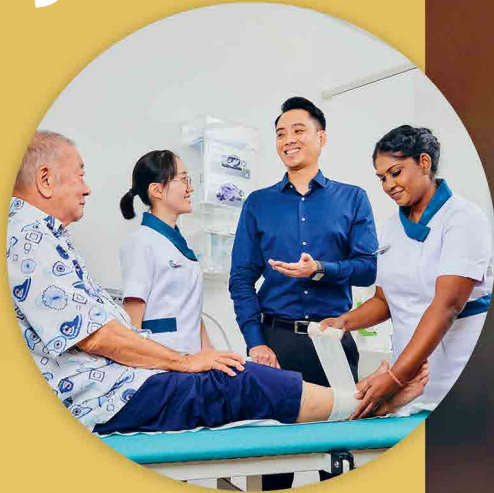
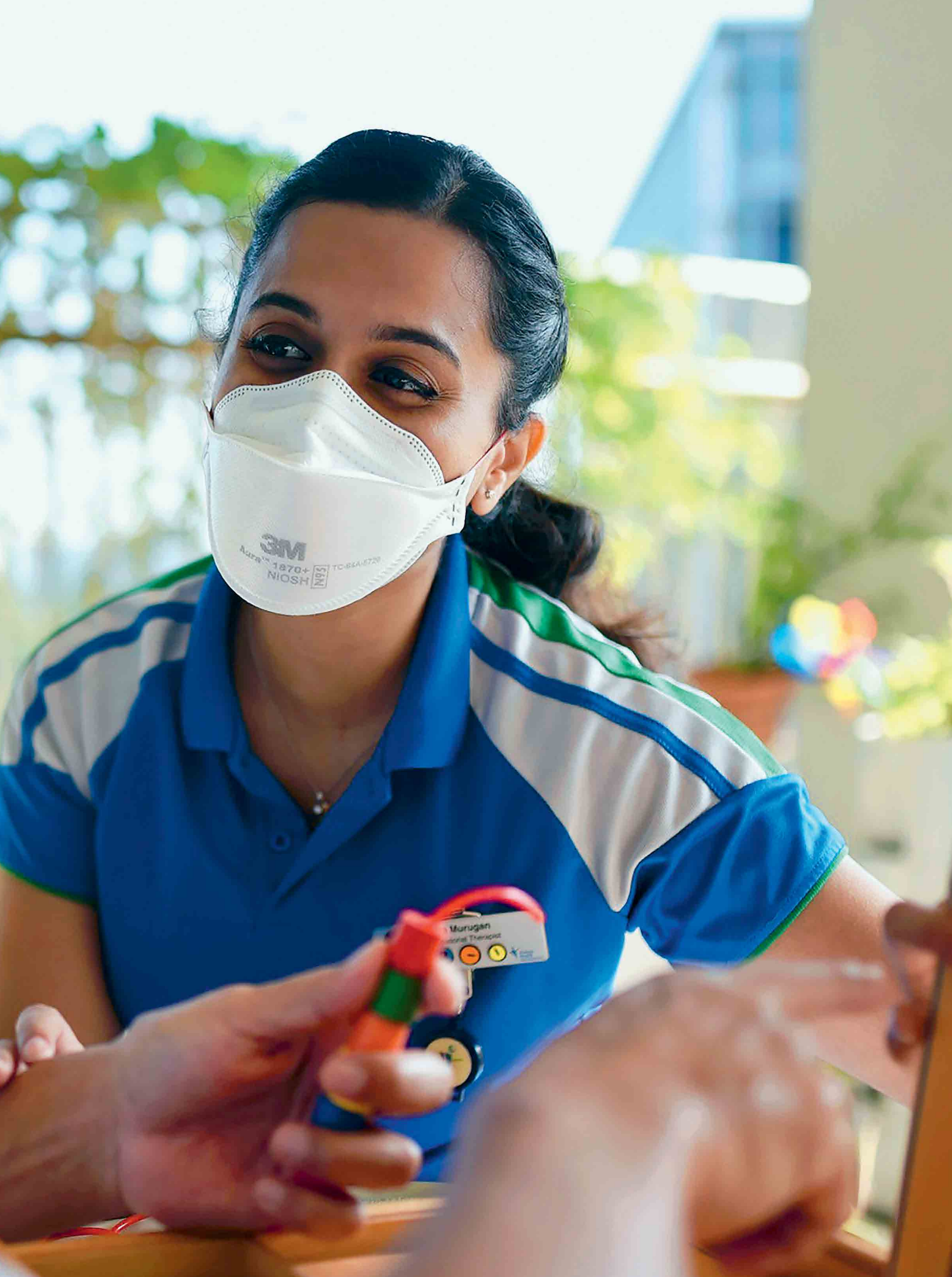


Living With Frailty



NHG is dedicated to identifying and empowering both the pre-frail and frail population, to ensure quality of care for our seniors. By closely collaborating with our Institutions, we are proactively driving preventive care and capacity-building in the community, as well as integrating health and social services to meet the complex care needs of our elderly population.







