COVID-19: LEARNING BRIEF

Title

Harnessing Digital Health Initiatives in the 'Hospital Setting'

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Key Learning Themes

The coronavirus crisis has provided a new context for the use of digital health solutions in the delivery of hospital-based care. Innovative digital health solutions can help mitigate the impact of COVID-19 in critical care settings. As well as being a viable option to provide continuity of care and treatment to patients, telehealth has help in transformation how health systems response to chronic workforce shortages in hospitals. To harness digital health effectively, hospitals need to consider:

- Digital health infrastructure as the key to the successful roll-out of telehealth and telemedicine.
- Staff training programs to ensure clinical standards of care are maintained.
- Support for patients to take-up new digital models of care, particularly vulnerable or elderly groups.

Context

The COVID-19 pandemic has accelerated transformations within healthcare delivery at an unprecedented pace. In many instances, these changes have incorporated a fundamental redesign of service delivery, with profound implications for both staff and patients. The primary catalyst for change has been the urgent need for infection control. It is notable that some transformations have been long-standing priorities for healthcare systems, on which limited progress was made prior to the pandemic.

One of the biggest 'service shifts' in the hospital sector has been **widespread adoption and application of digital technology to provide care –** namely through models of telehealth and telemedicine. Given the high risk of transmission of coronavirus through person-to-person contact, the pandemic has accelerated an unprecedented global expansion in telehealth.

Synchronous telehealth (the use of audio-visual technology to enable clinicians and patients to communicate in real-time) has become a particularly valuable option for **providing continuity in care and treatment** during the COVID-19 pandemic. Telehealth enables clinicians to provide routine consultations via video and monitor clinical signs of certain conditions remotely (i.e. blood pressure). This minimises disruptions to patients' care plans and treatment and reduces the risk of coronavirus contraction by eliminating travel to a clinical setting for care – something particularly beneficial for vulnerable patient groups, such as the elderly or those with co-morbidities.

Photo: Alder Hey staff and patients using the neonatal telehealth equipment

Synchronous telehealth is also **well-positioned to help healthcare systems combat professional staffing shortages.** Globally, the coronavirus pandemic has exacerbated shortfalls in the healthcare workforce – in particular, a lack of specialist staff to manage intensive care units (ICU). Leveraging telehealth technologies enables hospitals to optimise their clinical capacities. In using remote patient monitoring, one specialist can monitor multiple patients at a time, across different sites. Less time is spent moving physically between patients and thus, a clinician can increase the number of people who can be treated. In turn, this can reduce wait times for appointments, and at least partially, offset workforce shortages caused by COVID-19.

Learning Needs

As well as being a viable option to provide continuity of care and treatment to patients, telehealth has helped in transformation how health systems response to chronic workforce shortages.

However, to implement telehealth effectively, hospitals must invest in appropriate technological infrastructure and staff training. The openness of staff to embrace and employ new digital tools is paramount to their successful adoption. Moreover, it is critical that patients are well-supported to obtain and navigate telehealth technologies to ensure their broader uptake and to prevent inequities in care access. With the exception of a physical examination, care quality standards of telehealth and telemedicine should be the same or no lesser than in-person care; the care process must not be compromised in a way which jeopardizes patient safety.

Long-term, the ability to link and integrate telemedicine data with electronic health records for improved clinical decision-making, as well as the ability to provide patients access to their preferred providers, will be important markers of telehealth's success.

Further Reading

International Hospital Federation: 'Building the New Normal' Resources

Drawing directly of the experiences of IHF members and their networks, the International Hospital Federation has published a summary report offering insights into how hospitals can embrace new ways of delivering healthcare, whilst responding to the evolving coronavirus pandemic: **'Building the 'New Normal': Harnessing transformative practices from the COVID-19 pandemic'.** A selection of detailed case studies accompanies this publication, offering further depth to the transformative changes included the report.

Example Strategies

Examples of where telehealth has been employed in response to COVID-19, to transform healthcare delivery:

- **Gillette Children's Specialty Healthcare Centre (United States),** whose Rehabilitation Department adopted a virtual service model to provide continuity of care and treatment for children and young people.
- **Apollo Hospital Group (India),** who leveraged telehealth to scale up its hospitals' capacity to remotely monitor patients in intensive care units.
- **Alder Hey Children's NHS Foundation Trust and Liverpool Women's Hospital (United Kingdom),** who launched a telemedicine service to protect neonates from contracting COVID-19 whilst continuing to care for Patients who required monitoring and/or urgent clinical opinions.