

[Hospital Authority commended for promoting healthcare technology \(with photos\)](#)

The following is issued on behalf of the Hospital Authority:

The Hospital Authority (HA) has been committed to promoting the development of healthcare technology to enhance patient experience and the quality of clinical services through innovative technologies. Recently, the research team at Pamela Youde Nethersole Eastern Hospital (PYNEH), led by medical physicists Dr Carrison Tong and Mr Oliver Chan, was awarded the 2024 Global Innovation and Tech Excellence Award for Innovative E-Health Solutions Award (Public Sector) from the World Innovation, Technology and Services Alliance, often referred to as the "Oscar Award in the Information and Communications Industry", for their efforts in successfully developing a new technology for creating ultrasound-visible anatomical models with tactile reality.

With the maturation of 3D printing technology, the PYNEH team has been striving to develop anatomical models with tactile reality to be used by healthcare professionals during clinical training. Dr Tong said, "The model's surface offers tactile realism. When healthcare staff conduct puncture training with the equipment, the model closely simulates the sensation of human skin, muscles, organs and blood vessels. It is produced using actual Computed Tomography, Magnetic Resonance Imaging and Positron Emission Tomography data, together with AI-aided segmentation and 3D printing technology. Additionally, the model enables healthcare staff to visualise internal structures through ultrasound scanning."

Currently, the PYNEH utilises the models in clinical training across various specialties, including neurosurgery, surgery, medicine, accident and emergency, paediatrics, as well as intensive care unit. The hospital team custom-designed the models to meet the specific needs of healthcare staff, while keeping production costs low. Dr Tong said he believes that this innovative technology will benefit different specialties within the hospital, enhancing simulation training for healthcare professionals and continually improving patient safety.

In addition, the HA was recently awarded the highest maturity level, Stage 7, on the Electronic Medical Record Adoption Model of the Healthcare Information and Management Systems Society. As the first healthcare organisation in Hong Kong to attain this achievement, it not only shows that the HA is internationally recognised in areas such as smart health and healthcare information management but also marks a remarkable milestone in its electronic medical records development.

The Head of Information Technology and Health Informatics of the HA, Dr

Cheung Ngai-tseung, said, "This accomplishment across all 43 public hospitals and institutions of the HA underscores the HA's commitment to integrating advanced electronic medical records and analytics to enhance patient-centric services and operational efficiency."

The HA will continue to enhance digital capabilities through advancements in clinical management systems, smart hospital initiatives, workflow optimisation, and integration of data analytics and interoperability to drive improvements across clinical and operational domains.

