Project Title

Nursing Home Support Team (NHST): Envisioning Care in Nursing Home

Project Lead and Members

Project Lead: Kenneth Lam

Project Members: Dr Andrew Samson, Dr Grace Chiang, Clement Chua, A/Prof Tan Boon Yeow

Organisation(s) Involved

St Luke's Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health, Ancillary Care

Applicable Specialty or Discipline

Palliative Medicine, Internal Medicine, Intensive Care Medicine, Speech Therapy

Project Period

Start date: Apr 2018

Completed date: Mar 2022

Aims

- Reduce hospital readmissions amongst nursing home residents by at least 10% per year.
- Provide a holistic approach to care enabling nursing home residents to live and "leave well" within the homes.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

- Customised delivery of care to suit specific needs and work cultures
- Goals of care discussion with residents' family members and caregivers
- Constant changing data to provide deeper insights into the dynamics of cause-and-effect, poses challenges for data collection

Conclusion

See poster appended/ below

Additional Information

NHST has been implemented and adopted into a paid service by 4 NHs in the Western region of Singapore.

- End-of-life/palliative support to NH partners
- On-site medical coverage, tele-medical consultations, after-office hours telemedicine service, speech therapist services, and transfer out reviews.
- Continuous training and education to NH staff

Project Category

Care Continuum, Intermediate and Long Term Care & Community Care, Nursing Home

Care & Process Redesign, Access to Care, Bed Occupancy Rate, Transfer Out Rate, Readmission Rate

Training & Education, Learning Approach, Collaborative Learning

Keywords

Support Team, Resident Care, Care Delivery, Advance Care Plan (ACP), Preferred Plan of Care (PPC)

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Nursing Home Support Team: Envisioning Care in Nursing Homes

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Background

Singapore has one of the most rapidly aging populations in the world. It is estimated that by 2030, one in four people will be aged over 65 years, and, that this will rise to almost one in two by 2050. To meet the rapidly rising demand for long-term care, the Ministry of Health plans to double the number of nursing home (NH) beds to more than 31,000 in the next 10 years. Given the escalating strains of an aging population and rising number of aged sick, there is a need to expand good-quality care and end-of-life care in nursing homes. As Health Minister Ong Ye Kung said at the Agency for Integrated Care's (AIC) annual Community Care Work Plan Seminar on 13th June 2022: ""Nursing home residents will not want to go through multiple transitions to hospital and back towards the end of their lives, as it can be very distressing."

We designed the nursing home support team (NHST) to specifically address the issue of reducing hospital readmissions and to better enable NH residents to live well and "leave well" in the NHs.

Goal and Objectives

NHST's goals are to

1. Reduce hospital readmissions amongst nursing home residents by at least 10% per year.
2. Provide a holistic approach to care enabling nursing home residents to live and "leave well" within the homes.

To achieve this, our programme had to to satisfy three objectives.

OBJECTIVE 1: LONG-TERM EFFECTIVENESS

NHST was designed as a programme that would allow nursing homes and their staff to quickly adapt, apply and transfer relevant knowledge and interventions into the existing care system to enhance care for nursing home residents. This involves equipping the NH staff and supplementing their existing services.

OBJECTIVE 2: SCALABILITY

The NHST programme must be technically and operationally scalable to other nursing homes across Singapore to achieve a positive impact on our healthcare system.

OBJECTIVE 3: FINANCIAL SUSTAINABILITY

In order to create lasting impact at scale, the NHST programme has to be cost-effective and mainstreamed.

Problem Analysis

The NHST team adopted a highly collaborative approach with our NH partners to identify ground-level and systemic issues so as to ensure that solutions were developed based on needs, instead of adopting a "one-size fits all" approach. Network meetings were held regularly with all NH partners to share best practices, to garner interest and to adopt shared approaches with resident care, clinical pathways and practices. This ensured that it was the needs of each individual NH that drove and determined the initiatives (Figure 1).

