



## Policy Brief | Bridging patient-centred approaches and digital transition in healthcare

### Purpose

This policy brief summarises the learnings from two collaborative research projects between QUT design researchers and Queensland Health clinicians that developed virtual healthcare solutions. During the COVID pandemic, healthcare providers and consumers turned to telehealth and virtual models. The digital transition of healthcare is continuing with ongoing expectations and opportunities for service innovation and patient centred approaches. This brief highlights findings from design-led and collaborative approaches to digital healthcare and the role of localised and responsive innovations in achieving smart and interconnected health services that centre patient care.

### Background

The Healthcare Excellence Accelerator (HEAL) is a collaboration hub formed in 2020 by QUT Design Lab and Queensland Health to embed designers and design researchers into healthcare (QUT Design Lab, 2021). HEAL is one of three Bridge Labs formed by Clinical Excellence Queensland to amplify innovation capability to address healthcare improvement and implementation (Queensland Health, 2021). HEAL collaborated on more than 20 projects across 7 Queensland Hospital and Health Services. The purpose is to tackle persistent evidence-based practice gaps and support innovation and change in health services including virtual service provision. This policy brief presents the findings from two collaborative research projects resulting in virtual health services:

- *Virtual Outpatient Integration for Chronic Disease (VOICeD)* developed a telehealth service for people with diabetes to alleviate access issues experienced by people living in rural and remote areas
- *Virtual integrated care in Central Queensland* responded to the rapid uptake of information and communication technologies by envisioning an innovative model of virtual health care in the region

Both projects acknowledge the importance of reimagining healthcare systems through information and data sharing, clinician collaboration, patient engagement, and improved integration (Toni and Mattia, 2022). As a creative discipline, design excels in ‘non-traditional’ research outputs such as new services and strategies that reflect the knowledge embedded in the healthcare system.

### Case 1: Virtual Outpatient Integration for Chronic Disease (VOICeD)

Australians living in rural, regional and remote communities face challenges in managing chronic illnesses, such as diabetes, and multiple co-morbidities. They often must travel long distances and endure long wait times to consult several clinicians.

Queensland Health’s Dr Gaurav Puri collaborated with QUT Design Lab to develop and test VOICeD as a telehealth service to enable people with chronic disease to consult several clinicians in one online appointment. The service was developed through a participatory design method involving both health consumers and practitioners. The research method was user and future focused with a view to understanding positive patient experience.

The resulting telehealth service was tested with users who responded positively to the service with 100 per cent of users surveyed saying they would recommend the service and 83 per cent describing it as a “very good experience”. The service has also resulted in 350 per cent reduction over 12 months while maintaining patient satisfaction. Significantly, three times fewer routine appointments are needed. Following the initial trial, three new VOICeD services were further trialled.

## **Case 2: Virtual, integrated care in Central Queensland (CQ)**

Since the COVID-19 pandemic, healthcare providers and consumers have sought virtual access to healthcare services. However, for both consumers and clinicians, virtual healthcare delivery is a different model of care that requires significant changes in practice. Virtual healthcare caters to the geographically dispersed settlement pattern in the region through greater connectivity.

In 2022, QUT Design Lab worked with over 50 regional stakeholders, including clinicians, GPs, allied health, Queensland Ambulance Service, consumers and leadership teams, to envision technology-enabled solutions for regional healthcare.

The multi-stakeholder process envisioned the future of healthcare as virtual, connected, collaborative and provided in consumers’ homes. Patients would be active partners in their healthcare and drive health decisions in collaboration with healthcare teams. Specific opportunities included expansion of virtual care such as remote patient monitoring; better connections between GPs and specialists; and reduction of emergency department pressure.

## **Policy Implications**

This research highlights two key findings that strengthen the link between patient-centred approaches and digital transition in healthcare:

- Embedded interdisciplinary research teams, which include designers, patients and clinicians, can initiate and develop innovative and adaptable patient focused solutions. These have significant benefits for patients, clinicians and funders including reduced demand and wastage in healthcare services.
- Appropriately resourced local and/or regional solutions are necessary to address critical access issues, particularly in regional and geographically dispersed areas. This enables a more place-based and connected approach to healthcare service provision.

Digital transition is an opportunity for rethinking healthcare services through design-led approaches for practical and on-the-ground benefits (Queensland Health, 2021). In both the projects presented here, the digital and virtual dimensions of healthcare are levers for improved patient focus and quality of care (Li and Carayon, 2021). This feeds a culture of user-centred innovation and improvement in healthcare services which is a focus of health policy. Programs such as Bridge Labs and HEAL provide vital collaborative spaces for service innovation that is solutions and evidence based.

## **References**

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