Academic Medicine Innovation Institute
SingHealth Duke-NUS

SingHealth DukeNUS Academic Medical Centre
Alice Lee Innovation Centre of Excellence

ALICE LEE INNOVATION CENTRE OF EXCELLENCE

Transforming Care, Strengthening Community

MAY 2026 | ISSUE 09



“CARE ISN’T JUST DELIVERED, IT’S ANTICIPATED.”
Dr Hong Wei Wei,

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Dr Hong Wei Wei,
Director,
Office for Service Transformation,
SingHealth

As a public health doctor by training, I have been fortunate to be rotated through many healthcare postings and exposed to services planning at the Ministry as well as at the cluster level.
I currently head the SingHealth Office for Service Transformation (OST), a cluster level unit, that drives strategic service and care transformation initiatives.

I see **OST as a force multipler**, where we partner various institutions and domains at the cluster level to develop and scale new models of care, including telemedicine, hospital-at-home, precision medicine, and value-based care. It is very exciting and rewarding to work with our partners and our patients, all of whom I am very thankful for, to co-create and redesign the future patient journey, for better outcomes and value.

Innovation is propelling care into its next era. —
where care isn't just delivered, it's anticipated.
Digital health ecosystems, intelligent care coordination, and always-connected multidisciplinary teams are moving care beyond buildings into everyday life.

Telehealth, remote monitoring, and shared digital platforms are becoming the invisible infrastructure of care—always on, responsive, and deeply personalized.



" WHEN IT COMES TO TRANSFORMING HEALTHCARE AT SCALE, OST DOESN'T JUST PLAN CHANGE—WE MAKE IT HAPPEN."

Across some of Singapore's most complex healthcare redesign efforts, OST has consistently shown its strength in bringing diverse stakeholders together and delivering solutions that scale beyond hospital walls and into the community and home.

Take initiatives like Acute On Demand Telehealth (AODTH) with SingHealth Polyclinics (SHP), TelePaeds with KKH, and SingHealth @ Home with RHS, CGH, SGH, SKH and KKH. These programmes have helped patients get care faster, reduced unnecessary physical visits and bed utilisation, and made the care experience smoother—by safely shifting the right care to where patients are most comfortable: their homes.

OST's work goes beyond improving day to day service delivery. They are also known for turning bold ideas into national firsts. These include collaborating with partners on projects like AODTH, Telepaeds mentioned above, and also establishing Singapore's first National Genomic Assessment Centre (GAC) for Familial Hypercholesterolaemia with KKH, NHCS and SHP. The GAC built a digital-first care pathway that allows patients to receive virtual genetic counselling, consent digitally and have bloods taken at a nearby polyclinic, without visiting the GAC in person.

At the system level, OST has driven meaningful change through initiatives like Virtual Professional Consultation, strengthening collaboration between primary care and specialists.

By enabling asynchronous consultations, OST helped optimise specialist workload while improving care continuity for patients.

Taken together, these initiatives tell a clear story:

OST SEEKS TO DESIGN AND DELIVER PATIENT-CENTRED, SUSTAINABLE SOLUTIONS THAT DON'T JUST IMPROVE INDIVIDUAL SERVICES, BUT CREATE SYSTEM WIDE IMPACT—TODAY AND FOR THE FUTURE.

Where you see the biggest opportunities for innovation in strengthening community-based care models.

The frontier ahead lies in **predictive, preventive, and person-centred models** where care is seamless and connected. Imagine this scenario:

On a quiet morning, Mrs Tan starts her day as usual—except her care team is already awake. A gentle alert from her wearable has checked in overnight, her virtual nurse pops up on a tablet to ask how she's feeling, and her doctor reviews updates without her leaving home. Behind the scenes, data links everyone together—healthcare, social support, caregivers—moving in sync. Care arrives before problems surface, conversations happen effortlessly and support feels constant but unobtrusive.