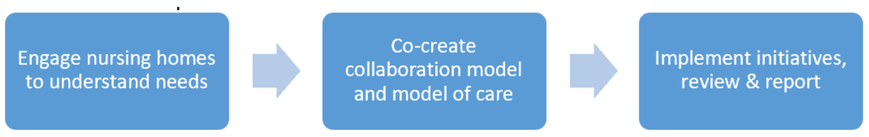


Figure 1: Collaborative approach

Challenges identified within nursing homes (Figure 2)

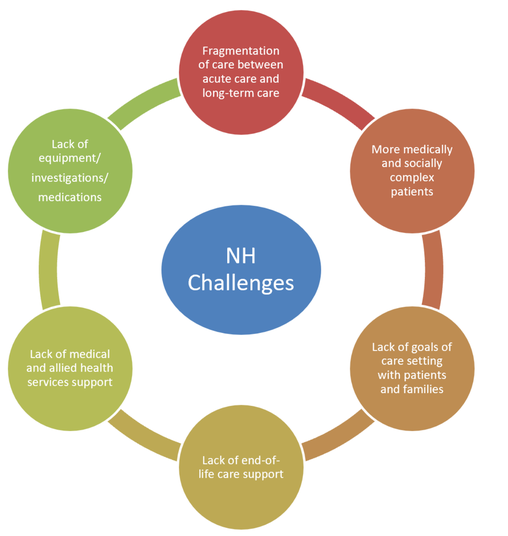


Figure 2: Nursing home challenges

Strategy & Theory of Change

Our 3 Strategic Thrusts are:

1. A holistic intervention programme that is highly responsive and adaptive which can be easily adopted by nursing homes
2. Partnering nursing homes to anchor care within the nursing homes so as to reduce hospital readmissions.
3. Integrate Health & Social care at the care provider level, programme level, and organisational level.

Overcoming Challenges Within Nursing Homes (Figure 3)

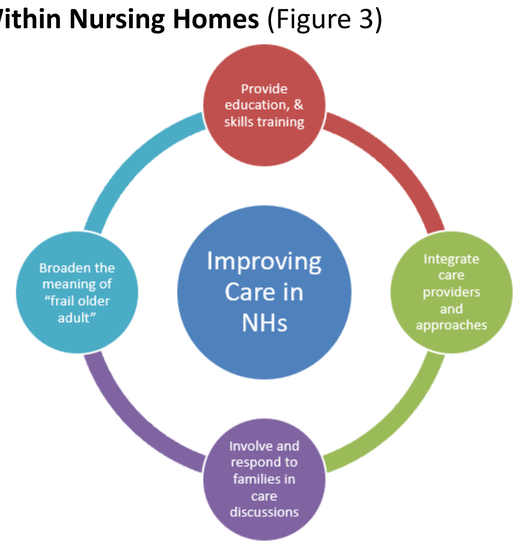
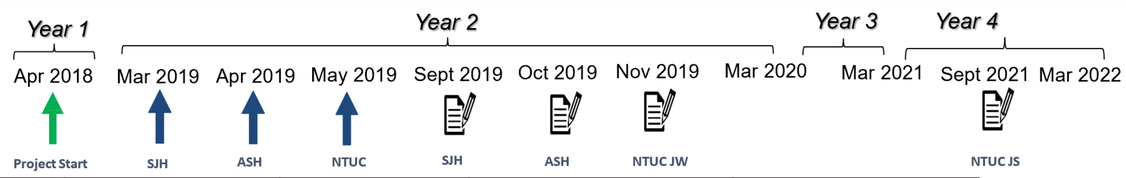


Figure 3: Solutions

Implementation of NHST



S/N	Nursing Home (NH)	Ave. No. of Bed Occupancy	Service	Status
1st NH	St. Joseph's Home (SJH)	201	• Medical Coverage (2x/week) • Tele-Consult till 10pm daily • ST Services (1x/week) • **N2CH (Discontinued)**	• Adopted March 2019
2nd NH	All Saints Home JE (ASH)	184	• Medical Coverage (1x/week) • Tele-Consult till 10pm daily • ST Services (1x/week) • **N2CH (Discontinued)**	• Adopted April 2019
3rd NH	NTUC Health JW (NTUC)	257	• Medical Coverage (2x/week) • Tele-Consult till 10pm daily • ST Services (1x/week) • **N2CH (Discontinued)**	• Adopted May 2019
4th NH	NTUC Health Jurong Springs (NTUC)	243 (*Planned*)	• Medical Coverage (2x/week) • Tele-Consult till 10pm daily • ST Services (1x/week)	• Adopted September 2021

Figure 4. Project Timeline with Major Milestones

Broad Phases

Phase I : Piloting Model of Care, Establishing Partnerships, Securing Funding.
Phase II : Implementation of NHST.
Phase III : Programme Evaluation and Development of Plans for Scaling & Mainstreaming.

