



Australian Government

Australian Digital Health Agency

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Background

The *Connecting Australian Healthcare – National Healthcare Interoperability Plan 2023-2028* ([Interoperability Plan](#)) is Australia's first national plan to deliver a connected healthcare system for more personalised holistic care and better health and wellbeing outcomes for all Australians.

The Interoperability Plan sets out a national vision to share consumer health information in a safe, secure and seamless manner and identifies 44 actions across five priority areas – identity, standards, information sharing (sending, receiving and finding the right information), innovation (initiatives that drive interoperability) and measuring benefits – and policy tools to support interoperability.

The Australian Digital Health Agency (the Agency) has established the [Council for Connected Care](#) (the Council) as the key governance body to provide strategic advice, oversee implementation of the Interoperability Plan, and report on progress.

The Interoperability Plan was published on the Agency's website on 11 July 2023. This is the first quarterly progress report against the 44 actions in the Interoperability Plan. The timeframes to initiate the 44 actions are categorised as:

- Immediate – within one year (2023-24)
- Ongoing – currently underway (2023-24 to 2027-28)
- Short term – one to three years (2024-25 to 2026-27)
- Medium term – three to five years (2025-26 to 2027-28).



Summary of progress

With the publication of the Interoperability Plan in July 2023, the Agency and its partners have moved quickly into the delivery phase. Of the 27 immediate or ongoing actions that are to be initiated in the 2023-24 financial year, two have been completed (Action 2.7 Digital health standards guiding principles and Action 6.1 Review policy tools) and the remaining 25 have commenced and are on track. Several short and medium actions have also commenced earlier than scheduled due to the Australian Government decision to progressively transition to a 'Share by Default' setting accelerating work under the identity, standards and information sharing priority areas.

Everyone can benefit from a connected healthcare system, and everyone has a role to play from consumers to healthcare providers, government, technology sector and researchers. The willingness of and enthusiasm among these stakeholders to achieve interoperability is evidenced by the progress in this report.

Key progress towards a better-connected healthcare system for all Australians includes:

- Establishing strong governance – the Council for Connected Care and the Australian Digital Health Standards Advisory Group – and developing a communication and engagement plan for collaboration and transparency.
 - Sharing resources in central locations – the Agency's Online Interoperability Toolkit and Digital Health Developer Portal – for collaboration and to build the knowledge base.
 - Developing roadmaps for healthcare identifiers and the Fast Health Interoperability Resources (FHIR) Accelerator program and commencing consultations with jurisdictions on the National Health Information Exchange Architecture and Roadmap.
 - Developing guidelines for ICT procurement and a framework for conformance.
 - Publishing guiding principles for digital health standards, developing a standards gap analysis tool and designing a community platform for a standards catalogue that will bring resources together in one place.
 - Building the digital health capability of the workforce through assessment tools and training on FHIR and healthcare identifiers.
 - Measuring maturity through the 2022 Interoperability Benchmark Survey, identifying appropriate maturity models and monitoring progress against the actions in the Interoperability Plan.
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Identity



Identity

Healthcare identifiers support information sharing by accurately identifying individuals, healthcare providers and healthcare provider organisations. This ensures information shared is for the right individual and improves the safety of care provided. It also gives individuals greater control over the level of access they provide to healthcare providers.

This priority area includes 10 actions to leverage the national Healthcare Identifiers Service and the National Health Services Directory:

- 2 actions are immediate (2023-24)
- 4 actions are ongoing (2023-24 to 2027-28)
- 4 actions are short (2024-2025 to 2026-27).

Progress highlights

A roadmap to increase the adoption and use of healthcare identifiers has been drafted and stakeholders are being consulted to identify key areas for legislative reform to strengthen and expand the use of the Healthcare Identifiers Service. Engagement with jurisdictions has also commenced to identify and overcome barriers to using healthcare identifiers to support a wider program of health information exchange and conformance.

Stage 2 of the national rollout of Provider Connect Australia (PCA) commenced in July 2023. Almost 2,000 healthcare organisations have registered for PCA, along with over 30 of their business partners. Implementation of the 2019 National Health Services Directory (NHSD) review recommendations to position the NHSD as core national infrastructure is nearing completion and data quality improvement activities continue that assist with data sharing and PCA adoption.



