

Digitising Youth Health: Co-Designing Creative and Accessible Pathways for Reliable, Peer-Led Health Literacy, Self-Management and Independence

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Background:

Digital transformation is reshaping the landscape of youth health care, driving a paradigm shift towards participatory, accessible, and personalised engagement. Within the Sydney Children's Hospitals Network (SCHN), a suite of digital innovation projects—including *digitized galleries (SMARTIFY)*—*parallelling in-person viewing*, *Chronic Conundrums Podcast*, *digital storytelling activations*, and *interactive e-publications*—has been established to enhance health literacy, self-management, and independence among adolescents and young adults living with chronic illness and/or disability. These initiatives align with the *NSW Health and the Arts Framework (2024–2032)* and the *Future Health for Young People in NSW Strategy (2025–2032)*, situating creativity and co-design as central mechanisms for equitable digital health transformation.

Methods:

Adopting a translational, interdisciplinary methodology, clinicians, young people, and creative practitioners co-designed digital interventions integrating narrative, visual, and interactive media. *SmARTify* connects co-created artworks with evidence-informed health resources via QR-linked digital platforms; *Chronic Conundrums* is a youth-led podcast exploring complex care, identity, and self-advocacy; and *interactive e-publications* amplify youth-authored health narratives for both peers and clinicians. Mixed-methods evaluation captures pre/post shifts in health literacy, self-efficacy, accessibility, and patient experience, supported by participatory feedback and reflective practitioner analysis.

Results:

Preliminary findings show marked improvements in youth understanding of health information, confidence in self-management, and engagement in care planning. Clinicians report greater therapeutic connection and improved capacity to integrate digital and creative tools into routine psychosocial and educational practice. Importantly, these initiatives have expanded accessibility for priority populations—ensuring young people with varied abilities, cultural backgrounds, and digital literacy levels can participate meaningfully in their care.

Conclusion:

Digitisation in youth health represents a human-centred shift in care delivery. By embedding co-designed digital storytelling, creative practice, and accessible technologies, SCHN is advancing a model that strengthens health literacy, fosters self-management and independence, and reimagines equitable engagement for

young people in the digital era. Through these digital platforms, young people are empowered to access reliable, repeatable, and meaningful health information—often communicated by peers and lived-experience storytellers—enhancing trust, relatability, and sustained engagement with care.

Disclosure of Interest Statement:

Sydney Children's Hospitals Network acknowledges the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.