For Mrs Tan, **care isn't a service you visit; it's a companion, woven seamlessly into everyday life.**

Dr Hong Wei Wei

FOR MORE INFORMATION, PLEASE CONTACT OST AT OST@SINGHEALTH.COM.SG

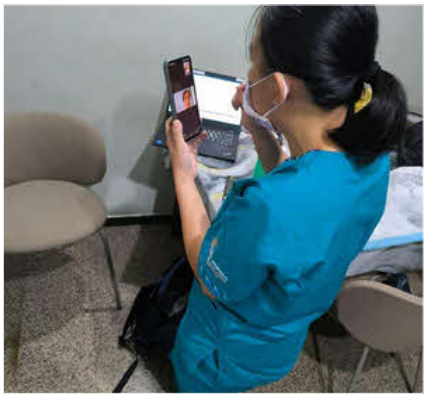
SGH@HOME



Also known as Mobile In-patient Care@Home (MIC@Home), is SGH's home hospitalisation service that brings inpatient-level care directly to patients' homes.

Instead of staying in an acute hospital ward, suitable patients can recover safely and comfortably at home while remaining under close medical supervision.

The SGH@Home care team works closely with SGH's specialist departments and allied health professionals to provide comprehensive care for the patients.



SGH@Home leverages technology such as teleconsultations and remote vital signs monitoring to provide round-the-clock care.

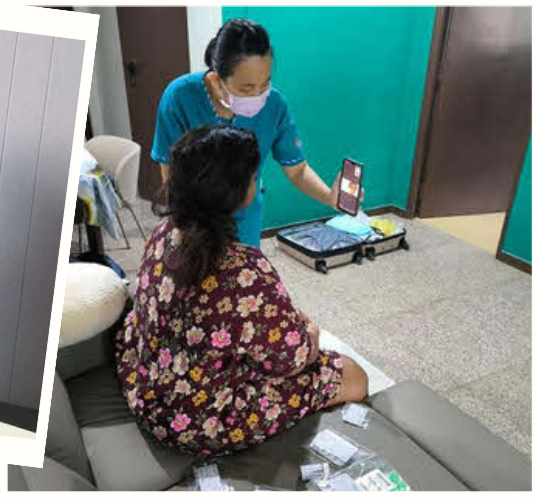
Patients benefit from 24/7 access to their care team, a reduced risk of hospital-acquired infections, and the emotional comfort of being surrounded by loved ones—helping to reduce stress and support recovery.



Beyond individual patients, SGH@Home also strengthens the broader healthcare ecosystem. By caring for suitable patients at home, it helps ease hospital bed pressures and enables healthcare workers to deliver care more efficiently, sustainably and compassionately — transforming how care is delivered, together.

Singapore General Hospital
SingHealth





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A Collaboration Between:

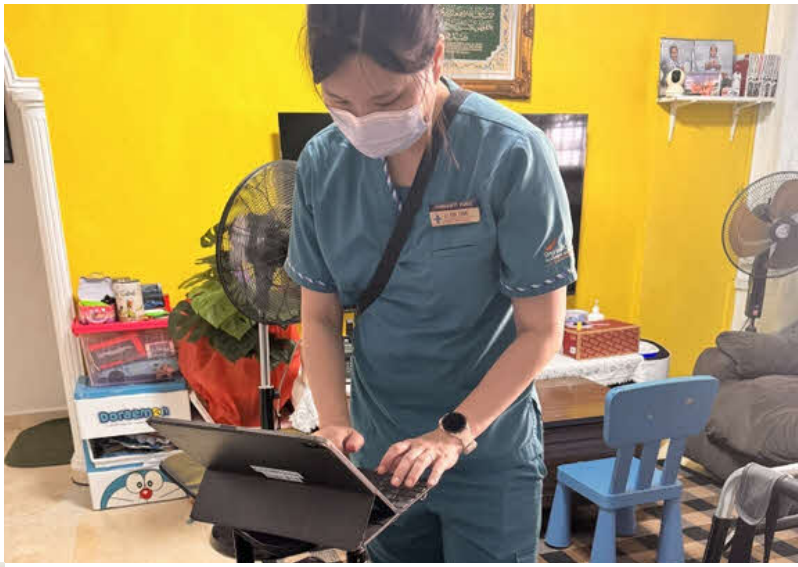
Changi General Hospital SingHealth

SilverRehab

At Changi General Hospital (CGH), community nurses are an integral part of efforts to deliver care and strengthen health beyond the hospital and within the community.

