

Senior Minister of State for Health Koh Poh Koon trying out a game meant to be used in training healthcare professionals, at the launch of the SingHealth Duke-NUS Institute of Medical Simulation i3 Hub yesterday. Watching him were the institute's co-director Fatimah Lateef and Duke-NUS Medical School dean Thomas Coffman.  
ST PHOTO: CHONG JUN LIANG



# New hub to train healthcare staff via use of serious games

Extended-reality tech simulates scenarios for them to hone critical thinking, practical skills

Cheryl Tan

A simulation training facility has been set up by SingHealth and Duke-NUS Medical School to hone and improve the skills of healthcare professionals with the help of serious games.

Known as the SingHealth Duke-NUS Institute of Medical Simulation (Sims) i3 Hub, the facility in Academia in College Road opened yesterday. It houses a wide range of extended-reality solutions – immersive technologies that can merge the physical and virtual worlds – and gaming equipment to facilitate learning.

Professor Chan Choong Meng, group chief education officer of SingHealth, said yesterday: “A key benefit of incorporating serious games in healthcare training is the

ability to simulate challenging scenarios for learners to practise critical thinking, decision-making and hone practical skills in a safe learning environment.”

Senior Minister of State for Health Koh Poh Koon said in his opening remarks at the launch of the hub that the incorporation of serious games in teaching enhances “the breadth of healthcare simulation capabilities”, thereby offering more engaging and interactive learning opportunities that empower healthcare professionals to take increased ownership of their learning.

He noted that the Sims hub has developed 18 serious games that cover a wide variety of skills and knowledge across various healthcare professions.

Professor Fatimah Lateef, co-director of the SingHealth Duke-NUS Institute, said the hub is cur-

rently open to healthcare professionals from KK Women’s and Children’s Hospital, Sengkang General Hospital, Singapore General Hospital and Changi General Hospital, which are all run by SingHealth.

She said the games fulfil unmet training needs among healthcare professionals.

One game, known as the Basic Cardiac Life Support Game, teaches learners to perform cardiopulmonary resuscitation (CPR) and identify people who need it. The game allows healthcare professionals to refresh their CPR knowledge and skills remotely.

Developed by SingHealth Alice Lee Institute of Advanced Nursing, the game will be integrated into SingHealth’s basic cardiac life support certification training this year. Up to 5,000 healthcare professionals are expected to be trained with this game in a year.

With these games, the duration for in-person, hands-on training is projected to be reduced by about 25 per cent, saving manpower and cost.

Another game, developed by Singapore General Hospital’s department of internal medicine, is aimed at training healthcare professionals to manage septic shock.

Septic shock is a life-threatening condition usually caused by bacterial infection and can lead to a patient’s blood pressure dropping to a dangerously low level.

The game recreates such a scenario through virtual reality for doctors to practise critical decision-making without posing a risk to actual patients.

Examples of other games include one that teaches users how to dispense medicine in a pharmacy properly, another on magnetic resonance imaging safety, and one that allows users to play the role of a decontamination team member responding to a disaster.

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