



## PRESS RELEASE

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### **New breast cancer screening services, community partners for Neighbourhood Health Service 2019**

*Led by students from the NUS Yong Loo Lin School of Medicine, this year's event in Kampong Glam and Queenstown is the biggest since inception, with more than 30 healthcare screening services and 16 community partners.*

*Singapore, 5 October 2019* – For the first time, mammogram screening will be introduced as one of the healthcare screening services at the Neighbourhood Health Service (NHS), a student-led flagship community health project by the National University of Singapore Yong Loo Lin School of Medicine (NUS Medicine). In partnership with the Singapore Cancer Society, a mammogram bus will be stationed at Leng Kee Community Club (CC) on 5 and 6 October to provide residents with the convenience of having mammograms done on-site, saving them the hassle of waiting to receive a referral at a later date.

The health screening exercise involves numerous agencies and groups coming together, and is the biggest since its inception in 2007. This year, the NHS aims to reach out to residents of Kampong Glam and Queenstown. It aims to bring an integrated and holistic screening experience right to the doorsteps of residents who require healthcare services, as well as providing them with a comprehensive and robust follow-up programme after the screening.

More than 500 residents were screened at Kampong Glam Community Club on 7 and 8 September 2019. This weekend (5 and 6 October), NHS will be held in Queenstown.

#### **New SIT Physiotherapy Collaboration for Fall Risk Services**

This year's NHS event also marks the inaugural collaboration with students from the Singapore Institute of Technology (SIT) Physiotherapy course, who have come on board as part of the NHS 2019 organising committee to conduct fall-risk screening for elderly residents.

The screening aims to identify elderly residents at risk of falling and stratify them according to their risk levels. Based on factors such as fall history and performance in the fall risk assessments,

residents who display high fall risks will then be taught simple exercises, with personalised education to encourage awareness among residents on fall prevention.

More importantly, this initiative also extends the screening services to residents with mobility issues, who can now benefit from fall-risk screening in the comfort of their own homes.

Professor Chong Yap Seng, Dean of NUS Yong Loo Lin School of Medicine said, “With more tertiary education partners for this year’s NHS screening efforts, students will gain an understanding of how the various healthcare disciplines complement each other in actual real-life scenarios to care for patients.”

Residents will be screened via multi-level tests in five categories:

- Chronic diseases (diabetes mellitus, hyperlipidaemia, hypertension, obesity)
- Functional modalities (vision, oral health, hearing)
- Fall prevention (fall risk screening, physiotherapy education)
- Cancer (colorectal, cervical, breast)
- Mental health (dementia, depression)

### **Interprofessional Collaboration and Capacity Building**

The NHS brings together a total of 16 community partners for this year’s event, including the three Regional Health Systems (NUHS, SingHealth, NHG), the Health Promotion Board (HPB), the Ministry of Health (MOH), the Agency for Integrated Care (AIC), National Dental Centre Singapore, Singapore Cancer Society and the Active Ageing Council amongst others.

Students from the Lee Kong Chian School of Medicine and Duke-NUS Medical School – as well as social work, nursing, physiotherapy and occupational therapy students from NUS Social Work, NUS Nursing, Nanyang Polytechnic and the Singapore Institute of Technology –have been invited to join the NUS Medicine students in the organisation of the event. Interdisciplinary teams participate in door-to-door screening, fostering interprofessional collaboration.

This year, the student participants also benefited from a pioneering “Motivational Interviewing” training, based on materials from the NUHS Department of Family Medicine. Traditionally used in clinical counselling, NHS imparted relevant techniques to students to promote health-seeking behaviour among residents.

Professor Kenneth Mak, Deputy Director Medical Services (Health Services Group) from the Ministry of Health (MOH) said, “NHS 2019 is a holistic, community-based health screening aligned with nationwide screening efforts. Serving over almost 6,000 residents in seven different districts, NHS is the only student-led community health project with a strong partnering support from undergraduates from the Alice Lee School of Nursing at NUS and other medical schools in Singapore. This is an impressive undertaking and demonstrates the commitment level that our future healthcare professionals have towards improving the community’s health outcomes.”

