td>
<td><strong>228</strong></td>
<td><strong>656</strong></td>
<td><strong>2,391</strong></td>
<td><strong>416</strong></td>
<td><strong>3,796</strong></td>
<td><strong>3,767</strong></td>
<td><strong>29</strong></td>
<td><strong>1%</strong></td>
</tr>
</tbody>
</table>

### No. of Beds

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>22</td>
</tr>
<tr>
<td>Class B1</td>
<td>26</td>
</tr>
<tr>
<td>Class B2</td>
<td>55</td>
</tr>
<tr>
<td>Class C</td>
<td>22</td>
</tr>
<tr>
<td>Classless</td>
<td>92</td>
</tr>
</tbody>
</table>

- **IMH**
- **Johns Hopkins**
- **TTSH**
- **TTSH-CDC**

**Statistics 11/12**

**Bed complement**

**By hospital & class of bed as at 31 March 2012 (FY2011)**
BED OCCUPANCY RATE
BY HOSPITAL

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IMH</td>
<td>84%</td>
<td>84%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>JOHN HOPKINS</td>
<td>51%</td>
<td>48%</td>
<td>59%</td>
<td>65%</td>
</tr>
<tr>
<td>TTSH</td>
<td>86%</td>
<td>86%</td>
<td>86%</td>
<td>87%</td>
</tr>
<tr>
<td>TTSH-CDC</td>
<td>45%</td>
<td>41%</td>
<td>37%</td>
<td>57%</td>
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</table>
TREND IN INPATIENT DISCHARGE

No. of Inpatient Discharges

<table>
<thead>
<tr>
<th>Period</th>
<th>IMH</th>
<th>JOHNS HOPKINS</th>
<th>TTSH</th>
<th>TTSH-CDC</th>
<th>TOTAL NHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 11 – Jun 11</td>
<td>2,392</td>
<td>103</td>
<td>13,850</td>
<td>411</td>
<td>16,756</td>
</tr>
<tr>
<td>Jul 11 – Sept 11</td>
<td>2,449</td>
<td>107</td>
<td>14,688</td>
<td>435</td>
<td>17,679</td>
</tr>
<tr>
<td>Oct 11 – Dec 11</td>
<td>2,395</td>
<td>133</td>
<td>14,097</td>
<td>393</td>
<td>17,018</td>
</tr>
<tr>
<td>Jan 12 – Mar 12</td>
<td>2,366</td>
<td>125</td>
<td>13,499</td>
<td>628</td>
<td>16,618</td>
</tr>
<tr>
<td>FY 2011</td>
<td>9,602</td>
<td>468</td>
<td>56,134</td>
<td>1,867</td>
<td>68,071</td>
</tr>
<tr>
<td>FY 2010</td>
<td>9,805</td>
<td>398</td>
<td>57,341</td>
<td>1,518</td>
<td>69,062</td>
</tr>
<tr>
<td>Change</td>
<td>(203)</td>
<td>70</td>
<td>(1,207)</td>
<td>349</td>
<td>(991)</td>
</tr>
<tr>
<td>Change %</td>
<td>-2%</td>
<td>18%</td>
<td>-2%</td>
<td>23%</td>
<td>-1%</td>
</tr>
</tbody>
</table>
TREND IN INPATIENT DAY

No. of Inpatient Days

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IMH</td>
<td>149,186</td>
<td>150,938</td>
<td>153,694</td>
<td>153,652</td>
<td>607,470</td>
<td>594,324</td>
<td>13,146</td>
<td>2%</td>
</tr>
<tr>
<td>JOHNS HOPKINS</td>
<td>1,333</td>
<td>1,157</td>
<td>1,413</td>
<td>1,539</td>
<td>5,442</td>
<td>4,736</td>
<td>706</td>
<td>15%</td>
</tr>
<tr>
<td>TTSH</td>
<td>106,977</td>
<td>107,779</td>
<td>108,810</td>
<td>106,913</td>
<td>430,479</td>
<td>419,308</td>
<td>11,171</td>
<td>3%</td>
</tr>
<tr>
<td>TTSH-CDC</td>
<td>4,299</td>
<td>4,244</td>
<td>3,891</td>
<td>7,551</td>
<td>19,985</td>
<td>15,424</td>
<td>4,561</td>
<td>30%</td>
</tr>
<tr>
<td>TOTAL NHG</td>
<td>261,795</td>
<td>264,118</td>
<td>267,808</td>
<td>269,655</td>
<td>1,063,376</td>
<td>1,033,792</td>
<td>29,584</td>
<td>3%</td>
</tr>
</tbody>
</table>
AVERAGE LENGTH OF STAY
BY HOSPITAL & CLASS OF BED

