



MEDIA RELEASE

SHBC 2015: MOU ON PREDICTIVE AND PREVENTIVE HEALTHCARE *NHG-NTU Partnership to Provide Better Healthcare Further Upstream*

2 October 2015

1. The National Healthcare Group (NHG) and Nanyang Technological University (NTU) signed a Memorandum of Understanding (MOU) today to establish a joint research programme - *Predictive and Preventive: Better Health at Affordable Cost*. The partnership seeks to break new ground by understanding disease factors unique to Asian populations. It aims to proactively prescribe care and interventions before the start of illnesses. The MOU was signed at the Opening Ceremony of the Singapore Healthcare and Biomedical Congress (SHBC) 2015.
2. Professor Philip Choo, NHG Group CEO, said, "Our current model of care which focuses on illness care is unsustainable. In line with NHG's vision of *Adding Years of Healthy Life*, our ultimate goal is to help Singaporeans manage their health and live well. Part of this will involve revisiting some fundamentals of public health and working out how to encourage Singaporeans to live better in order to avoid or slow the progression of chronic diseases."
3. The MOU seeks to consolidate data and collaborate efforts to conduct population health studies by NHG, NTU's Lee Kong Chian School of Medicine (LKCMedicine), and supporting partners. Such studies will examine psychosocial, lifestyle, metabolic, genetic and environmental factors associated with chronic disease progression which may be unique to Singaporeans. Healthcare professionals can then make sense of the data to identify modifiable risk factors to prevent and/or slow the onset of diseases.
4. Spearheading NTU's efforts in this partnership is its Lee Kong Chian School of Medicine. Professor James Best, Dean of LKCMedicine said, "This partnership is well-aligned with the school's vision of *Redefining Medicine and Transforming Healthcare*. We now have a team of world-renowned scientists working on themes relevant to Singapore's healthcare challenges. At the forefront of this joint research is NTU's newly launched *Singapore Phenome Centre*, which looks at the physical and biochemical traits produced by interactions between genes and environmental factors. We will work closely with NHG to improve the health of the population."



5. "Population health research programmes should focus on secondary prevention of the underlying reasons for the causes of serious diseases. For example, the control of high blood pressure and cholesterol levels for the reduction of heart attacks," explained Professor Elio Riboli, Director of the School of Public Health, Imperial College London, who will be supporting the collaboration.

SHBC 2015 HIGHLIGHTS

6. The MOU was signed at the Opening Ceremony of the Singapore Health and Biomedical Congress (SHBC) 2015. The annual congress was organised by NHG, with some 3,000 international and local delegates in attendance. Health Minister, Mr Gan Kim Yong, was the Guest-of-Honour. Themed ***Advancing Health Care into the Future: Innovate, Improve, Integrate***, the Congress comprises 15 tracks including one satellite conference.
7. Three eminent keynote speakers will cover each of the elements in the SHBC theme: Professor Elio Riboli, Director, School of Public Health, Imperial College London (United Kingdom); Professor Jackie Ying, Executive Director, Institute of Bioengineering and Nanotechnology (Singapore); and Associate Professor H. Thomas Aretz, Vice President for Global Programs, Partners Healthcare International (United States of America) (see Annex A for details).
8. Another key highlight of the SHBC is the annual Scientific Competition, which showcases the research of medical professionals and scientists across Singapore. This year's SHBC received a record 615 submissions, a 30 per cent increase compared to 2014. Winners were announced at the Opening Ceremony (see Annex B for details).

NEW TRACKS

9. SHBC 2015 will feature three new tracks:
 - a. The **Women's Wellness** track covers female-specific diseases. This includes focus on preventive measures and treatments for gynaecological cancers and chronic illnesses, and tips to age gracefully through exercise and a healthy diet.
 - b. The **Dental** track highlights the importance of oral health in sustaining overall good health, be it at home, at the office or in the community.
 - c. The **Health Services Research** track covers Data Science and Healthcare Modelling to improve population health.

TRANSFORMING PRIMARY CARE

10. The Primary Care landscape is set to undergo a major transformation over the next few years, with the provision of more healthcare support to patients outside the acute care setting and within the community. The Primary Care Forum 2015 is themed “**Primary Care: Beyond 50 Years of Healing and Caring in the Community**”. It discussed innovations and care delivery redesign which will help propel the sector forward. One example is the implementation of patient empanelment where a patient is cared for by a specific healthcare team comprising Family Physicians, a care coordinator, care manager and allied health professionals. Early results have been promising. A six-month study at the Toa Payoh Polyclinic has shown a 16 per cent reduction in doctor visits by patients and better management of their own chronic conditions at home.
11. Primary care forms the bedrock of transformative care at the National Healthcare Group. The National Healthcare Group Polyclinics (NHGP) will launch its 15th year Anniversary Book titled, **NHG Polyclinics: 15 Years of Transforming Primary Healthcare**, on the first day of the Congress. The book celebrates the NHGP spirit and tenacity as told through the voices of its leaders, doctors, nurses and Allied Health Professionals. Marking its 15-year journey alongside Singapore’s 50 years of nation building, NHGP continues to ignite the next chapter of its journey in quality primary healthcare through its commitment in continued learning, innovation and strategic collaborations.

= ENDS =

For more information, please contact:

Hamidah Aidillah
Senior Executive
National Healthcare Group
Group Corporate Communications
Direct: 6496 6264 Mobile: 9661 7141
Email: Hamidah_aidillah@nhg.com.sg

Lydia Soh
Assistant Manager
National Healthcare Group
Group Corporate Communications
Direct: 6496 6947 Mobile: 9842 8571
Email: Lydia_cc_soh@nhg.com.sg

About NHG

The National Healthcare Group (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 nine primary healthcare polyclinics, acute care hospital, national specialty centres, and business divisions. Together they bring a rich legacy of medical expertise to our philosophy of patient-centric care.

