

Alexandra Hospital pioneers Singapore's Integrated General Hospital care model

Singapore, 14 December 2018 – Alexandra Hospital under the National University Health System partners MOH Office for Healthcare Transformation and Queenstown community stakeholders to co-develop a new model of hospital care, with a view to scale successful solutions.

Alexandra Hospital (AH) is the first healthcare institution in Singapore to roll out a new model of care, called the Integrated General Hospital (IGH), where patients are cared for by a single care team with minimal transfers during their inpatient stay, and their post discharge care is well integrated with the community.

AH, under the National University Health System (NUHS), has partnered with MOH Office for Healthcare Transformation (MOHT) and Queenstown community stakeholders since taking over the hospital from 1 June 2018, to co-develop the IGH. This new model seeks to better meet the needs of a growing group of patients, many of whom are elderly and have multiple medical conditions. Efforts are ongoing to improve and validate processes for the IGH, with a view to scale more successful practices. Over time, it is hoped that more patients who require acute hospital care but not complex tertiary specialist treatment, can be managed through the IGH.

The design of the IGH model was guided by insights from the community at Queenstown. For example, the Health Innovation Project by the Department of Communications and New Media at the National University of Singapore (NUS) reached out to more than 700 respondents around Queenstown, and identified issues faced by the community. Subsequently, AH partnered the Chua Thian Poh Community Leadership Centre at NUS to carry out a Receptivity Study of about 170 residents in Queenstown where residents shared their hopes and expectations of AH's care models.

Differentiating Elements of the IGH

The IGH care model integrates acute, sub-acute, rehabilitative, and community care, and is differentiated by the following elements:

a. One Care Team during Inpatient Stay

Holistic and coordinated care delivery is anchored by a lead physician who is supported by a multidisciplinary care team, reinforced through tertiary specialist support and anchored by five key clinical programmes.

Twice a week, a multi-disciplinary team of doctors, nurses, therapists, medical social workers, pharmacists and care managers meet up to look through each patients' case notes and discuss the best consolidated care plan for the patient. In the IGH model, multi-disciplinary team rounds are not always doctor-led, but can be led by other members of the care team, depending on the patient's needs at that point of time.

b. Minimal Transfers during Inpatient Stay

Resources and services provided by the care team are sensitive to the recovery needs of each patient. Acute care and rehabilitative care take place in the same ward, reducing the hassle and risks of handovers between disciplines, teams and institutions. The patient is also not transferred out to a community hospital but will be able to receive similar rehabilitative care at AH until he or she is fit for home.

The patient is cared for by the same care team from admission and treatment, through to rehabilitation and discharge. This provides the opportunity to build trusted relationships between patients, caregivers and the care team.

c. One Principal Doctor at Outpatient Clinic Appointments

There are five key programmes at AH designed to wrap care around the needs of patients. Under these programmes, multiple specialist outpatient clinic sessions are consolidated and helmed by one principal doctor in one appointment, thereby enabling holistic care of multiple chronic conditions, reducing visits and addressing issues like poly-pharmacy.

d. Integration with the Community, Primary Care, and Home

AH works with care teams in primary care and the community to facilitate seamless handovers and shared care. Discharge planning begins soon after a patient is admitted to the inpatient ward.

Close ties are being built and shared care processes worked out between AH and family physicians in the community, including named discharges of patients from AH to primary care, and direct access for patients to AH services through primary care referrals. To this end, CareHub@AH, a service helmed by care managers, expands the hospital's current transitional care programmes.

CareHub@AH helps patients in the community navigate healthcare options, including hospital care and community care, facilitates management of medical and social emergencies, and collaborates with and taps on strong networks of community partners to better match resources to needs. For example, CareHub@AH provides care advice over the phone; efficiently contacts the individual's primary physician; links patients to social support, day care, and home and community services beyond AH; and enables fast-track access to AH services or fast track admission to hospital wards. During each admission, AH patients are introduced to the centralised hotline which is manned by care managers.

e. Zero-based Design

The IGH employs a zero-based design approach, where a clean slate is applied to designing, prototyping and innovating in areas like new care models, technology application and physical space.

