

Connected Health

Technical Working Group (TWG)

Problem Statement and Terms of Reference

(Version: Final Draft – for SAGE approval)

Our Objectives

- Develop a Connected Health 2.0 framework that will support and enable health providers to safely share health information across networks between themselves and to health information consumers.
- Develop a Connected Health 2.0 framework that will allow system developers to take full advantage of what emerging technologies have to offer.
- To augment the existing Connected Health network such that it loses none of its' value or benefit yet so that it also does not eventually become an isolated artefact.

Context (Reference Health Technology Vision in the Digital Health Strategy)

- Digital health is the use of digital technologies and accessible data to improve health outcomes for both health service providers and consumers
 - How will digital services help New Zealanders manage their health and wellbeing and transform the nature of healthcare delivery?
 - What role will connectivity play in the rise of the Internet-of-things, artificial intelligence and mobile technologies that are impacting more and more how health consumers/providers collect and share access to health data.?

Health Technology Vision

The Nine Themes



Problem Statements (referencing Themes in the Health Technology Vision)

- **Life Centered; Collaborative care; Informed choice; Accessible trusted information**
 - The current Connected Health network is in essence a closed, multi-provider wide area network. It does allow for inter provider collaboration with a degree of communication safety due to its private architecture, yet at the same time it stands isolated from consumer access and modern internet based technologies.
- **Responsive, Predictive, personalized; and closer to me care**
 - Secure digital connectivity framework/standards are needed to support emerging models of care, particularly mobile, remote healthcare delivery and self-management – with the rise of Internet-of-things, AI and mobile technologies, connectivity has to go beyond connecting provider systems in a closed network.
 - The Connected Health network in its present form offers a higher degree of reliability, predictability and guaranteed bandwidth than internet connections typically do and these are qualities to be preserved as required within the future framework for Connected Health.
 - The internet is invariably the preferred avenue of consumer based access for health information - therefore the Connected Health network needs to be evolved to incorporate internet connectivity without compromising either provider or consumer confidence in the sharing of health information.
- **Sustain change and Innovation; value for NZ; Actionable Insights**
 - Digital Health services require more than a private network. Innovative services and new technologies tend to be delivered via the internet meaning the internet needs to be integral to how New Zealand connects health in the future.
 - To be able to develop and adopt innovative ideas with confidence, trust, privacy and accountability are key principles to be maintained.

In Scope

- Describe current problems/challenges in Health Sector connectivity with special focus on:
 - enable safe sharing of information
 - having right access to information by consumers and providers when and where needed
 - maintaining trust, privacy and accountability
 - being able to consume and leverage new and innovative internet based technologies
- Explore and describe (with participant scenarios) how Connected Health 2.0 within the context of the NZ Health & Disability Sector would facilitate safe sharing of information so that patients and providers can have access to health information when and where needed.
- Based on the above , define the “future state” Connected Health, its characteristics, and its relationship to our current state Connected Health network.
- Recommended standards to support the proposed “future state” Connected Health, keeping an eye on valuable work already done.
- Explore/analyse options and recommend those best suited to deliver the NZ Health connectivity adoption/transition roadmap; considering work done by and learning from other government agencies as well as solutions available from the market.
- Develop an adoption plan/roadmap for the recommended standards (recognising that an initial phase may be a constrained model vs subsequent phases with regard to accepted security best practices).

Out of Scope

- The Technical Working Group will not work on:
 - Dual factor authentication solution options; or
 - Public Key Infrastructure solution options; or
 - Dual homing current Connected Health based services; or
 - Any specific implementations of solutions that may arise as a recommended roadmap milestones for this phase of the review.

While technologies such as PKI and dual factor infrastructures may be identified as necessary components of the desired future state Connected Health, the selection, design and implementation of these constitute projects in their own right.

What would success look like for the TWG

- An agreed health connectivity framework signed off by SAGE
- A set of participant scenario models underpinning and describing the agreed health connectivity framework signed off by HISO with a proposed adoption/transition plan/roadmap
- A set of standards and policies describing how connectivity can be achieved for the NZ Health & Disability Sector to facilitate the safe sharing of information over both the existing Connected Health network and the internet (including how and when the two might intersect).

Deliverables

1. Terms of Reference of the Technical Working Group; Scope; and Problem statements
2. Definition of Connected Health 2.0 and supporting standards for health information connectivity
 - A set of participant scenarios describing how health connectivity for the NZ Health Sector would facilitate safe sharing of information so that patients and providers can have access to the required health information when and where needed
 - A definition of the “future state” Connected Health, its characteristics, how it enables consumer access inclusion and the ability to adopt and leverage new technologies
 - Recommended standards and associated guidelines to support the proposed “future state” health connectivity
 - Ensure alignment with wider HISO and wider Government standards
3. Recommended transition paths with guidelines towards encompassing new connectivity options;
4. Develop an adoption plan/roadmap for the recommended standards (recognizing that an initial phase may be a constrained model vs subsequent phases with regard to accepted security best practices).

Indicative Timeline

- Preliminary future state view of Connected Health v2.0 - June 2018
- Proposed standards needed by Connected Health v2.0 - July 2018
- Draft roadmap/adoption plan – August 2018
- Draft guidelines and transition pathways – September 2018
- Draft standards and roadmap released – November 2018
- Published standards and roadmap – March 2019