

PRESS RELEASE

COMMUNITY KNEE OSTEOARTHRITIS PROGRAMME DRIVES POSITIVE CARE OUTCOMES, ADDS BACK YEARS OF BETTER HEALTH

FOR IMMEDIATE RELEASE

Osteoarthritis (OA) is a global public health concern, with 528 million people worldwide living with the condition¹, and this number is expected to increase with the ageing of populations. It is also a leading cause of disability worldwide among musculoskeletal conditions, accounting for 19 million years lived with disability (YLDs)², and more commonly affects individuals aged above 55-years old and women³. In Singapore, OA is the fifth reason for years of life lost to disability, ill-health, or early death (DALYs)⁴.

While OA can affect almost any joint, the knee is the most frequently affected. Knee OA is thus one of the most common and fastest growing causes of pain and disability in the elderly. To enhance care for seniors with knee OA, the National Healthcare Group (NHG) first started the **Collaborative Model of Care between Orthopaedics and Allied Healthcare Professionals (CONNACT)** programme in 2018, before transitioning it to an enhanced CONNACT Plus programme in 2021.

A first in Singapore, CONNACT Plus is a community-based programme focused on maximising rehabilitation outcomes and optimising non-surgical treatment for such individuals. This approach involves partnering community care providers such as St Luke's ElderCare (SLEC) to upskill and train their physiotherapists in knee OA management, and enrolling patients from Tan Tock Seng Hospital (TTSH), Khoo Teck Puat Hospital (KTPH), and the upcoming Woodlands Health (WH) Campus in the programme to be cared for and undergo rehabilitation in the community.

CONNACT Plus has four key pillars - exercise and active lifestyle; diet and nutrition; psychological empowerment; and social and community support. This is supported by three key enablers - strong hospital-community partnership; health coaching; and senior-friendly technology. Under CONNACT Plus, patients with knee OA undergo a personalised 12-week programme, where they work with their care team to co-create personalised care goals, attend regular weekly physiotherapy exercise sessions, and psychoeducation classes covering OA-specific care and management, as well as learn about nutrition and mindful eating. After completing the programme, participants are encouraged to continue their physiotherapy sessions at the SLEC centres or join existing community programmes in their neighbourhoods. Should patients experience a deterioration in their condition, they will be referred to hospitals for specialist care.

¹ World Health Organization (WHO): <https://www.who.int/news-room/fact-sheets/detail/osteoarthritis>

² WHO: <https://www.who.int/news-room/fact-sheets/detail/musculoskeletal-conditions>

³ WHO: <https://www.who.int/news-room/fact-sheets/detail/osteoarthritis>

⁴ Singapore Burden of Disease Study 2014

Since the start of the programme, some 170 participants have benefitted and shown improved clinical outcomes. Preliminary analyses showed that 74.4 per cent of participants reported an improvement in pain outcomes, 61.5 per cent reported improvements in daily function, and 66.7 per cent reported an improvement in quality of life. All participants have successfully completed the 12-week programme, and close to 40 per cent continue to remain active in other community-based exercise programmes. Compared to the control arm, participants who underwent CONNACT Plus saw a reduction in the risk for knee replacement surgery by 36 per cent.

“CONNACT Plus is one of the programmes that shows how NHG’s collaborations with community partners lead to the delivery of excellent and accessible health care. We aspire for it to also bring focus to the crucial role physical exercise plays in enhancing the health of our population,” said **Dr Teoh Chin Sim, Chairman, NHG SEM+ & Musculoskeletal Steering Committee; and Senior Consultant, Sports and Exercise Medicine, KTPH.**

“The CONNACT Plus programme has transformed our approach to knee OA management. We are now able to provide comprehensive support to our clients, including tailored exercises, education, dietary guidance, consultations, and counselling. This collaboration has empowered our staff to provide better care, paving the way for a trans-disciplinary practice which is essential in managing the complex needs of our clients in the community,” added **Ms Lui Yook Cing, Senior Principal Physiotherapist and Assistant Director, SLEC.**

In line with the goals of NHG’s OneRehab strategy and *Healthier SG*, CONNACT Plus will look at working with more primary care partners in Central and North Singapore, including NTUC Health, to identify more suitable participants and refer them to the programme. Leveraging IT as an important enabler, participants can look forward to tracking their progress and care outcomes digitally via the NHG Cares app soon.