Identity progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
1.1 Using healthcare identifiers Jurisdiction health departments, the Agency and Services Australia will adopt and use national healthcare identifiers in future digital health initiatives involving health information sharing.	The Agency Services Australia All Health Departments	Ongoing	On track	The Department of Health and Aged Care is engaging with jurisdictions through the Digital Health Oversight Committee to consider the current use of healthcare identifiers and ways to overcome any barriers, to support a wider program of health information exchange. The Agency is also working with jurisdictions to increase the adoption and use of healthcare provider identifiers to connect to the My Health Record and implement electronic prescribing.
1.2 Promoting healthcare identifiers Promote the use of individual healthcare identifiers (IHIs), including creating IHIs for newborns as soon as possible after birth.	The Agency Services Australia	Ongoing	On track	<p>The Agency, in consultation with the Department of Health and Aged Care and Services Australia, is developing a communication and engagement plan to transform the perception of the Healthcare Identifiers Service and highlight its role at the centre of a digitally enabled health system.</p> <p>As part of the implementation of the Birth of a Child initiative, Services Australia is considering options to promote the use of IHIs for newborns as close to birth as possible.</p>
1.3 Healthcare Identifiers Roadmap Develop a Healthcare Identifiers Roadmap that includes: <ul style="list-style-type: none">• coordinating the response to recommendations from the 2018 Healthcare Identifiers Act and Service Review and the 2020 review of the My Health Records Act that relate to or affect healthcare identifiers• Reviewing legislative impediments to the wider uptake of healthcare identifiers in the Healthcare Identifiers Act 2010• Reporting on healthcare identifier adoption.	The Agency Department of Health and Aged Care	Immediate	On track	<p>In 2022 the Agency undertook a national consultation on the projects needed to strengthen and expand the use of the Healthcare Identifiers Service. A draft Healthcare Identifiers Roadmap is currently being updated to include recent decisions of government and advancements in digital systems.</p> <p>The Department of Health and Aged Care has commenced the Healthcare Identifiers Framework Project to reform the <i>Healthcare Identifiers Act 2010</i>. Consultation with key stakeholders is taking place to inform and refine the proposed reforms, which will be taken to the Australian Parliament in 2024. A report on the public consultation outcomes has been published.</p>

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Identity progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
1.4 Healthcare identifier matching Develop and implement a program of improvements in healthcare identifier matching (especially IHIs), focusing on data quality, user interfaces, service improvements, enhancements and proactive efforts on IHI retrieval.	The Agency Services Australia	Short	On track	Services Australia has commenced the Healthcare Identifiers Data and Service Enhancements Project under the Health Delivery Modernisation program to improve data quality and match rates for IHIs that will inform this action. The Agency has also commenced analysis work to develop a program of improvements.
1.5 Review Healthcare Provider Identifier – Individual (HPI-I) conformance Review conformance requirements for using HPI-Is when uploading documents to the My Health Record system, recognising that providers are at different stages of use of HPI-Is.	The Agency	Short	On track	The Agency has commenced a review of healthcare organisations' implementation of HPI-Is.
1.6 Develop deeper network structures Develop deeper Healthcare Provider Identifier – Organisation (HPI-O) network structures, including revising published guidance, to support enhancing online HPI-O network registration, and work with vendors to address software limitations.	The Agency Services Australia	Short	Not started	This short-term action will be progressed under the Healthcare Identifiers Roadmap.
1.7 Using the National Health Services Directory (NHSD) Use the NHSD as the service directory for digital health programs. Where this is not possible (such as for a specialised directory), jurisdictions will work with Healthdirect Australia and the Agency to support the required flow of information.	All Health Departments	Ongoing	On track	<p>Through the Healthcare Identifiers Framework Project, the Department of Health and Aged Care is considering what legislative reform is required to support the NHSD to use healthcare identifiers. Health departments are also working with the Agency and Healthdirect to ensure the NHSD supports the flow of information for a national health information exchange.</p> <p>NSW Health has developed the NSW Health Providers Directory for managing services' details and identifiers that synchs data with the NHSD. Planning work is underway to transition from SA Health's existing health service directory to the NHSD. ACT Health is working to further develop widgets and the use of NHSD is increasing through Health Map.</p>