**No. of Days**

<table>
<thead>
<tr>
<th>Class</th>
<th>A</th>
<th>B1</th>
<th>B2</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMH</td>
<td>10.9</td>
<td>18.0</td>
<td>12.1</td>
<td>95.1</td>
</tr>
<tr>
<td>JOHN Hopkins</td>
<td>11.7</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>TTSH</td>
<td>6.1</td>
<td>5.6</td>
<td>6.4</td>
<td>8.5</td>
</tr>
<tr>
<td>TTSH-CDC</td>
<td>8.4</td>
<td>4.6</td>
<td>5.8</td>
<td>15.0</td>
</tr>
</tbody>
</table>
TREND IN DAY SURGERY

No of Day Surgeries Performed

<table>
<thead>
<tr>
<th>Month</th>
<th>No. of Day Surgeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 11–Jun 11</td>
<td>12,037</td>
</tr>
<tr>
<td>Jul 11–Sept 11</td>
<td>12,169</td>
</tr>
<tr>
<td>Oct 11–Dec 11</td>
<td>11,653</td>
</tr>
<tr>
<td>Jan 12–Mar 12</td>
<td>11,654</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>TTSH</th>
<th>TOTAL NHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 11–Jun 11</td>
<td>12,037</td>
<td>12,037</td>
</tr>
<tr>
<td>Jul 11–Sept 11</td>
<td>12,169</td>
<td>12,169</td>
</tr>
<tr>
<td>Oct 11–Dec 11</td>
<td>11,653</td>
<td>11,653</td>
</tr>
<tr>
<td>Jan 12–Mar 12</td>
<td>11,654</td>
<td>11,654</td>
</tr>
<tr>
<td>FY 2010</td>
<td>45,949</td>
<td>45,949</td>
</tr>
<tr>
<td>Change</td>
<td>1,564</td>
<td>1,564</td>
</tr>
<tr>
<td>Change %</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>
TREND IN SOC ATTENDANCE

No. of Attendances

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMH</strong></td>
<td>38,666</td>
<td>38,719</td>
<td>37,147</td>
<td>38,391</td>
<td>152,923</td>
<td>155,501</td>
<td>(2,578)</td>
<td>-2%</td>
</tr>
<tr>
<td><strong>JOHNS HOPKINS</strong></td>
<td>1,671</td>
<td>1,538</td>
<td>1,682</td>
<td>1,836</td>
<td>6,727</td>
<td>7,410</td>
<td>(683)</td>
<td>-9%</td>
</tr>
<tr>
<td><strong>NSC</strong></td>
<td>82,685</td>
<td>90,414</td>
<td>84,846</td>
<td>84,641</td>
<td>342,586</td>
<td>318,960</td>
<td>23,626</td>
<td>7%</td>
</tr>
<tr>
<td><strong>TTSH</strong></td>
<td>148,810</td>
<td>153,292</td>
<td>148,553</td>
<td>153,155</td>
<td>603,810</td>
<td>583,969</td>
<td>19,841</td>
<td>3%</td>
</tr>
<tr>
<td><strong>TTSH-CDC</strong></td>
<td>10,811</td>
<td>12,194</td>
<td>11,722</td>
<td>10,880</td>
<td>45,607</td>
<td>33,381</td>
<td>12,226</td>
<td>37%</td>
</tr>
<tr>
<td><strong>TOTAL NHG</strong></td>
<td>282,643</td>
<td>296,157</td>
<td>283,950</td>
<td>288,903</td>
<td>1,151,653</td>
<td>1,099,221</td>
<td>52,432</td>
<td>5%</td>
</tr>
</tbody>
</table>
TREND IN A&E ATTENDANCE

No. of Attendances

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TTSH</td>
<td>37,700</td>
<td>38,030</td>
<td>39,656</td>
<td>39,867</td>
<td>155,253</td>
<td>156,496</td>
<td>-1,243</td>
<td>-1%</td>
</tr>
<tr>
<td>TOTAL NHG</td>
<td>37,700</td>
<td>38,030</td>
<td>39,656</td>
<td>39,867</td>
<td>155,253</td>
<td>156,496</td>
<td>-1,243</td>
<td>-1%</td>
</tr>
</tbody>
</table>
### Trend in Polyclinics Attendance