Results

We achieved a year-on-year reduction in hospital readmissions. We achieved an average transfer out reduction of 17.5% in the 2nd year (Figure 5).

NH	Ave No. of Bed Occupancy	A. Baseline Transfer Out	B. Target Transfer Out	C. Year 1 Transfer Out	D. Year 2 Transfer Out	E. Year 3 Transfer Out
SJH	201	70	63	71 (+1.4%)	64 (-8.6%)	35
ASH JE	184	222	199	207 (-6.8%)	200 (-9.9%)	151
NTUC JW	257	364	328	282 (-22.5%)	240 (-34.1%)	157
Ave. % change in transfer rate				-9.3%	-17.5%	NA
KPI				-10%		

NH	Ave No. of Bed Occupancy	A. Baseline Transfer Out	B. Target Transfer Out	C. Year 1 Transfer Out
NTUC LS*	69	9	8	39

*Started in Sep 2021; cumulative case volume is lower compared to other NHs

Figure 5: Transfer outs

NHST has value added to our nursing home partners. In a year-end anonymised survey of nursing home staff.

- 85.8% of NH staff felt that NHST had a very strong positive impact on NH care
- 95.7% of NH staff were satisfied + highly satisfied with the NHST's service, level of care, after hours support
- 91.2% of NH staff felt that NHST educational talks were very useful
- 85% of NH staff wanted more talks to be conducted
- The net promotor score for whether NH staff wanted NHST to continue in their NH was 45 (great) (Figure 6) and 38 (great) (Figure 7) for how likely they were to recommend NHST to another NH respectively

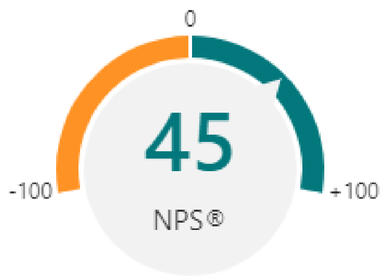


Figure 6: Would you like NHST to continue in your NH?

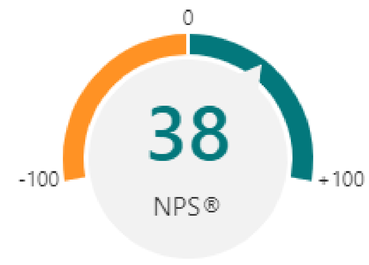


Figure 7: How likely are you to recommend NHST to another NH?

Lessons Learnt

1. The importance of customised delivery of care

- The uniqueness of each NH required that NHST care delivery be tailored to suit specific needs and work cultures. Across the four partners, there were preferential care delivery approaches to the residents. The NHST team implemented their interventions in view of the nursing home's practices and model of care.
- The NHST team appreciated these sorts of challenges, because we proactively engaged the NH partners and took the time to dialogue and solicit feedback on the most appropriate approaches to enhance care delivery.

2. The importance of goals of care discussion (advanced care planning)

- Advanced Care Plan (ACP) and Preferred Plan of Care (PPC) are conversations that featured strongly in many of the nursing home interactions.
- Perspective and understanding of ageing in a long-term care setting within Singapore's healthcare needs to be evolve so as to better support successful ageing in the long-term care setting and promote quality of life for residents towards the end-of-life.

Way Ahead

- The NHST programme has shown that enhancing care delivery at the NH level can effect an impactful change in hospital readmissions and care of nursing home residents.
- This model of care can be adopted by the larger healthcare community to integrate healthcare services at even more fundamental and profound ways within nursing homes to better enable NH residents to live well and "leave well" in the NHs.