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Identity progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
1.7 Using the National Health Services Directory (NHSD) (continued)	All Health Departments	Ongoing	On track	The Tasmanian Digital Health Interoperability Project, that aims to deliver a state-wide health information exchange, is in its planning phase and is now reviewing how project timelines will align to the NHSD. NT Health has integrated the NHSD with its Primary Care Information Systems (PCIS) and Communicare and will integrate it into health information exchange framework architecture and new EMR (Acacia).
1.8 Implementing the 2019 National Health Services Directory (NHSD) review Healthdirect, in partnership with the Australian Government Department of Health and Aged Care and state and territory health departments, will implement the work packages developed in response to the 2019 AHMAC NHSD review, which include positioning the NHSD as core national infrastructure.	Healthdirect	Ongoing	On track	The workplan cascading from the 2019 AHMAC Review is mostly completed with remaining items on track for completion by June 2024. Continuous quality improvement of directory data is an ongoing activity, linked to the Provider Connect Australia (PCA) adoption program as well as the establishment of FHIR APIs with data sharing partners.
1.9 Provider Connect Australia Roll out and support the implementation of Provider Connect Australia.	The Agency	Immediate	On track	The Agency undertook a nationwide pilot of PCA from November 2022 until February 2023. The first stage of the national rollout (March to June 2023) focussed on supporting COVID Vaccine providers to transition from a temporary platform to PCA. From July 2023, PCA is undertaking stage 2 of its national rollout open to all healthcare providers and their business partners. As of September 2023, 1,841 healthcare organisations have registered for PCA, along with 34 of their business partners.
1.10 Integrating the NHSD and the Health Provider Directory (HPD) Assess the feasibility of integrating the NHSD and the HPD to reduce duplication and rationalise the national directory infrastructure.	Services Australia	Short	On track	Services Australia has held initial discussions with Healthdirect. The next stage will include the creation of a business case, which will include the assessment of feasibility impacts and identifying any legislative dependencies.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Standards



Standards

To seamlessly exchange or access health information and ensure consistent understanding, it is essential to have agreed digital health standards, specifications and terminology.

This priority area includes 14 actions to drive effective leadership and a sustainable approach to standards governance:

- 5 actions are immediate (2023-24)
- 4 actions are ongoing (2023-24 to 2027-28)
- 5 actions are short (2024-2025 to 2026-27).

Progress highlights

The governance of interoperability standards is becoming more coordinated and collaborative with the Agency establishing the Australian Digital Health Standards Advisory Group in September 2023. Guiding principles for digital health standards have been agreed and published, a gap analysis tool and conformance framework developed, and a national standards catalogue is currently under development.

A two-year roadmap to develop and implement national core health information sharing standards is a huge step forward for Australia. The FHIR Accelerator program was launched in August 2023 and is being led by a cooperative between the Agency, CSIRO, HL7 Australia and the Department of Health and Aged Care.



Standards progress update

Action	Lead	Timeframe*	Status	Update Q1 23/24
2.1 Terminology in digital health systems Engage with the health technology sector and health departments to enhance digital health systems to integrate national terminologies and classifications natively.	The Agency	Ongoing	On track	The Agency in collaboration with CSIRO held a National Clinical Terminology Service workshop with jurisdictions and vendors from across the country on 29-30 June 2023. A Teams channel to distribute information with stakeholders and a calendar of webinars for further engagement are being established.
2.2 Develop specifications and standards Engage with the health sector on the development, selection, use and maintenance of specifications and standards that support the Agency's approved priorities. When required, Agency-developed specifications will be progressed to become standards through the appropriate standards development organisation and their balloting/development processes.	The Agency	Ongoing	On track	The Agency has commenced work to update the existing HL7 Australia Provider Directory FHIR implementation guide to utilise the best-practice HL7 template-based publishing method. This is preparation work that will be leveraged for National Secure Messaging Network and Provider Connect Australia.
2.3 HL7 FHIR® AU usage Develop and expand on HL7 FHIR® AU Base 2 for all Agency and Healthdirect digital health systems and services, including modifications and new systems.	The Agency Healthdirect	Ongoing	On track	<p>The Agency is updating its FHIR implementation guide to change its dependency from the HL7 AU Base FHIR implementation guide to the HL7 AU Core FHIR implementation guide. This work is aimed at ensuring the Agency adopts AU Core as much as possible for our implementation guides, reducing effort associated with localisation while, at the same time, ensuring the Agency is contributing content to the core standard. The Agency implementation guides are publicly available on the Internet.</p> <p>Adoption of HL7 standards across Healthdirect's platform services is ongoing and include enhancements to information exchange infrastructure including Healthdirect's interoperable Secure Messaging Platform (HL7v2) enabling inbound and outbound referrals, and FHIR APIs with PCA and other source systems publishing to the NHSD.</p>

