

Enhancing care in nursing homes: Qualitative insights from the ENHANCE programme

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Dear Editor,

Empower Nursing Homes And improve staNdards of CarE (ENHANCE) was a pilot programme introduced by Sengkang General Hospital to address the challenges faced by Singapore's ageing population. With nearly 1 in 4 Singaporeans projected to be aged 65 years and above by 2030, the demand for effective long-term care solutions is increasingly urgent.¹ The ageing population is a global phenomenon that results in increased healthcare expenditure.² ENHANCE seeks to improve nursing home care and reduce preventable hospital admissions through collaboration with an acute an hospital.³ The initiative aligns with the World Health Organization's Integrated Care for Older People guidelines, focusing on preventive care and tailored interventions to improve elderly care in community settings.⁴

The ENHANCE programme incorporates several key interventions, including the National Early Warning Signs (NEWS) tool, teleconsultations with hospital physicians and the establishment of clinical care pathways. These components empower nursing home staff to manage residents' acute health issues more effectively, thereby reducing emergency department visits and hospital admissions.

Qualitative in-depth interviews were conducted with 26 staff members from 2 nursing homes in the northeast of Singapore that piloted the ENHANCE programme. Using semi-structured interviews (Supplementary material), we sought to understand the practical implementation, challenges faced and perceived benefits among nursing home staff. Interviews were transcribed and thematically analysed with NVivo 14.0 (Lumivero, CO, US).

The study revealed several important insights into the programme's impact and factors influencing its success. Table 1 summarises the themes and

subthemes which emerged from the study. Nursing staff generally demonstrated a good understanding of the collaboration's purpose and workflow. The ability to consult hospital physicians via teleconsultation provided a valuable support system. This real-time access to expert advice was particularly appreciated, enabling staff to manage complex cases effectively within the nursing home setting. The reassurance and confidence gained from this support empowered staff to make informed decisions, thus allowing them to continue managing patients without the immediate need for hospital transfers. This not only bolstered the competence of the staff but also helped prevent overburdening of the nursing home system by identifying patients who truly required hospital intervention.⁵ Despite this positive feedback, there were varying perceptions about the optimal use of the collaboration. Some staff members expressed uncertainty regarding when and how to fully utilise the available resources. Clearer guidelines and more comprehensive training are needed to ensure that all staff members can confidently leverage the collaboration most effectively.

One of the major strengths of the ENHANCE initiative was its focus on improving staff skills and knowledge. Training sessions provided nursing home staff with practical experience in using the NEWS tool, an established and validated method for assessing patient acuity and guiding escalation of care. This training was complemented by simulated scenarios allowing staff to practice and refine their skills. The user-friendly nature of the interventions, including teleconsultation and the NEWS assessment, was highlighted as a significant advantage. The collaboration also improved efficiency; by streamlining processes and providing direct access to hospital physicians, the programme helped save time and resources,

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Table 1. Themes and subthemes that emerged from the interviews.

Categories	Themes	Selected quotes
Knowledge and understanding of the collaboration	Assurance of availability of help	"The aim is to help the staff on duty to not send out the residents to A&E (Accident & Emergency), we can call the doctors online, audio and video call to help us manage the residents here before sending out." – A9 "Actually, I think the objective of the project is so that we can communicate with the other doctors from SKH and we can follow up with them through video call, no need to bring the patient there if it's not for emergency like that. We can follow up also, through calls." – B12
	Enhanced skills and knowledge	"That's why the NEWS score is useful for new staff so that they can have basis. Especially for new nurses and inexperienced ones since the data is collected quantitatively and can justify that the patient needs immediate care." – B1 "It's important to consult the doctor. We will have more confidence to carry out the intervention. Additionally, we will gain experience to handle similar situations in the future." – A6
Service satisfaction	Applicability to nursing home residents	"The learning (teaching) is quite good as they provided one scenario for us, with a patient having complaints, so we get to do the assessment. Sufficient and informative. Content is very aligned(ed) with the homecare, it's relevant for us." – A1
	User-friendly interventions	"NEWS scoring, it's very easy to fill up, the hospital transfer form, the NEWS scoring is easy to fill up, it's very easy." – A14
	Improved efficiency	"I think the benefits of lesser hospital transfers is that you can save staff from following the patient when going to send the patient to the hospital" – A13
	Lack of resource and workforce	"Because we did the laboratory tests outside, everything is external, we don't have our own pharmacies also, so it's expensive." – B9 "But only one SN (staff nurse) is there, so they will only focus on their routine what, so what the staff do, the staff will call 995 for ambulance. Yeah, but the staffing is the problem, otherwise can. Our staff mostly we never call, because of the lack of staffing, otherwise this will be very useful for the staff." – B4
Challenges in implementation	Nursing staff barriers	"Although we are trained nurses, we still need supervision from the doctor." – B3 "We cannot also put intravenous cannula here, only blood extraction for the lab test and that's all... we cannot give the (cough) syrup without the doctor's order." – B7
	Other limitations	"If they (family) don't want to be sent out, we of course respect them, especially if they are comfort care residents. If they are in comfort care, we don't really send them out, we care for them in the nursing home. If the relatives really insist on sending out, then we will send out the residents." – A14 "Sometimes, no. not really, (NEWS) not accurate. Because we had one patient last time, the vital signs are okay, but the patient is not well, but vital signs are okay. But he looks unwell." – B10
	Internal support	"We have Mr Y, just in case we are confused with the care paths, we can ask him. He will try to explain to us. If he cannot explain as well, he will email Dr J. He's like our leader." – A2
	Nursing staff competencies	"Because we already know the patient, so when we see unusual behaviour from the patient or if the patient looks weak, so that's the time we will use the NEWS scoring on the patient." – B5
Project enablers	Motivation to improve patient care	"I think some conditions can be managed by the staff as well, don't have to send every patient with condition to the hospital." – B2 "If there are situations whereby, we need to refer but most of the times, we will refer to our doctor. Our focus is usually the patient." – B5
	NEWS: National Early Warning Signs; SKH: Sengkang General Hospital	

allowing nursing home staff to manage acute situations more effectively. This efficiency is crucial in a setting where staff often juggle multiple responsibilities and face high workloads.