LIVING WITH FRAILTY

LIVING WITH FRAILTY

DIGITAL WELLNESS AND HEALTHCARE INITIATIVES

Active Ageing Feature In NHG Cares App

An Active Ageing feature was released in conjunction with the launch of the NHG Cares app in the first quarter of 2023. The feature allows residents, especially those above the age of 60, to ascertain their Critical Frailty Score (CFS) after completing an Active Ageing questionnaire within the app, which in turn will help determine their overall well-being. Based on an individual's CFS score, a customised lesson plan will be tailored accordingly. This innovative approach aims to empower senior residents to make informed lifestyle adjustments, while setting achievable goals for active ageing.



CommFit By Woodlands Health

Despite the increasing prevalence of frailty in Singapore, public awareness of this health condition remains limited. In March 2023, Woodlands Health (WH) introduced CommFit, a multi-faceted programme designed in accordance with the recommendations of the National Frailty Policy workgroup. CommFit specifically targets Woodlands residents at risk of frailty, are pre-frail or moderately frail, or who have developed symptoms of frailty. Its multidimensional interventions include frailty assessments, exercise advice, nutrition education, caregiver



I didn't know that I was at risk of frailty before joining the programme. I joined to gain more knowledge — such as exercise and diet recommendations. This has been very helpful. I have been following my health coach's advice and attending the exercise sessions regularly. I have also cut down on my sugar and oil intake as recommended."

Madam Fatimah Binte Arib
WOODLANDS HEALTH COMMFIT PARTICIPANT

support, medication reviews, home environment assessments, and referrals to other services.

ENHANCING NUTRITION AND CARE FOR PATIENTS

Dysphagia Friendly Foods

Dysphagia is a condition characterised by swallowing difficulties, where patients typically require modifications to the consistency of fluids and texture of foods they consume to





ensure safe swallowing and prevent complications, such as pneumonia, from arising. Speech therapists play a crucial role in assessing patients with this condition. In October 2022, to increase food options for dysphagia patients in the community, organic health food retailer Green Capsule Organics sought the professional counsel of speech therapists from Tan Tock Seng Hospital (TTSH) to test and advise on food preparation methods for consumers to prepare their own dysphagia-friendly version of the YOUMEIRICE Instant Brown Rice Porridge. With the right preparation methods, the product can be made suitable for individuals recommended the “Level 5 Minced and Moist” diet, or less modified textures, in accordance to the International Dysphagia Diet Standardisation Initiative (IDDSI) framework. To better inform consumers, Green Capsule Organics has plans to incorporate this new knowledge into its product packaging.

Enhancing Frailty Care Through The Frailty Ready Hospital Framework

Since the expansion of TTSH's Framework for Inpatient Care of the Frail Elderly (FIFE) to the Frailty Ready Hospital (FRH) workstream in FY2019 within the Central region of Singapore, the hospital has made significant strides in improving frailty care. This comprehensive approach includes the validation and alignment of a Clinical Frailty Scale (CFS-FAST) for use in the hospital and TTSH's community health teams, developing effective frailty interventions that include inpatient oral protocols and expansion of delirium care bundle to more wards, as well as reviewing discharge planning processes for better patient transitions back to the community. TTSH's commitment to building a culture of frailty-readiness is also



reflected in its Frailty Education Series launched in 2022, with talks on frailty screening and care bundles, plus initiatives to engage staff on the concept of frailty.

Subacute Frailty Care Unit

The Subacute Frailty Care Unit (SFCU) was established in November 2022 by the TTSH Department of Geriatric Medicine. With its focus on managing senior individuals with complex medical needs, both with and without rehabilitation needs or social issues, but no longer necessitate acute ward care, SFCU is well-equipped to conduct comprehensive geriatric assessments to improve patient outcomes, reduce avoidable admissions, restore function, and develop individualised discharge plans with links to relevant community services. To-date, SFCU has trialled initiatives on frailty care and prevention, including a virtual museum tour in collaboration with occupational therapists and the National Heritage Board, as well as oral frailty care, developed in conjunction with dental and nursing teams.





LIVING WITH FRAILTY

ADVANCEMENTS IN RESEARCH AND FRAILTY

Mobility, Frailty, And Falls Programme

NHG is making inroads into shifting the frailty curve, reducing adverse outcomes of frailty, falls, and functional decline – and thus, reducing healthcare costs due to ageing – with its efforts in Mobility, Frailty, and Falls research programme. Led by TTSH, the programme focuses on screening through deep phenotyping and risk stratification of the population, prevention of disease through a comprehensive understanding of social and health behavioural factors, and interventions through pilot trials for novel individualised approaches.

Research programmes, such as MMF, are supported by the Rehabilitation Research Institute of Singapore (RRIS) and the Palliative Care Centre for Excellence in Research and Education (PaLC). RRIS is jointly established by NHG, Nanyang Technological University (NTU), and the Agency for Science, Technology, and Research (A*STAR), while PaLC is a collaborative effort in palliative care research and education between NHG, Dover Park Hospice, and NTU.