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Standards progress update

Action	Lead	Timeframe*	Status	Update Q1 23/24
2.3 HL7 FHIR® AU usage (continued)	The Agency Healthdirect	Ongoing	On track	Search APIs used to interactively query the NHSD now also leverage FHIR, which is how the Healthdirect Service Finder and third-party consumer and provider applications interact with the directory. FHIR integrations with data sharing partners including booking and secure messaging vendors are underway and will be progressively onboarded between November 2023 and December 2024.
2.4 International standards participation Support Australian participation in international standards development.	The Agency AIHW	Ongoing	On track	The Agency continues to be actively involved with international standards development organisations (such as GS1, HL7, SNOMED-CT and Standards Australia/ISO) through their local affiliates. Agency staff are directly engaging with GS1, HL7 and SNOMED-CT internationally.
2.5 Standards catalogue Develop and implement a national digital health standards catalogue as a user-friendly access point for digital health standards.	The Agency	Immediate	On track	The Agency is developing the Digital Health Standards Catalogue that will contain a library of published standards and specifications accessible via a single front-door on the Digital Health Developer Portal. Work is underway to procure standards for the catalogue.
2.6 National Digital Health Standards Program (NDHSP) Implement the NDHSP to develop a dynamic, comprehensive and collaborative digital health standards environment. This program will inform the need for and scope of national governance arrangements for standards.	The Agency	Immediate	On track	The Agency has established the Australian Digital Health Standards Advisory Group under the National Digital Health Standards Program to provide strategic advice on matters including the prioritisation of effort in relation to standards, the development of a roadmap for standards use, development and implementation and the content in the Digital Health Standards Catalogue. The Standards Advisory Group met for the first time on 20 September 2023. Membership, terms of reference and meeting communiqués are published on the Agency's website .

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Standards progress update

Action	Lead	Timeframe*	Status	Update Q1 23/24
2.7 Digital health standards guiding principles Develop and publish a set of national guiding principles for those developing or implementing digital health standards in Australia, in partnership with standards development organisations and the health technology sector.	The Agency	Immediate	Complete	The Agency published national digital health standards guiding principles on its Digital Health Developer Portal in June 2023. The seven principles were developed in consultation with our partners in standards and interoperability.
2.8 Standards gap analysis Complete a gap analysis to prioritise the digital health standards that are required most urgently to accelerate the interoperability agenda.	The Agency	Immediate	On track	The Agency has developed a standards gap analysis tool that will be considered by the newly established Australian Digital Health Standards Advisory Group.
2.9 Engage standards stakeholders Develop and maintain strong partnership ties with the health technology sector, standards development organisations and other key standards bodies.	The Agency	Immediate	On track	The Agency has engaged with and encouraged collaboration among standards stakeholders through the establishment of the Australian Digital Health Standards Advisory Group in September 2023, and the Council for Connected Care who undertook a deep dive on standards at their 11 October 2023 meeting.
2.10 Including terminology in datasets Coordinate discussions on expanding minimum datasets to incorporate the use of SNOMED CT-AU, AMT and LOINC for data not currently collected in areas such as medications, adverse reactions, pathology and radiology.	The Agency	Short	Not commenced	This short-term action will be progressed in the 2024-25 financial year.
2.11 National library of terminology mapping Develop a national “library” of resources that provide translation mapping from national terminologies to other popular terminologies.	The Agency	Short	Not commenced	This short-term action will be progressed in the 2024-25 financial year.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Standards progress update

