

Simulation-Based Training to Prepare for Screening Seniors in Community Context



Kwong Wai Shiu Hospital

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Introduction/Background

Kwong Wai Shiu Hospital (KWSH) serves as the lead training provider for the nationwide InterRAI training initiative, equipping community care and nursing home staff with the skills to assess seniors' health for early intervention and preventive care. The nationwide InterRAI screening initiative requires community care and nursing home staff to assess seniors' health for early intervention.

However, traditional training methods provided limited practice opportunities, leaving learners lacking confidence during competency assessments. Trainers also faced high workloads, and variations in roleplay scenarios leading to inconsistencies in learning outcomes.

This gap in training affected client care, as underprepared screeners might struggle to accurately assess seniors' health conditions, leading to missed early intervention opportunities.

Goal/Objective

To address the problem, KWSH collaborated with Nudgyt to develop the Al Seniors Training Platform, an Al-driven simulation tool that provides screeners with realistic, interactive practice opportunities via artificial intelligence (AI) beyond traditional roleplay-based training.

The following goals were set for the platform pilot between Oct '24 and Dec '24 (within a project timeline of Jan '24 – Jan '25):

- 93% of learners pass competency assessment
- 5 / 6 Learner Satisfaction rate
- Learners' rating of 4 / 5 for platform's ease of use and usefulness
- 50% of learners continue using the platform outside classroom

Problem Analysis

Focus group discussions with both KWSH in-house trainers and learners were conducted to identify key challenges faced.

Learners reported one practicum session per learner was insufficient to build confidence in conducting the InterRAI assessment with actual seniors, even after passing their competency test.

Conducting further face-to-face practicum sessions is not feasible for KWSH's trainers (nurse / therapy educators), given the estimated population of 4,500 learners to train over the course of 3 years.

Therefore, it was deduced that a digital solution was required to complement the InterRAI course structure with the features of:

- Enabling learners to self-practice outside a classroom setting
- Simulating face-to-face interaction with an actual senior while performing the InterRAI assessment
- Assessing learners' InterRAI competency during self-practice with the assessment rubric built into its system.

Implementation Plan

KWSH collaborated with Nudgyt and applied for the Institute of Adult Learning's (IAL) Innoplus Challenge to develop the Al Seniors Training Platform. The Al Seniors Training Platform, an Al-driven simulation tool that provides screeners with realistic, interactive practice opportunities beyond traditional roleplay-based training.

This Al-driven simulation provides unlimited, realistic practice scenarios with immediate feedback, enabling screeners to refine their skills at their own pace.

Implementation Plan

Implementation Steps 2. Incorporate 1. Develop Al 4. Align training 3. Ensure userspeech scenarios with simulation recognition and friendly, tailored to the competency accessible semantic testing criteria InterRAI platform for understanding for assessment screening for realistic remote practice. process. accuracy. conversations. **Action items** Timeline Jan-Mar 2024 Incorporate training materials and demo assessment recordings into specifications Apr-Sep 2024 Perform user acceptance test (UAT) with 10 KWSH

Pilot platform for 149 learners across 8 course runs. Oct-Dec 2024 Provide platform access for learners' practice outside

staff trained on InterRAI to test user experience.

Optimise platform function through further revisions.

classes. Ongoing Expand InterRAI training with platform to other community care providers, ensuring sustainability

Clients from Active Ageing Centres (AACs) and their caregivers were consulted to provide insights into their experiences during InterRAI screening, sharing common concerns and communication challenges.

This enabled the team to develop realistic Al-based personas for seniors to simulate screening using the platform, and refine their response for natural, respectful, and culturally appropriate interactions.

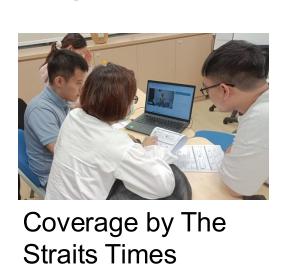
Benefits/Results

The Al Seniors Training Platform has improved InterRAI screener training by enhancing confidence, standardising training, and reducing trainer workload, with pilot results exceeding the objective targets set.

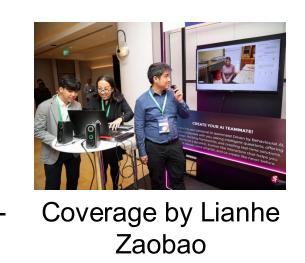
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Sustainability & Reflections

The project team has promoted the Al Seniors Training Platform through numerous channels including SkillsFuture Singapore Learning Circle to encourage sector-wide adoption.











The platform received Trailblazers Transformation Award by Infocomm Media Development Authority, recognising the team's development of a product with considerable impact and value.

Lessons Learnt

Al-driven training can provide scalable, standardised, and effective learning solutions to the healthcare workforce. Enhanced competencies in screening allows seniors to receive timely intervention for improved health outcomes - supporting nationwide preventive care initiatives including HealthierSG and Age Well SG for positive systemic impact.