CONNACT Plus has more recently served as the foundation for several research initiatives on musculoskeletal conditions. This includes the **Heat and Acupuncture Randomised Controlled Trial to Manage Osteoarthritis of the Knee (HARMOKnee)** trial looking at the effectiveness of acupuncture and heat in knee OA; the **Singapore Knee Osteoarthritis Cohort (SKETCH)** study on the role of psychosocial factors in predicting clinical outcomes and health utilisation in patients with knee OA; and the **Built Environment in Falls and ArthrITis (BE-FIT)** study on the relationships between the built environment and psychosocial factors such as physical activity, social participation, and functional outcomes in the elderly with mobility challenges.

Given the massive burden of disease that musculoskeletal conditions have for the local population, musculoskeletal conditions have been identified as one of the key strategic priorities for NHG as part of its population health strategy. **Dr Bryan Tan Yijia, NHG-LKCMedicine Clinician Scientist; Consultant, Orthopaedic Surgery, Woodlands Health and Lead of CONNACT Plus** and his team will be sharing key findings on the programme and other musculoskeletal research initiatives at the 21st Singapore Health and Biomedical Congress (SHBC) organised by NHG. This year’s SHBC, themed “Transforming for a Healthier Population”, will be held on 12 and 13 October 2023 at Max Atria@Singapore Expo. Distinguished local and overseas experts will share their in-depth expertise and knowledge on four key areas - Future of Health; Health Behaviour & Change; Health & Technology; and Digital Health, AI and Big Data—with a total of four symposiums and 16 tracks. (See *Fact Sheet on SHBC 2023*)

For information about SHBC 2023, visit www.shbc.com.sg.

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About the National Healthcare Group

The National Healthcare Group (NHG) is a leader in public healthcare in Singapore recognised for the quality of its medical expertise and facilities. Care is provided through an integrated system of primary care polyclinics, acute care and tertiary hospitals, and national specialty centres. Together, we provide comprehensive and innovative healthcare to address the unique needs of our patients and the population we serve.

As the Regional Health Manager for 1.5 million residents in Central and North Singapore, NHG through its Central, Woodlands, and Yishun health networks collaborates with private general practices, public and community health and social care providers to keep residents well and healthy.

The 22,000 healthcare professionals in NHG are committed towards building healthier and resilient communities, and Adding Years of Healthy Life to the people we serve.

More information is available at www.nhg.com.sg.

GLOSSARY

新加坡卫生与生物医学大会	Singapore Health & Biomedical Congress (SHBC)
杨时政 兼任助理教授 主任及高级顾问医生, 肾脏内科部门 陈笃生医院	Assistant Professor Yeo See Cheng SHBC2023 Organising Chairperson Senior Consultant, Head, Department of Renal Medicine Tan Tock Seng Hospital
陈奕嘉医生 顾问医生, 矫形外科 兀兰医疗集团	Dr Bryan Tan Yijia Lead, CONNACT Plus Consultant, Orthopaedic Surgery Woodlands Health
张真心医生 高级顾问医生, 体育与运动医学中心 邱德拔医院	Dr Teoh Chin Sim Senior Consultant, Sports and Exercise Medicine Khoo Teck Puat Hospital
吕毓箐 高级首席物理治疗师及康复护理部门 助理主任, 圣路加乐龄关怀	Ms Lui Yook Cing Senior Principal Physiotherapist and Assistant Director of Rehab Services St Luke's ElderCare