However, the study identified several challenges impacting the implementation of the ENHANCE initiative. Resource limitations within nursing homes were significant issues, with many facilities facing constraints related to access to diagnostic tools, medications and other essential resources. These limitations hindered the staff's ability to manage residents effectively and contributed to higher rates of hospital transfers.⁶ Additionally, a lack of staff also exacerbated these issues, limiting nursing homes' ability to fully utilise the tools and interventions provided by the programme.

Institutional policies and protocols sometimes restricted staff capabilities, leading to underutilisation of new skills and resources. Decisions regarding transferring residents to hospitals were sometimes influenced by next-of-kin preferences, complicating care pathway implementation and undermining the programme's objectives.⁷ This highlights the importance of clear family involvement protocols and decision-making frameworks that foster trust between families and nursing staff, to facilitate discussions with family members.⁸ This is particularly important in Asia, where family-centred care is emphasised, ensuring that family preferences and values are integrated into the care process.

Concerns were also raised about the ability of the NEWS tool to capture all relevant aspects of a resident's condition. While NEWS is a valuable tool, some staff felt it did not fully address the complexities of managing residents with multiple health issues. The additional paperwork required by the programme also added to the existing workload and could detract from direct patient care.

Despite these challenges, several factors contributed to the success of the ENHANCE initiative. Internal support, including having a designated contact point within the nursing homes, was crucial for overseeing the project and providing necessary assistance. Competent nursing staff, who are familiar with residents' baseline conditions, were better equipped to assess clinical status and decide on appropriate escalation of care. The intrinsic motivation of nursing staff to improve care quality was also a driving factor, aligning with the programme's goals and contributing to its success.⁹

To enhance the effectiveness of the ENHANCE programme, key recommendations include ongoing training and specialised geriatric education for nursing staff to keep them updated on best practices and improve their ability to manage acutely ill residents.^{2,10} Expanding the nursing workforce is also essential to balance workloads and maximise the use of ENHANCE interventions. On a policy level, improving resource allocation for nursing homes, providing government support for telemedicine and integrating geriatric care into community health settings are crucial steps. These measures aim to improve care quality, facilitate access to specialists, reduce preventable hospital transfers and promote ageing in place.

The ENHANCE initiative highlights the benefits of integrating acute care services with nursing home care, offering a model potentially replicable in other regional countries facing rapidly ageing population. Addressing resource limitations and refining workflows are essential for further success. By expanding emergency care beyond traditional hospital settings, ENHANCE aims to improve care delivery as Singapore's elderly population continues to grow.

Supplementary material

Qualitative evaluation of project ENHANCE

Ethics statement

This study was approved by the SingHealth Centralised Institutional Ethics Board (201709-00124).

Declaration

The authors declare no conflict of interest.

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REFERENCES

1. Ministry of Health, Singapore. White Paper on Healthier SG, 2022. <https://go.gov.sg/healthiersg-whitepaper-pdf>. Accessed 2 December 2024.
2. Levy BR, Slade MD, Chang ES, et al. Ageism Amplifies Cost and Prevalence of Health Conditions. *Gerontologist* 2020;60:174-81.
3. Lemoyne SE, Herbots HH, De Blick D, et al. Appropriateness of transferring nursing home residents to emergency departments: a systematic review. *BMC Geriatr* 2019;19:17.
4. World Health Organization. Integrated care for older people (ICOPE) implementation framework: Guidance for systems and services, 2019. <https://iris.who.int/bitstream/handle/10665/325669/9789241515993-eng.pdf?sequence=1>. Accessed 2 December 2024..

5. Udesen SEJ, Nielsen DS, Andersen N, et al. Healthcare professionals' experience with emergency department-based acute care performed within nursing homes. *Age Ageing* 2022;51:afac170.
6. Ouslander JG, Lamb G, Perloe M, et al. Potentially avoidable hospitalizations of nursing home residents: Frequency, causes, and costs. *J Am Geriatr Soc* 2010;58:627-35.
7. Romøren M, Pedersen R, Førde R. How do nursing home doctors involve patients and next of kin in end-of-life decisions? A qualitative study from Norway. *BMC Med Ethics* 2016;17:5.
8. Hovenga N, Landeweert E, Zuidema S, et al. Family involvement in nursing homes: an interpretative synthesis of literature. *Nurs Ethics* 2022;29:1530-44.
9. Silles KT, Vonthein R, Pohontsch NJ, et al. Expanded nursing competencies to improve person-centred care for nursing home residents with complex health needs (Expand-Care): study protocol for an exploratory cluster-randomised trial. *BMJ Open* 2023;13:e072955.
10. Bryant-Lukosius D, DiCenso A. A framework for the introduction and evaluation of advanced practice nursing roles. *J Adv Nurs* 2004;48:530-40.