## **Beyond Screening: Sustainable Care for Residents**

As part of the NHS' holistic healthcare screening programme, residents are provided with personalised follow-ups after the screening.

As of July 2019, about 38% of 132 residents previously identified for the NHS' personalised follow-up programme in 2018 were subsequently discharged as they had followed up with their doctors for a sustained period of time and took their medicines regularly.

"This is a commendable achievement, considering that lower-income rental block residents are less likely than the average Singaporean to seek healthcare support due to their difficult socioeconomic circumstances," said Associate Professor Gerald Koh, Director of Medical Undergraduate Education at Saw Swee Hock School of Public Health, and Joint Assoc Prof at NUS Medicine. He has been advising NHS since 2007.

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For media enquiries, please contact:

Edna CHIA  
Senior Assistant Manager, Communications  
Yong Loo Lin School of Medicine  
National University of Singapore  
DID: +65 6772 6978  
Email: [medcme@nus.edu.sg](mailto:medcme@nus.edu.sg)

WONG Hui Shan  
Assistant Manager, Communications  
Yong Loo Lin School of Medicine  
National University of Singapore  
DID: +65 6772 3816  
Email: [wonghuishan@nus.edu.sg](mailto:wonghuishan@nus.edu.sg)

Amanda YAP  
Executive, Dean's Office  
Yong Loo Lin School of Medicine  
National University of Singapore  
DID: +65 6772 6783  
Email: [medajy@nus.edu.sg](mailto:medajy@nus.edu.sg)

## **About National University of Singapore (NUS)**

A leading global university centred in Asia, the National University of Singapore (NUS) is Singapore's flagship university, which offers a global approach to education and research, with a focus on Asian perspectives and expertise.

NUS has 17 faculties and schools across three campuses. Its transformative education includes a broad-based curriculum underscored by multi-disciplinary courses and cross-faculty enrichment. Over 38,000 students from 100 countries enrich the community with their diverse social and cultural perspectives. NUS also strives to create a supportive and innovative environment to promote creative enterprise within its community.

NUS takes an integrated and multi-disciplinary approach to research, working with partners from industry, government and academia, to address crucial and complex issues relevant to Asia and the world. Researchers in NUS' Schools and Faculties, 30 university-level research institutes and centres, and Research Centres of Excellence cover a wide range of themes including: energy, environmental and urban sustainability; treatment and prevention of diseases common among Asians; active ageing; advanced materials; risk management and resilience of financial systems. The University's latest research focus is to use data sciences, optimisation research and cybersecurity to support Singapore's Smart Nation initiative.

For more information on NUS, please visit [www.nus.edu.sg](http://www.nus.edu.sg).

## **About the NUS Yong Loo Lin School of Medicine (NUS Medicine)**

Established in 1905, the NUS Yong Loo Lin School of Medicine is the first institution of higher learning in Singapore and the genesis of the National University of Singapore.

The School offers one of the finest undergraduate medical programmes in the Asia Pacific region and enjoys international recognition and respect. The Times Higher Education World University Rankings 2019 by subject and Quacquarelli Symonds (QS) World University Rankings by Subject 2019 list NUS Medicine as a leading medical school in Asia.

It admits 300 students to the MBBS degree programme annually and its principal missions are to educate and train the next generation of healthcare professionals, and foster research that will help to advance the practice of medicine.

The 18 NUS Medicine departments in the basic sciences and clinical specialties work closely with the Centre for Medical Education, the Centre for Biomedical Ethics, the Centre for Healthcare Simulation as well as the restructured public hospitals to ensure that teaching and research are aligned and relevant to Singapore's healthcare needs. The School is a founding institutional member of the National University Health System.