Partnering MOHT to Develop and Scale Solutions

MOHT was established in January 2018 by the Ministry of Health to address fundamental and longer-term issues critical for healthcare transformation. AH has been actively collaborating with MOHT, leveraging MOHT's expertise and capabilities to develop agile collaborations that help to address challenges faced by patients and families.

In addition, MOHT is developing enablers to facilitate the replication and scaling of successful solutions. These include developing effective ways for health professionals to partner patients and the community in designing care so that it can be more patient-centric; and optimising the use of IT and technology.

Co-Creating Care with Patients and Families

The IGH model allows AH to partner stakeholders to discover and address important factors that contribute towards improving health outcomes holistically. Explained Professor Tan Chorh Chuan, Executive Director of MOHT: "Taking a whole-of-community approach to designing care models is important because social, behavioural and environmental factors play a big role in the health and well-being of patients. Therefore, healthcare delivery models need to continue to integrate further with community support and resources, so as to enable better outcomes."

To this end, patients and Queenstown residents will play a significant role in co-designing and co-creating care at AH for other patients. AH has established the Alex Advocates, a patient and family engagement and advocacy group. Alex Advocates will be involved in various stages of care design and delivery ranging from enriching discussions that impact practice and policy at hospital management level, to leading improvement initiatives as part of an extended AH resource.

AH and MOHT are rolling out a series of efforts with a larger community of carers and residents around Queenstown, guided by DesignSingapore Council and their networks. These efforts will see patients, caregivers, volunteers, community partners and hospital staff coming together to co-design solutions to common challenges faced by patients in their care journey. For a start, the team is looking critically at improving pathways and resources for patients transitioning from hospital to home.

As part of enabling future capabilities for CareHub@AH, AH and MOHT are working together on Patient Activated Community Transitions (PACT) to review workflows and develop toolkits to help care teams better assess patients for their knowledge, skills and confidence to manage their own health. Interventions are designed for each patient based on his or her activation level, as well as medical, social and functional needs. Care managers will be trained in activation assessment, motivational interviewing, health coaching, resource allocation and community care; and will journey with the patient from the inpatient setting to the community. Patients

will get the opportunity to do care planning, goal setting and shared decision making hand in hand with their care teams.

Enabling Patient Centric Care through Technology

AH and MOHT have also co-designed technology-enabled workflows in the form of a Technology Enabled Nursing Documentation (TEND) application prototype that streamlines, structures and automates nursing documentation at the wards. The team adopted an iterative approach in building the app, which included regular walkabouts, focus group discussions, and surveys. Training collaterals to supplement learning have also been developed. The app, which is being piloted at AH ward(s), shows promise in improving decision support for nurses and enabling nurses to spend more time on direct care with patients. Through the app, ward nurses are also encouraged to ask key care-related questions and consider relevant tasks according to a structured framework that takes in each patient's holistic needs. This empowers each ward nurse to practise at the top of their licence. Over time, nurses can also be upskilled to handle more complex tasks.

Imagining Future Wards of IGH

AH is working with MOHT to redesign two wards, where future-ready ideas for a technology-enhanced healing inpatient environment can be rapidly developed and tested. Design thinking principles will be applied – e.g. modular components and integrated service highways that can allow rapid addition and reconfiguration of mechanical and electrical systems, information technology, robotics and other forms of care innovation. In the longer term, AH seeks to discover successes from its various pilots and deploy these at scale in its future infrastructure, as it develops the campus in phases. AH is evaluating proposals submitted for the design of the future inpatient wards. Patients, caregivers and families, members of the public, as well as community care and social care partners will be invited to share their opinions on co-creating a more holistic care experience at the wards.

Vision for AH's IGH Care Model

Chief Executive of NUHS, Professor John Wong Eu Li said, "The implementation of the IGH model is in line with NUHS' and AH's aim to build a new model of hospital care and develop a health-empowering campus around Queenstown. We are harnessing the strengths and expanded capacity of the whole of NUHS and its partners to transform how illness is prevented and managed holistically both in the hospital and in the community."

Chief Executive Officer of AH, Associate Professor Jason Phua said, "Whatever we do at AH, we must always keep in mind that it is for our patients, their families, and the community – people that we should and will work with to co-design the hospital and campus."