Action	Lead	Timeframe*	Status	Update Q1 23/24
2.12 API information exchange Engage with the health technology sector to enhance digital health systems to use HL7 FHIR®, OAuth and OpenID Connect for API information exchanges.	The Agency	Short	On track	A cross-government team has been established between the Agency, Department of Health and Aged Care, Department of Finance and Services Australia to develop a draft authentication blueprint for health information exchange and FHIR Repository projects in preparation for engagement with the technology sector.
2.13 Develop a conformance framework Engage with stakeholders to develop a conformance framework and associated conformance rules for national digital health systems and services.	The Agency	Short	On track	The Agency has completed targeted consultations with government organisations on a draft conformance framework. The next phase of consultation is with peak bodies including the Medical Software Industry, Australasian Institute of Digital Health, Medical Technology Association of Australia and Australian Information Industry Association.
2.14 Standards development cooperative Establish a cooperative of developers working to expedite the development of new digital health standards, with a suitable operating model.	The Agency	Short	On track	<p>The Sparked FHIR Accelerator program was launched in August 2023, establishing a cooperative between the Agency, CSIRO, HL7 Australia and the Department of Health and Aged Care. The collaborative works with the software developer community to develop localised FHIR implementation guides suitable for the Australian healthcare context.</p> <p>The Sparked Delivery Roadmap outlines the two-year program of work that will develop:</p> <ul style="list-style-type: none">• Australian Core Data Set for Interoperability• HL7 AU eRequesting Data Set for Interoperability• HL7 AU Core FHIR Implementation Guide• HL7 AU eRequesting FHIR Implementation Guide• Pathology and Radiology Referral Set.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Information sharing



Information sharing

The sharing of information between healthcare providers and consumers requires information to be discoverable and accessible within a framework of trust, safety, consent, privacy and data quality.

This priority area includes 12 actions to increase the safe, secure and seamless sharing of information with the right people at the right time:

- 3 actions are immediate (2023-24)
- 2 actions are ongoing (2023-24 to 2027-28)
- 4 actions are short (2024-2025 to 2026-27)
- 3 actions are medium (2025-26 to 2027-28).

Progress highlights

Key foundational pieces for the short and medium actions have been fast tracked with the recent funding announcements to establish a health information exchange architecture and roadmap and review legislative and policy options to support information sharing.

Procurement guidance for healthcare providers to procure interoperable solutions has been drafted and will be considered by the newly established Australian Digital Health Standards Advisory Group. The current interoperability between GP and residential aged care facility systems has been analysed and will be used to identify potential solutions.