For more information about NUS Medicine, please visit <http://nusmedicine.nus.edu.sg>

## Annex 1: Prevalence of Conditions among Low SES vs High SES Residents

Studies have shown that residents of low socio-economic status (SES) communities have a higher prevalence of hypertension (68.4% compared to the national average of 41.5%)<sup>1</sup>, depression (26.2% compared to 14.8% in high SES communities)<sup>2</sup> and cognitive impairment (26.2% compared with 16.1% in owner-owned communities)<sup>3</sup>. This vulnerability renders them a critical target group, driving the core ethos of NHS, which is to serve residents-in-need.

Screening	Prevalence	
	Low-income blocks	National average
Hypertension	68.4% (143/209)	41.5% (Wu et al., 2009)
Depression	26.2% (104/397)	14.8% (24/162)
Cognitive Impairment	26.2% (104/397)	16.1% (26/161)

In 2018, NHS managed to diagnose a total of 248 residents with chronic medical conditions that they were previously unaware of. Acting as a bridge, NHS reconnects residents to existing healthcare provider, providing detailed referrals to a plethora of community partners and their services (Annex 2 and 3). 132 residents were then included in our personalised follow-up programme. Residents are followed up on via telehealth in three-month cycles to assess medical compliance, as well as to encourage proper healthcare seeking behaviour. Following this programme, an annual Patient Care Conference provides professional advice on more complicated cases which require house visits.

As of July 2019, about 50 of the 132 residents were discharged from follow-ups. This meant that they had followed up with their doctors for a sustained period of time and took their medicines regularly.

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<sup>1</sup> Hypertension awareness, treatment and control in an urban low-income setting: A community-based study in Singapore (2010)

<sup>2</sup> Individual and area-level socioeconomic status and their association with depression amongst community-dwelling elderly in Singapore (2013)

<sup>3</sup> Individual and area level socioeconomic status and its association with cognitive function and cognitive impairment (low MMSE) amongst community-dwelling elderly in Singapore (2012)

## Annex 2: List of Services for NHS 2019

TYPE	SERVICE	SCREENED BY
Chronic Diseases	<b>Triage</b> 1. Blood Pressure (BP) 2. Height & Weight (BMI) 3. Waist/Hip Circumference 4. Capillary Blood Glucose (for diabetics)	NUS, NTU, Duke-NUS Medicine students NUS, NYP Nursing students SIT Physiotherapy & Occupational Therapy students
	<b>Blood Test (Phlebotomy)</b> 5. Fasting Blood Glucose 6. Lipid Profile (Triglycerides, Total Cholesterol, HDL, LDL)	SingHealth National Healthcare Group Tzu Chi Foundation
Functional Modalities	<b>Basic Vision</b> 7. Snellens Test	NUS Medicine & Nursing students NYP Nursing students
	<b>Advanced Vision</b> 8. Slit lamp 9. Tonometry 10. Kerato-refractometry 11. Optical coherence tomography and/or fundus photography	Singapore Eye Research Institute (SERI)
	<b>Dental</b> 12. Dental Examination 13. Oral Health Impact Profile-14 (OHIP-14)	National Dental Centre Singapore (NDCS)
	<b>Hearing</b> 14. Hearing Handicap Inventory for the Elderly-Screening (HHIE-S) 15. Tinnitus Screening 16. Otoscopy Examination 17. Pure Tone Audiometry	Health Promotion Board (HPB)
Fall Risk	<b>Fall Risk Assessment</b> 18. Community Fall Risk Questionnaire 19. Short Physical Performance Battery 20. Barthel ADL Index 21. Fracture Risk Assessment 22. Specific Falls Assessment	SGH Community Nurses SIT Physiotherapy Students NUS Medicine students
	<b>Fall Risk Education</b> 23. Healthy Diet for Strong Bones 24. Home Safety 25. Proper Footwear	
Mental Health	<b>Dementia (Cognitive Impairment)</b> 26. Abbreviated Mental Test (AMT)	NUS Medicine students
	<b>Depression</b> 27. Patient Health Questionnaire (PHQ)-2 & 9	
Cancer	<b>Colorectal Cancer</b> 28. Faecal Immunochemical Test (FIT) Kits	Singapore Cancer Society
	<b>Cervical Cancer</b> 29. Referral for free pap smear	
	<b>Breast Cancer</b>	