With a vision to enhance the delivery of patient care in the community, a team of community nurses, supported by the Office of Innovation, came together to innovate a mobile workstation with dedicated features that better supports care delivery in home settings.

Developed from commercial cabin luggage bags, the mobile workstation was finetuned through iterations in collaboration with the Office of Innovation and industry partner SilverRehab, resulting in a practical solution that addresses real-world challenges in community care.





The mobile workstation features a dedicated in-built work surface that allows nurses to carry out care procedures safely in the homes. Internal shelving compartments with modular pouches are designed for efficiency in medical storage and retrieval, and inventory flexibility tailored to each care visit respectively.

This supports our nurses in conducting home visits more efficiently, and delivering care with greater ease in the community.

With the latest iteration being rolled out for CGH community nurses to use in the community, CGH hopes that this innovation can eventually be adopted for use across Singapore and internationally.

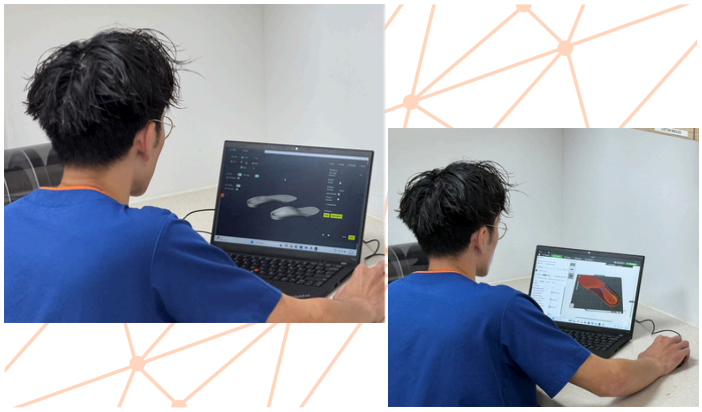


FOR MORE INFORMATION, PLEASE CONTACT CGH OFFICE OF INNOVATION AT INNOVATION@CGH.COM.SG

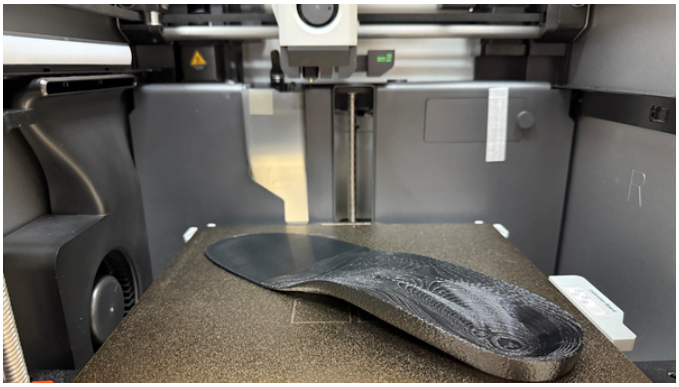
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Imagine Tomorrow's Care SKH CAMPUS

3D-PRINTED CUSTOM INSOLES: ADVANCING DIABETIC FOOT CARE AT SENGKANG GENERAL HOSPITAL

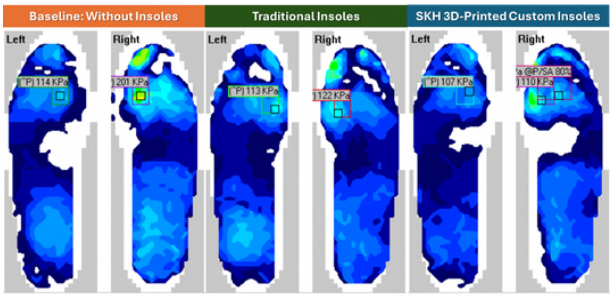
Sengkang General Hospital (SKH) is enhancing community care for patients with diabetes through an innovative in-house 3D-printing initiative that makes customised diabetic foot support more accessible, timely and effective.