Information sharing progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
3.1 Interoperability in procurement The Agency, health departments and Services Australia will specify interoperability requirements in procurement requests where they meet business objectives. This will leverage existing national infrastructure, terminology and standards.	The Agency All Health Departments Services Australia	Ongoing	On track	NSW Health procurement processes incorporate integration and interoperability requirements where appropriate. WA Health also includes available interoperability standards in all procurements where appropriate. Victoria Health is reviewing the government procurement tender process to ensure inclusion of national infrastructure, terminology, and standards. All digital health procurement requires vendors to comply with digital health standards on the Victorian Department of Health website. Queensland Health has incorporated interoperability standards and requirements in procurement policies, such as the ICT procurement Queensland Health digital standard. Queensland Health will work with relevant procurement teams to ensure that any new standards, such as those which are developed as part of the 'Sparked' (AU FHIR Accelerator) program of work are consistently incorporated into future procurement documentation. SA Health is developing an interoperability plan that will outline its approach to interoperability in procurement. Tasmania Health has incorporated and specified interoperability standards and requirements in its Request for Proposal, leading to interoperability in procurement for an Electronic Medical Record. Following the implementation of the EPIC Digital Health Record System across the ACT public health system, ACT Health has capabilities to accelerate the adoption in health system procurements. NT Health has embarked on a journey to implement a robust process for managing the lifecycle of digital and non-digital initiatives, including processes for addressing interoperability requirements in procurement.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Information sharing progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
3.2 API Gateway information exchange Promote the use of the API Gateway to support interoperable information exchange, including development of a service catalogue.	The Agency	Ongoing	On track	The Agency is currently scoping potential consumers and expansion opportunities for the HL7 FHIR®-based API Gateway that provides a single point of access to the My Health Record system and other national infrastructure.
3.3 Procurement guidance Establish an intergovernmental working group to harmonise procurement and use of standards, based on best-practice approaches to interoperability requirements for information and communications technology system procurement.	The Agency	Immediate	On track	The Agency, in consultation with health departments, the Australian Commission on Safety and Quality in Health Care and technology providers, has drafted guidelines for procuring digital health services and products. These guidelines will be considered by the newly established Australian Digital Health Standards Advisory Group.
3.4 Online interoperability toolkit Develop and maintain an online interoperability toolkit that provides practical guidance, lessons learned, case studies, data dictionaries, terminologies, common specifications, frameworks, and a library of exemplars and reusable components, including implementation guides.	The Agency	Immediate	On track	<p>The Agency has updated its Interoperability and Digital Health Standards webpage to include the first iteration of the interoperability toolkit that includes links to:</p> <ul style="list-style-type: none">• Governance bodies (Council for Connected Care and Australian Digital Health Standards Working Group) including terms of reference, meeting calendars, and communiqués• Interoperability Plan, Supplement and Plan on a Page• Resources including the 2022 Interoperability Survey, digital health standards developer portal site, and education materials. <p>The toolkit will be developed over time as new resources become available.</p>
3.5 GP and aged care facility interoperability Assess the current interoperability between GP and residential aged care facility systems, identifying issues, requirements and potential solutions to resolve issues.	The Agency	Immediate	On track	The Agency has examined the current level of interoperability between general practice and residential aged care facility clinical information systems. The findings from this analysis will be used to identify potential solutions to improve interoperability between GP and residential aged care facilities.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Information sharing progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
3.6 Consent Management Engage with consumers to investigate options for enabling individuals to grant consent to access all their health information, including in My Health Record. Options will include making it easier to choose which healthcare providers are authorised, and the types of information they can access.	The Agency	Short	Not commenced	This short-term action will be progressed in the 2024-25 financial year. The Department of Health and Aged care is leading work to develop options for a health information exchange legislative framework to allow consumers to have more control over their health information and how it is used and shared that will inform this action.
3.7 Research international practice Assess the UK national minimum standards for digital health technologies and similar international policies to inform consultation on Australian approaches.	The Agency	Short	Not commenced	This short-term action will be progressed in the 2024-25 financial year.
3.8 Care management network Investigate opportunities to build capability to identify and manage individuals within a consumer's formal and informal care management network.	The Agency	Short	Not commenced	This short-term action will be progressed in the 2024-25 financial year.
3.9 Information-sharing model agreement Collaborate with stakeholders on the development of a model agreement to be used by organisations holding personal health information. This will specify the terms and conditions for sharing, discovering and acquiring information from other organisations. It will cover privacy, security, access controls, patient data rights, technical specifications and intellectual property rights.	The Agency	Short	On track	The Agency is engaging with jurisdictions on the National Health Information Exchange Architecture and Roadmap. The Department of Health and Aged Care is also undertaking a legislative and policy review to support health information exchange that will inform this action.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Information sharing progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
3.10 Publish–subscribe service Develop a business case for a national publish–subscribe service to support actions such as alerts, changes to an individual’s health information and notifications of acute episodes. This would be available to individuals, healthcare providers and healthcare provider organisations.	The Agency	Medium	Not commenced	This medium-term action will be progressed in the 2025-26 financial year.
3.11 Consistent legislative health definitions Collaborate with jurisdictions and key stakeholders to develop consistent definitions to support health information sharing.	The Agency	Medium	Not commenced	This medium-term action will be progressed in the 2025-26 financial year.
3.12 Harmonising legislation Undertake collaborative intergovernmental work on harmonising relevant jurisdiction legislation, drawing on outcomes from Action 3.11.	All Health Departments	Medium	Not commenced	This medium-term action will be progressed in the 2025-26 financial year.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Innovation



Innovation

Developing innovative digital products and services and building a workforce that can confidently use digital technologies will encourage and make it easier to connect to and derive value from new digitally enabled models of care that place individuals at the centre of their healthcare experience.

This priority area includes 3 actions to drive innovation and digital health capability:

- 1 action is immediate (2023-24)
- 2 actions are ongoing (2023-24 to 2027-28).

Progress highlights

The National Digital Health Capability Action Plan 2021 outlines priority actions to effectively build digital health capability across the health workforce. Foundational elements such as the Australian Digital Health Capability Framework, digital health capability framework, Digital Health care Career Pathways Model, Quality in Data and its importance in Connecting Care Guideline and Organisation Readiness Tool will be published soon on a new digital health hub hosted by the Australasian Institute of Digital Health.

