Alexandra Hospital

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BEYOND HOSPITAL WALLS: REIMAGINING CARE DELIVERY THROUGH THE VIRTUAL CARE CENTRE

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Background

Rising healthcare demand, increasing Emergency Department (ED) utilisation and the growing complexity of chronic disease management have highlighted limitations in traditional hospital-centred care and intensified pressure on finite hospital resources. These challenges have driven the need to reimagine acute care delivery beyond conventional hospital settings. Enabled by a collaborative mindset, advances in digital health and growing patient acceptance of telemedicine, the NUHS Virtual Care Centre (VCC) was developed as a cluster-wide orchestrator of virtual care delivery and right siting, bridging hospital and community care, through a centralized, transdisciplinary model.

Objectives

1) Illustrate the VCC approach in redefining care delivery through a transdisciplinary virtual care model, integrating hospital, community and home-based care.

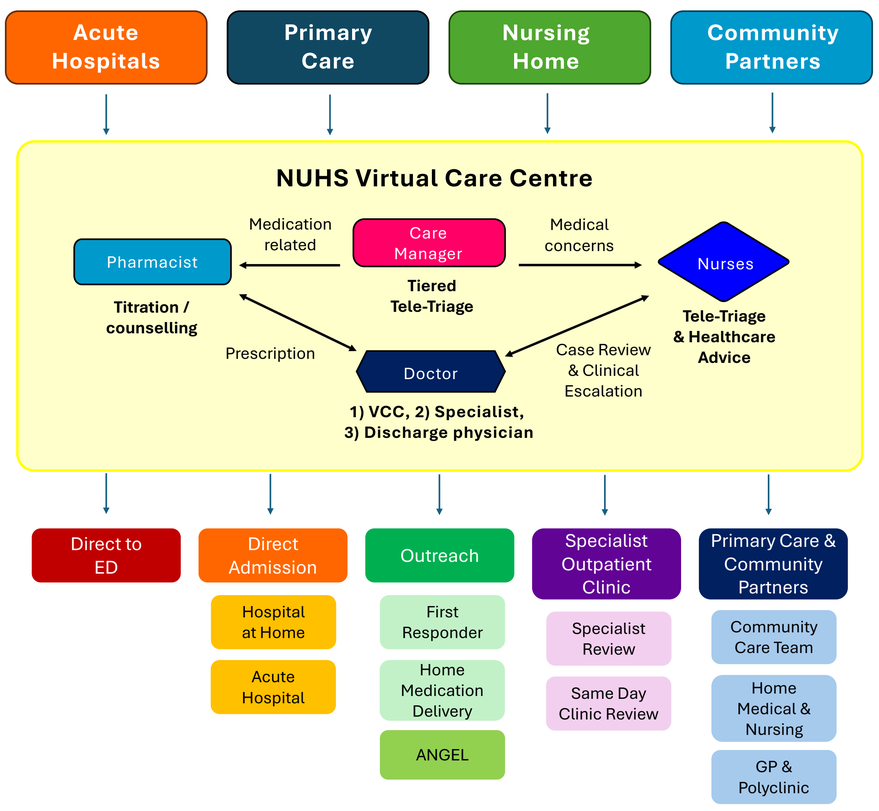
2) Evaluate the VCC operational impact on healthcare resource optimisation, hospital capacity preservation, care coordination efficiency and avoidable ED attendances.

3) Examine the influence of VCC interventions on patient experience and outcomes.

Methods

VCC adopts a transdisciplinary task-sharing and redistribution model, where care managers conduct triage guided by tiered tele-triage protocols and escalation pathways, directing patients to appropriate clinical and non-clinical services based on acuity and care needs.

Patients requiring medical support are managed by nurses who perform tele-triage, provide education, advice, coordinate care and ensure appropriate right-siting, with escalation to physicians when clinically indicated. This model optimises workforce expertise, enabling timely intervention, efficient resource utilisation and safe care delivery.



Discussion

The VCC extends hospital-level care beyond hospital walls by delivering acute care services into patients' homes through a connected, technology-enabled model. By effectively triaging and diverting non-emergency cases to appropriate care pathways, the VCC reduces avoidable ED load and preserves acute hospital capacity for critically ill patients.

The VCC's key strength lies in its ability to bring together virtual care, multidisciplinary collaboration and real-time response to deliver timely interventions and seamless care transitions. Notably, its integrated model enhances coordination across acute, community and social care, improving access, optimising resources and supporting sustainable patient-centred care.

Results

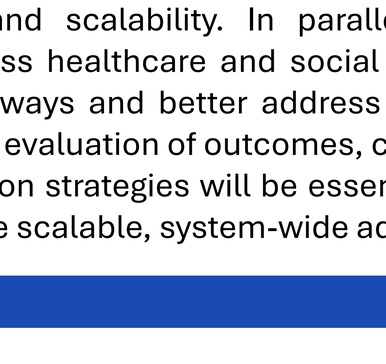
8,234 calls
All answered within 15 sec

Patient Impact

93% Patient Satisfaction

0 Adverse Events

30% Medical Calls



System Impact

1,602 Bed Days Saved

888 Cases of ED Avoidance

From April 2025 to March 2026

Conclusion

The NUHS VCC showcases a scalable and effective model for delivering hospital-level care beyond the brick-and-mortar settings, improving access while preserving acute care capacity. By bringing care closer to home and strengthening system-wide integration, it advances the vision of "a hospital in every home".

Priorities for further development include enhancing digital and clinical decision support to improve precision, responsiveness and scalability. In parallel, strengthening partnerships across healthcare and social care sectors will expand care pathways and better address patients' holistic needs. Continued evaluation of outcomes, cost-effectiveness and implementation strategies will be essential to sustaining impact and enable scalable, system-wide adoption.