Developed in collaboration with Singapore General Hospital's (SGH) 3D Printing Centre, the new process enables SKH to produce personalised pressure-relieving insoles within just one week—a significant improvement from the previous turnaround time of up to two months when insoles were manufactured overseas.



For patients living with diabetes, timely access to proper foot care is essential in preventing complications such as ulcers, infections and potential amputations. By shortening wait times and enabling quicker adjustments when needed, this innovation ensures patients receive the support they need earlier, improving comfort, mobility and overall quality of life.



The in-house process uses digital scanning and specialised software to create highly customised insoles tailored to each patient's foot shape and pressure points. This allows for more precise pressure distribution, better wound healing support, and improved prevention of ulcer formation. The digital workflow also allows clinicians to make quick modifications without delays caused by overseas shipping, helping patients get the right fit sooner.

Led by the SKH Podiatry team in collaboration with the Department of Orthopaedic Surgery, Plastic, Reconstructive & Aesthetic Surgery Services under the SKH Diabetic Limb Salvage (DLS) service, as well as SGH's 3D Printing Centre, the initiative reflects how multidisciplinary and cross-institution collaboration can drive meaningful improvements in patient care.

Initial results show that SKH's custom 3D-printed insoles can reduce peak pressure by up to 28.5% and improve pressure distribution by 52.7%, compared to 23% reduction and 40% improved distribution with traditional insoles.

Beyond improving clinical outcomes, the initiative supports SKH's broader commitment to preventative and sustainable healthcare by making customised care more affordable, efficient and environmentally friendly through optimised local production, supported by a quality management system that ensures standardisation, traceability and continuous quality improvement.

As the SKH podiatry team continues to study and validate the programme's impact, there are plans to expand this innovation beyond diabetic care—bringing the benefits of personalised, technology-enabled treatment to even more patients in the community.

FOR MORE INFORMATION, PLEASE CONTACT SKH INNOVATION OFFICE AT INNOVATION@SKH.COM.SG

At SingHealth, Allied Health Professionals (AHPs) are pioneering innovative approaches that extend care beyond traditional clinical settings and into the heart of our communities. United by a shared vision to enhance population health outcomes and strengthen community wellbeing, AHPs across the cluster are developing groundbreaking solutions that address real-world challenges in preventive care, health promotion, and community engagement.

Allied Health Leading Population Health Innovation



PreSchool Myopia Prevention Campaign Empowers Early Intervention:

The PreSchool Myopia Prevention Campaign (PreSM), developed by SNEC's Optometry Service, addresses the need for early myopia prevention before the school-going years. Through collaboration with preschool educators, the programme delivers age-appropriate, interactive education for preschoolers, complemented by educator training and parent engagement. Iteratively refined in partnership with preschools, PreSM empowers children, educators, and families with practical eye care knowledge applicable across both school and home environments. Since its inception, the programme has expanded from 43 students in 2022 to 1,689 students and 181 educators by March 2026, with parent engagement reaching 117 families. PreSM demonstrates the potential of community-based, early intervention approaches to complement national myopia prevention efforts.

Empowering Independence: A Novel Approach to Falls Prevention Allied Health



The SKH Falls Prevention Programme, implemented under the SHARE initiative, was developed to address the limitations of traditional, lecture-based falls prevention education. Designed by the Allied Health Population Health Sub-Unit at Sengkang General Hospital, the programme adopts a hands-on, multidisciplinary approach involving physiotherapists, occupational therapists, podiatrists, and dietitians working as an integrated team. Participants engage in interactive learning covering home safety, nutrition, footwear, and personalised risk assessment, with an emphasis on practical application. Evaluation of 319 participants across two Active Ageing Centres demonstrated improvements in health literacy and knowledge scores (from 56% to 63%), alongside unanimous positive feedback on usefulness and applicability. This programme highlights the effectiveness of integrated allied health collaboration and offers a scalable model for community-based falls prevention.

