CGH Launches Healthcare Robotics Centre to Drive New Solutions in Healthcare

23 July 2015 – Today, the Centre for Healthcare Assistive and Robotics Technology (CHART) at Changi General Hospital was officially opened by President Tony Tan Keng Yam, with Health Minister Gan Kim Yong and other dignitaries in attendance.

Spearheaded by Changi General Hospital (CGH) and supported by the Singapore Economic Development Board (SEDB), 'CHART' provides a collaborative platform that will enable healthcare professionals to work closely with academia, industry and research institutions to develop impactful healthcare solutions leveraging on robotics and assistive technology.

To achieve the healthcare vision of providing accessible, affordable and high quality care while managing the challenges of an ageing population and workforce, CHART will drive the development of solutions in five key healthcare domains – developing virtual hospitals, transforming aged care, optimised rehabilitation, automating processes and enhancing medical training - to achieve the following outcomes:

1. Improving productivity by enabling staff across various care settings to perform their respective clinical and operational roles more efficiently.
2. Optimising healthcare work force with automation augmenting/substituting some of the more labour-intensive jobs. This will also increase the value of these jobs.
3. Improving health and clinical outcomes with solutions that help care teams extend human capabilities.
4. Supporting 'right siting' of care by facilitating independent living and care in the community with assistive technology.

Sited at CGH, CHART is equipped with a Design Lab for ideation and collaboration, and a Living Lab with mock-up wards, clinics and minor surgery rooms that will enable solutions to be prototyped. Dr Lee Chien Earn, Chief Executive Officer, CGH said, "With a growing, ageing population we need to effectively harness technology to augment clinical care, enable independent living, enhance staff safety and improve productivity."

Nationally, CHART will serve as a shared platform to engage various healthcare clusters and aged-care providers for new healthcare solutions to be developed and tested, under the guidance of a central MOH robotics implementation committee. It will also become a launch pad for the National Robotics Programme, a multi-agency initiative that coordinates and

supports the end-to-end development of robotics technologies.

Mr Lim Kok Kiang, Assistant Managing Director of the EDB said, ”The silver tsunami is not unique to Singapore. We see significant opportunities for advances in robotics to be applied as part of the solution. CHART provides a platform for end-users, technologists and companies to co-innovate new robotics applications for healthcare and eldercare, thus enabling technology to be brought to market faster. All these go towards supporting Singapore’s vision to be a hub for the development of new robotic solutions.”

Currently, CGH has inked MOUs with Nanyang Technological University (NTU) and Singapore University of Technology and Design. CHART has also started collaboration projects with various local and foreign companies and welcomes more partners from healthcare, academia, research and industry, including local Small Medium Enterprises (SMEs), to jointly develop and test solutions.

NTU Provost Professor Freddy Boey said, “NTU has deep expertise and an excellent track record in developing biomedical devices and robotics for surgical and rehabilitative use over the last two decades. With the recent research and development focus by the university to deploy robotics technology into the healthcare sector, we found an ideal partner in CGH, with its focused vision on how such technology can assist patients and the hospital operations.”

NTU’s efforts in this collaboration with CGH will be led by Associate Professor Ang Wei Tech, Associate Chair of Research at the School of Mechanical & Aerospace Engineering.