



Australian Government

Australian Digital Health Agency






ADHA Trial of Consultative Process to Recommend Appropriate Technical Standards for Telehealth Consultations

Technical Standards to Categories Mapping for Consideration and Feedback

February 2021

Foundation Categories

Please consider the relevance of each mapped standard to the corresponding categories. Standards selected from this consultation will be considered in building the foundational set of standards for Telehealth.

| | | |
|--|--|---|
|  <p>Security</p> | <p>Security includes considerations such as secure messaging, cybersecurity, security of booking system and connection technology and non compliant software. A portion of standards selected within the Security category must also address metadata and security management.</p> | <p>IEC/DIS 81001-5-1 (to watch not yet adopt) ISO 27001 IEC/TR 80001-2-8:2016 HL7 Version 2.x Audit ISO 22340</p> <p>IEC 82304-1:2016 ISO/IEC 27002 IEC 80001-1:2010 - (DRAFT) EN, NIST SOC2</p> |
|  <p>Privacy Compliance</p> | <p>Privacy standards chosen should specify that all technology involved must be compliant with the Australian Privacy Principles. This stipulation is relevant for all standard categories.</p> | <p>Australian Privacy Principles (APPs)</p> |
|  <p>Interoperability</p> | <p>Interoperability standards remain underdeveloped but necessary with industry agreement. Outcome-based standards are preferred with flexibility due to the fast paced nature of software development.</p> | <p>ISO/IEEE 11073-20701:2020 ISO/IEEE 11073-20702:2018 ISO/IEEE 11073-30200:2004 FHIR® R4 (HL7 Fast Healthcare) ISO 11073-90101:2008 ISO/HL7 27931:2009</p> <p>HL7 Clinical Document Architecture ISO/IEEE 11073-10207:2019 ISO/IEEE 11073-00103:2015 ISO/IEEE 11073-10201:2020 ISO/IEEE 11073-10101:2020 HISO 10029:2015</p> |
|  <p>Integration</p> | <p>Standards recommended include data handling and management, as well as the transfer between systems of different purpose e.g. electronic referrals and telehealth system providers.</p> | <p>ISO 11240:2012 Unique Device Identification ISO/PRF 18530</p> <p>FHIR® R4 (HL7 Fast Healthcare) HL7 Clinical Document Architecture ISO/HL7 27931:2009</p> |
|  <p>Audit Trail</p> | <p>Standards selected include evidence of consultation and participants, and the date/time log of consultation.</p> | <p>ISO 27789 ISO/IEEE 11073-10101:2020 ISO 11239:2012</p> |



Proposed Future Standardisation (1 of 2)

As telehealth standards for the foundation categories are developed and adopted, IT standards in the following categories will need to be considered to support and align with clinical standards, policies and guidelines. The IT standards will need to support consumer and provider needs as the use of telehealth matures.



Video Quality

Standards selected should form the necessary baseline, which industry will build on and improve as the telehealth industry develops and consumers' needs are refined. Care needs to be taken to avoid telehealth being inaccessible to certain demographics.



Consumer Experience

Standards selected should form the necessary baseline which industry will build on and improve as the telehealth industry develops and consumers' needs are refined. Standards should support a person centred approach. Features and capabilities should enable broader interactions, sharing of information and greater health literacy.



Audio Quality

Standards selected should only form required practical standards which improve consumer and provider experience. Care should be taken to avoid telehealth being inaccessible to certain demographics.



Technical Infrastructure

Standards should support the greater adoption of telehealth adoption across Australia. As Australia's technical infrastructure varies greatly across remote, rural and also some metropolitan areas, proposed standards around technical infrastructure must not widen any digital gaps or make telehealth inaccessible to certain demographics.



Emergency

Emergency-related standards include standardising the procedure and guidelines for emergency escalation from telehealth consultations. This category must be first examined from a clinical perspective to determine purpose and effectiveness before standards are proposed.



Documentation Of Consultation And Outcomes

As telehealth products and systems become more widespread, IT standards may need amending or development to align and support clinical standards, policies and guidelines. Standards for interoperability, integration and security must also support clinical documentation.



Proposed Future Standardisation (2 of 2)



Multi-party Consultation

IT standards may need to be developed and/or amended to support multi-party consultations as the telehealth industry develops and needs are refined. As the Telehealth market develops and more products, services and processes utilise multi-party consultation, standards will need to support and maintain security and privacy.



Communication Tools During Consultation

As telehealth usage grows, consideration will need to be given to IT standards to support and improve quality, clinical outcomes and consumer and provider experience.



Use Of Other Devices And Tools

As telehealth becomes more widespread and the growth in at-home devices, digital diagnostic tools and apps, IT standards will need amending or development to support the use of these devices and tools.



Training And Support

As Telehealth products and systems become more sophisticated, some IT standards may need amending or development to support participants and then align with clinical standards, policies and guidelines.



Review And Quality Improvement

As telehealth products and systems become more widespread, some IT standards may need amending or development to align and support clinical standards, policies and guidelines.



Future Focus - Desirable Capabilities and Features

It is important to maintain a focus on the desirable “future state”, encouraging the development of enhanced features and capabilities, adopted and adapted over time as appropriate to the needs and sophistication of the participants (both providers and consumers), the clinical situation and the evidence on outcomes, quality, cost effectiveness and participant satisfaction. The following is an initial draft working list.

- online bookings for telehealth consultations
- secure consultation invitations and links and ability to import scheduled event into calendar systems
- access management, participant identity verification and consent
- virtual waiting rooms and management
- multiparty and multipoint consultation (both providers and consumers)
- case conferencing and group video therapy
- ability to launch a telehealth consultation without scheduled event
- ability to undertake video consultations across a variety of settings and locations (including consumer access across devices and portals)
- electronic messaging, sharing screens and files and bi-directional communication tools during telehealth consultation
- interoperability with codec-based videoconferencing systems and peripheral devices
- video quality with audio default options
- access for consumers with special needs
- access to technical support during telehealth consultation
- use of different audio and video sources during consultation
- use of other digital diagnostic devices and tools
- associated “e services” (eg prescribing, referrals, clinician to clinician consults)
- system, equipment and connectivity testing
- development of connectivity with other digital systems and devices through APIs
- data exchange, data content and terminology standards
- recording, back up, recovery and storage management
- reporting on telehealth consultation outcomes and user satisfaction