	30. Free mammogram and mammogram referrals	
Social	31. Evaluation of financial, social & psychological condition of residents	NUS Social Work students
Others	32. Assistance with CHAS Application	NUS Medicine students

**Annex 3: List of Follow-up Providers**

<b>Kampong Glam</b>	<b>Leng Kee</b>
<ol style="list-style-type: none"> <li>1. Peace Connect</li> <li>2. Care Close to Home</li> <li>3. Senior Group Home</li> <li>4. Senior Activity Centres</li> <li>5. JoyConnect</li> <li>6. Cluster Support</li> <li>7. Kampong Glam Family Service Centre</li> <li>8. Arise Community Services</li> <li>9. Social Service Office @ Jalan Besar</li> </ol>	<ol style="list-style-type: none"> <li>1. Regional Health System</li> <li>2. Singhealth Community Nurses</li> <li>3. NTUCHealth</li> <li>4. South Central Community Family Service Centre</li> <li>5. Social Service Office @Bukit Merah</li> </ol>
<b>Common</b>	
<ol style="list-style-type: none"> <li>1. Singapore Eye Research Institute</li> <li>2. Singapore National Eye Centre</li> <li>3. Health Promotion Board</li> <li>4. National Dental Centre Singapore</li> <li>5. Singapore Cancer Society</li> </ol>	

#### Annex 4: Diagnosis of Undiagnosed Residents 2018

<b>Medical Condition</b>	<b>No. of Previously Undiagnosed Residents</b>	<b>No. of Diagnosed Residents</b>	<b>% of residents who were diagnosed as a result of the screening</b>
Type II Diabetes Mellitus	38	50	76%
Hypertension	135	284	48%
Hyperlipidaemia	75	116	67%

Definition:

Undiagnosed residents refer to residents who had previously declared, to the best of their knowledge, that they did not have the medical condition. The number of diagnosed residents are those who were identified with the respective medical condition from NHS' screening of blood pressure and subsequent phlebotomy results.



## Annex 5: List of Partners and Sponsors

### 2019 NHS Partners

Healthcare Partners	<ul style="list-style-type: none"><li>● Agency for Integrated Care</li><li>● Health Promotion Board</li><li>● National Dental Centre Singapore</li><li>● Tan Tock Seng Hospital</li><li>● National Youth Council</li><li>● NTUC Health</li><li>● PEACE-Connect Cluster Operator</li><li>● SingHealth</li><li>● Singapore Cancer Society</li><li>● Singapore Eye Research Institute</li><li>● Singapore General Hospital</li></ul>
Social Organisations and Grassroots	<ul style="list-style-type: none"><li>● Kampong Kapor Family Service Centre (FSC)</li><li>● Social Service Office @ Jalan Besar</li><li>● Social Service Office @ Bukit Merah</li></ul>
Schools	<ul style="list-style-type: none"><li>● NUS Medicine, Nursing &amp; Social Work students</li><li>● NTU Medicine students</li><li>● Duke-NUS Medicine students</li><li>● Nanyang Polytechnic Nursing students</li><li>● SIT Physiotherapy &amp; Occupational Therapy students</li></ul>

### 2019 NHS Sponsors

Monetary Sponsors	<ul style="list-style-type: none"><li>● Ministry of Culture, Community and Youth Our Singapore Fund</li><li>● GoHelp (Yong Loo Lin School of Medicine)</li><li>● National Youth Council</li><li>● Tote Board Community Healthcare Fund</li></ul>
In-kind Sponsors	<ul style="list-style-type: none"><li>● Agency of Integrated Care</li><li>● Systema Lion</li><li>● Microlife</li><li>● Atlantic Optical</li><li>● Archer Copier</li><li>● Oh So Healthy!</li><li>● GlaxoSmithKline</li><li>● KOKA Noodles (Tat Hui Foods Pte. Ltd)</li><li>● Gift Market</li><li>● Sunshine Bakeries®</li><li>● Amrock Engineering (Far East) Pte Ltd</li></ul>