Humanitude By Yishun Health

As part of Yishun Health's commitment to becoming an age-friendly hospital, staff are trained using a special care methodology to foster greater connectedness between healthcare providers and patients. Named Humanitude, this relationship-based approach has shown qualitative improvement in the patient experience, boosted care outcomes, and instilled more dignity and compassion into care delivery, particularly for vulnerable and dependent persons. The goal



is to progressively train 500 staff, with greater participation from doctors and allied health professionals. With Humanitude, better patient outcomes can be expected.

Humanitude seeks to shift the care delivery paradigm from one that is task-oriented to building care that is relationship-based and enabling. It emphasises sensory communication, where caregivers make use of gaze, speech, touch, and verticality (an upright position) when interacting with patients – elements often missing in the lives of older people with frailty and dementia, as they are usually left in bed or chairs with minimal human contact.

Multicomponent Frailty Interventions At The Emergency Department

The Emergency Department Interventions for Frailty (EDIFY) programme reduces the number of potentially avoidable acute admissions, shortens the length of stay, and improves health-related quality-of-life (HRQOL) and functional outcomes in older persons above the age of 85 pending acute hospital admissions at TTSH, through early review from geriatric experts.

Patients aged 65 years or older, with Clinical Frailty Scale (CFS) scores between 4 to 6 (vulnerable to moderately frail), pending discharge from TTSH's Emergency Department (ED) were systematically assigned to EDIFY or standard-care, according



to their week of ED presentation. HRQOL was measured using self-reports over the course of six months. Among 140 participants (EDIFY = 70; standard-care = 70), 87 participants (EDIFY = 44; standard-care = 43) had complete data and were analysed. After adjusting for baseline HRQOL levels and relevant factors, there were higher gains in quality-adjusted life years (QALY) for EDIFY as compared to standard-care (see Figure 1). Additionally, participants with CFS scores of 4 and 5 appeared to have higher gains in QALYs as compared to those with a CFS score of 6 (both $\beta=0.13$, 95% confidence interval= 0.06, 0.20).

Early geriatric specialist interventions at the front-door of acute hospitals via the EDIFY programme have shown potential to improve quality-of-life outcomes of frail older adults awaiting ED discharge. Treatment effects could possibly be enhanced using a frailty-targeted approach where interventions are targeted at patients in their early stages of (pre) frailty, with CFS scores of 4 and 5.



EMPOWERING NURSES FOR ENHANCED CARE

First Intermediate Long-Term Care (ILTC) Nurse Training

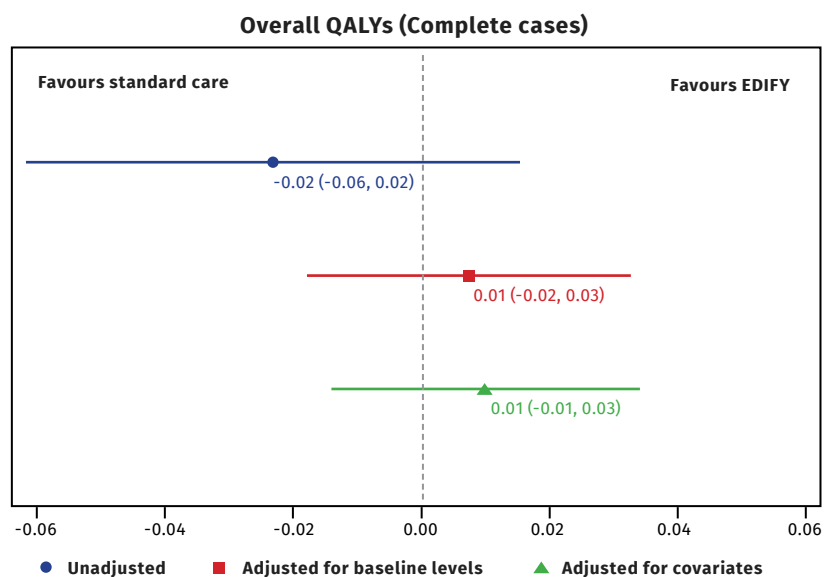
Driven by an ageing population with new needs for competent dermatology providers in a range of care settings, the Nursing team at National Skin Centre (NSC) launched the very first Basic Dermatology Nursing Course for Intermediate Long-Term Care

(ILTC) nurses in 2022, accredited by the National Nursing Academy.

In 2022, nurses from NSC conducted four sessions of the course to upskill 35 participants from ILTC organisations. The one-day course equipped ILTC nurses with essential knowledge and skills to provide safe and competent care to residents with common skin conditions of mild to moderate severity.

Nurses learnt about the basic structure and functions of skin, identifying the differences between normal and abnormal changes in skin, and common dermatology terminology. They also learnt the skills required to perform basic skin assessment, as well as the techniques of topical application, wet wrap therapy, and scabies management.

Figure 1. Overall QALYs Gained (β And 95% Confidence Interval) By EDIFY As Compared To Standard Care



Forest plot of the estimated QALYs gained by EDIFY. Each symbol represents the effect size of a model, with the horizontal line indicating the 95% confidence interval.