NHG’s vision of “*Adding years of healthy life*” is more than just about healing the sick. It encompasses the more difficult but infinitely more rewarding task of preventing illness and preserving health and quality of life. With some 13,000 staff, NHG aims to provide care that is patient-centric, accessible, seamless, comprehensive, appropriate and cost-effective.

As the Regional Health System (RHS) for Central Singapore, it is vital for NHG to partner and collaborate with other stakeholders, community advisors, volunteer welfare organisations and others in this Care Network together with our patients, their families and caregivers to deliver integrated healthcare services and programmes that help in *Adding Years of Healthy Life* to all concerned. More information is available at: <http://www.nhg.com.sg>

ANNEX A: Keynote Speakers & topics

1) Professor Elio Riboli, Director School of Public Health, Imperial College London (United Kingdom)

Topic

Lower Cost and Better Health – The Role of Population Health Research Programmes

- Primary prevention of chronic disease to lower the healthcare costs
- Secondary prevention acting on the root causes of premature death
- Improve integrated care

Synopsis

Over recent decades population-based cohort programmes with extensive health and lifestyle information from questionnaires and biological samples have been fundamental in identifying lifestyle, metabolic, genetic and environmental factors associated with chronic disease aetiology and prevention. These health research programmes have enabled us to identify modifiable risk factors of disease, including smoking, diet, obesity and physical activity. Prevention of diseases provides the most savings in public health spending - this has proven true with various preventive programmes in the United Kingdom

2) Professor Jackie Ying, Executive Director Institute of Bioengineering and Nanotechnology (Singapore)

Topic

Innovative Nanomaterials and Nanosystems for Health and Biomedical Applications

- Nanotechnology
- Biomaterials
- Diagnostics

Synopsis

Nanotechnology allows for the unique design and functionalisation of materials and devices at the nanometer scale for a variety of applications. The Institute's laboratory has synthesised organic and inorganic nanoparticles and nanocomposites for advanced drug delivery, antimicrobial, antifouling, stem cell culture, tissue engineering, and biosensing applications.

There are also fabricated nanofluidic systems for drug screening, *in vitro* toxicology, clinical sample preparation, and diagnostic applications. The nanosystems allow for the rapid and automated processing of drug candidates and clinical samples in tiny volumes, greatly facilitating drug testing, genotyping assays, infectious disease detection, point-of-care monitoring, as well as cancer diagnosis and prognosis.



3) Associate Professor H. Thomas Aretz, Vice President for Global Programs Partners Healthcare International (United States of America)

Topic

Does the Existing Health Professions Education and Training System Drive Health Care Improvement?

- Human resource development is crucial to performance improvement
- Changing demands are creating new professionals and teams
- Novel models are evolving across academic and healthcare systems

Synopsis

Education and Healthcare are the only two industries in the United States that have not shown any increase in productivity. While technological advances are occurring at a rapid rate, education and training are not keeping pace to address the changing needs of society. The shifts in demographics, epidemiology of disease, delivery models, as well as society's changing expectations and the demand for affordable quality care require new educational approaches and pathways. These need to address not only individuals, but also teams and organisations. Moving from "staff mix" to skills mix" and leveraging "vertical and horizontal substitutions" of skills across traditional professional boundaries are but two examples of the evolving healthcare workforce. As a consequence, the traditional divide between education and healthcare delivery systems is breaking down, leading to novel models of integrated education and training efforts, which challenge the existing structures and functions of universities and academic medical centres.

ANNEX B: ANNUAL SCIENTIFIC COMPETITION

We share three of the shortlisted projects in various categories:

- 1) Singapore Allied Health Award (IMH): *Frailty in Singapore elderly: Prevalence, correlates and role in disability and service use in a nationally representative sample.*

Synopsis: The study examines cross-sectional data from a national survey of 2565 elderly participants aged 60 years and above. A regression analysis was conducted to identify the strongest correlates of frailty. Frailty is common among the elderly and it correlates with many components at the person, health and societal levels, thus highlighting the importance of individual and population-level frailty detection and intervention strategies targeting this specific population.

- 2) Singapore Young Investigator Award (TTSH): *New Insights into Diabetic Retinopathy - Risk Factors for Prevalence, Incidence and Progression in Asians*

Synopsis: A longitudinal cohort study was conducted for 250 patients with diabetes mellitus, examined annually by ophthalmologists over a five-year period. Demographic and clinical risk factors were assessed. It was found that diabetic retinopathy progression accelerates with increasing severity, and is fastest in younger patients with longer duration of disease. Younger age and duration of diabetes are important risk factors for both prevalence and incidence of diabetic retinopathy.

- 3) Singapore Young Investigator Award (IMH) : *Quality of Life and Cognitive Functioning in Adult Patients with Schizophrenia: A Longitudinal Perspective*

Synopsis: The study sheds light on adult patients with schizophrenia. This hopes to give deeper understanding of the onset of such deficits in the developmental trajectory of the illness and for clinicians to provide better treatment in the holistic management of our patients with schizophrenia.

ANNEX C: CHINESE GLOSSARY

Singapore Health and Biomedical Congress 2015: <i>Advancing Health Care into the Future: Innovate, Improve, Integrate</i>	新加坡卫生与生物医学大会 2015 <i>推动健保迈向未来: 创新, 改进, 结合</i>
Professor Philip Choo Group Chief Executive Officer National Healthcare Group	朱伟仁教授 集团首席执行总裁 国立健保集团
Predictive and preventive healthcare	预测性与预防性健保
Nanyang Technological University	南洋理工大学
Lee Kong Chian School of Medicine	李光前医学院
Memorandum of Understanding	谅解备忘录