#### No. of Attendances

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACUTE</strong></td>
<td>230,569</td>
<td>237,867</td>
<td>247,332</td>
<td>347,666</td>
<td>936,113</td>
<td>970,657</td>
<td>-34,544</td>
<td>-4%</td>
</tr>
<tr>
<td><strong>CHRONIC</strong></td>
<td>245,867</td>
<td>244,974</td>
<td>249,117</td>
<td>250,394</td>
<td>985,555</td>
<td>967,527</td>
<td>18,028</td>
<td>2%</td>
</tr>
<tr>
<td><strong>NON-MORBID</strong></td>
<td>245,941</td>
<td>199,679</td>
<td>243,616</td>
<td>250,394</td>
<td>939,630</td>
<td>753,831</td>
<td>185,799</td>
<td>25%</td>
</tr>
<tr>
<td><strong>TOTAL NHG</strong></td>
<td>682,520</td>
<td>709,828</td>
<td>722,107</td>
<td>746,843</td>
<td>2,861,298</td>
<td>2,692,015</td>
<td>169,283</td>
<td>6%</td>
</tr>
</tbody>
</table>
DISTRIBUTION OF STAFF
as at 31 March 2012 (FY2011)

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 2011</th>
<th>FY 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>823</td>
<td>771</td>
</tr>
<tr>
<td>Nursing</td>
<td>4,349</td>
<td>4,033</td>
</tr>
<tr>
<td>Allied HEALTH</td>
<td>1,725</td>
<td>1,515</td>
</tr>
<tr>
<td>Ancillary</td>
<td>2,581</td>
<td>2,407</td>
</tr>
<tr>
<td>Administration</td>
<td>1,279</td>
<td>1,216</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,757</strong></td>
<td><strong>9,942</strong></td>
</tr>
</tbody>
</table>
# Key Financial Information

<table>
<thead>
<tr>
<th></th>
<th>FY 2011 S$'M</th>
<th>FY 2010 S$'M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets by Major Categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Properties, Plant and Equipment</td>
<td>328</td>
<td>298</td>
</tr>
<tr>
<td>Trade and Other Receivables</td>
<td>492</td>
<td>369</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>302</td>
<td>496</td>
</tr>
<tr>
<td>Other Assets</td>
<td>51</td>
<td>67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,173</strong></td>
<td><strong>1,230</strong></td>
</tr>
<tr>
<td><strong>Liabilities by Major Categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and Other Payables</td>
<td>343</td>
<td>396</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>275</td>
<td>321</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>618</strong></td>
<td><strong>717</strong></td>
</tr>
<tr>
<td><strong>Capital and Reserves by Major Categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Capital</td>
<td>217</td>
<td>217</td>
</tr>
<tr>
<td>Reserves and Retained Surplus</td>
<td>337</td>
<td>295</td>
</tr>
<tr>
<td>Minority Interest</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>555</strong></td>
<td><strong>513</strong></td>
</tr>
<tr>
<td><strong>Revenue by Major Categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient and Patient Related Revenue</td>
<td>527</td>
<td>512</td>
</tr>
<tr>
<td>Government Subvention</td>
<td>765</td>
<td>698</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>194</td>
<td>154</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,486</strong></td>
<td><strong>1,364</strong></td>
</tr>
<tr>
<td><strong>Expenditure by Major Categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manpower Costs</td>
<td>759</td>
<td>680</td>
</tr>
<tr>
<td>Supplies and Consumables</td>
<td>213</td>
<td>201</td>
</tr>
<tr>
<td>Depreciation and Amortisation</td>
<td>71</td>
<td>66</td>
</tr>
<tr>
<td>Other Operating Expenses</td>
<td>401</td>
<td>414</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,444</strong></td>
<td><strong>1,361</strong></td>
</tr>
</tbody>
</table>
Strategic sourcing, volume aggregation and closer collaboration with key stakeholders and suppliers enabled our Group Purchasing Office (GPO) to achieve cost savings of $18 million for participating hospitals.”

Ms Lim Yee Juan
Chief Financial Officer, National Healthcare Group

We are caring for an increasingly ageing population, who are staying frail longer in their lives. To address this we have to care for them not only in the hospital but also in the community, the place they call home. Through projects like Stepping Out, we are reaching out to more people around us, encouraging them to be aware and take ownership of their health. Collectively, we need to bring up the overall level of care for our community.”

Professor Philip Choo
Asst CEO (Care Integration & Population Health), National Healthcare Group, and CEO, Tan Tock Seng Hospital

The management of the rapid and complex changes around us involves knowing what to preserve, and how to learn and benefit from these new developments, in order for the medical profession to remain relevant and vital to society as healer and moral institution.”

Associate Professor Chin Jing Jih
Senior Consultant and Divisional Chairman,
Dept of Integrative & Continuing Care, Tan Tock Seng Hospital
53rd President, Singapore Medical Association