Behavioural Transformation Squad for the Elderly (BTS)



SGH's Occupational Therapy Department, in collaboration with Ward 63, implemented a person-centred programme using tailored activity prescriptions to manage behavioural and psychological symptoms of dementia (BPSD). Structured patient profiling and Pool Activity Level assessments guided the development of customised activity plans aligned with patients' interests and abilities. Ward staff were equipped with engagement tools and trained to apply non-pharmacological strategies.

Over two months, the programme generated an additional 14 hours and 28 minutes of constructive engagement. All surveyed nurses reported improved behaviour management, with 45.4% noting reduced time spent managing behavioural issues and an estimated 15–30 minutes of increased daily engagement per patient. The initiative demonstrates strong potential for scaling across wards and institutions.

GRANT SUPPORT

Supporting Innovation at Every Scale: Allied Health and Pharmacy Innovation Challenge (AHIC)

The Allied Health and Pharmacy Innovation Challenge (AHIC) serves as a catalyst for transformative ideas across our Allied Health community. Whether you are developing a small-scale quality improvement initiative or a comprehensive population health intervention, AHIC provides the platform, resources, and support needed to bring your vision to life.
Encouraging all AHPs to consider how their unique insights and experiences can contribute to the collective mission of transforming care and strengthening community health. The AHIC opens for submissions in 3rd quarter of the year, and looking forward to receiving your submissions!

FOR MORE INFORMATION, PLEASE CONTACT GAH AT ALLIEDHEALTHINNOVATE@SINGHEALTH.COM.SG

Singapore General Hospital
SingHealth



Under the leadership of A/Prof Luke Tay, A/Prof Damien Tan and Dr Bernard Ng, Clinical Innovation and Technology Unit (CITU) combines the project team's expertise in clinical care, with biomedical engineering and biodesign methodologies to translate clinical insights into market-ready solutions that address real healthcare challenges.

From left: Ms Lauren Pereira, Ms Ong Hui Shi, A/Prof Luke Tay, Dr Bernard Ng, Mr Matthew Woo & Ms Jaylyn Poh
(Not in picture: A/Prof Damien Tan)

Supporting innovation across multiple clinical departments, CITU drives the early-stage development of medical technologies (MedTech) and devices for transformative healthcare applications. Working closely with healthcare professionals and industry partners, our team of innovation engineers ensures MedTech solutions are safe, effective, and seamlessly integrated with real-world clinical workflows while meeting regulatory standards.

CITU provides comprehensive early-stage innovation support, guiding project teams from initial needs identification and concept development through prototyping and validation phases. Our key focus areas include innovative surgical tools, remote patient monitoring systems, and smart ward technologies that enable timely, data-driven clinical decision-making.



Recent breakthrough projects include VisBuddy, an automated beverage thickening machine for patients with swallowing difficulties; OtoDome, a surgical barrier system that contains droplets and aerosols during high-risk procedures; and SCREENii, which automates gait and grip strength measurements for pre-frailty screening. These solutions enhance patients. These solutions exemplify our commitment to enhancing patient outcomes, improving workplace safety, and reducing clinical workflow burden.

Looking ahead, CITU continues to nurture healthcare innovators from diverse backgrounds and accelerate MedTech development, establishing the foundation for a safer, smarter, and more responsive healthcare environment. From 1 April 2026, CITU is now a part of the newly formed SGH Innovation, Enterprise and Commercialisation Office (IEC) and will work together towards translating ideas to impact.

FOR MORE INFORMATION, PLEASE CONTACT US AT CITU@SGH.COM.SG.

CONNECTING MINDS, ADVANCING CARE

Explore emerging healthcare technologies and collaborative opportunities that are shaping better outcomes for patients and providers alike.

Partners of A.L.I.C.E @ SGH Campus

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