Building capability in FHIR is critical to facilitating interoperability. Approximately 400 people have completed Agency-funded FHIR training courses as of October 2023 and there have been almost 2,000 expressions of interest to enrol in the training courses. The HL7 AU FHIR Connectathon held on 23-24 August 2023 was a sellout success and had to be made open to virtual attendance due to the popular demand. The interest among stakeholders signals a very promising future for interoperability.

Healthcare identifiers are also critical to facilitating interoperability and an area where work is in train to build capability among the health workforce to encourage adoption and use.



Innovation progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
4.1 Interoperability innovation challenges Run interoperability innovation challenges and “connectathons” to encourage interoperability.	The Agency	Ongoing	On track	The HL7 AU FHIR Connectathon was a two-day in-person event held in Brisbane on 23-24 August 2023 to help advance the implementation of FHIR in Australia and facilitate open interoperability. The event featured the launch of the Sparked FHIR Accelerator Program. The next HL7 AU FHIR Connectathon is scheduled for 20-21 November 2023 in Melbourne.
4.2 Interoperability workforce Implement the National Digital Health Workforce and Education Roadmap to support the workforce required to progress interoperability.	The Agency Australasian Institute of Digital Health	Ongoing	On track	The Agency has engaged the Australasian Institute of Digital Health (AIDH) to deliver the workforce and education program priorities in the National Digital Health Capability Action Plan 2021 . This includes creating and validating frameworks and assessment tools, designing and developing a digital health hub and mapping career pathways. These outputs are in the final stages of development.
4.3 Develop education content Develop education content in partnership with users to increase awareness of interoperability.	The Agency	Immediate	On track	The Agency has engaged HL7 Australia to develop a series of training courses in the FHIR standard to suit the Australian context. The training is delivered in collaboration with CSIRO and the Centre for Digital Transformation of Health. Five fundamental courses are running throughout the year and by the end of October 2023 at least 400 participants will have received training. The Agency has also recorded an on-demand webinar on healthcare identifiers.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Benefits



Benefits

Measuring digital health maturity – including the interoperability of the healthcare system – will help identify areas for investment and track progress for continuous improvement.

This priority area includes 3 actions to continuously measure digital health maturity:

- 1 action is immediate (2023-24)
- 2 actions are ongoing (2023-24 to 2027-28)
- 1 action is short (2024-2025 to 2026-27).

Progress highlights

Australia's first national interoperability survey was conducted in 2022 with a total of 2,989 health care providers responding to questions on interoperability needs and experiences. The survey will be repeated periodically to measure changes in maturity and monitor progress.

The national interoperability survey is one approach to measure digital health maturity in Australia. The Agency is also reviewing digital maturity assessment frameworks to identify issues, strengths and weaknesses that will form guidance on which frameworks best apply across different care settings. This assessment will inform Australia's contributions to international maturity models.



Benefits progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
5.1 Administer interoperability survey Undertake an interoperability survey of hospital, pharmacy, GP, allied health, specialist and aged care organisations periodically to measure overall progress on interoperability, starting with a baseline survey in 2022.	The Agency	Ongoing	On track	In 2022 the Agency undertook a baseline interoperability survey. It is the first national interoperability survey with a total of 2,989 responses from health care providers working in public and private hospitals, community pharmacy, general practice, allied health, specialist and aged care organisations. The survey results can be found on the Agency's website .
5.2 Publish annual report Publish an annual report on progress of the National Healthcare Interoperability Plan.	The Agency	Ongoing	On track	The Agency has established the Council for Connected Care as the key governance body to provide strategic advice, oversee implementation of the Interoperability Plan and report on progress. This is the first quarterly report on progress against the 44 actions in the Interoperability Plan and will feed into the first annual report that will be published in July 2024 covering progress over the 2023-24 financial year.
5.3 Assess digital health maturity models Collaborate with jurisdictions to assess digital health maturity models.	The Agency	Immediate	On track	The Agency is reviewing digital maturity assessment frameworks to identify issues, strengths and weaknesses of these frameworks. This will provide guidance on which frameworks best apply across primary and acute care services, private healthcare service providers including diagnostic, and residential and aged care.
5.4 GDHP interoperability maturity model Work with the Global Digital Health Partnership to develop and apply the Global Interoperability Maturity Model.	The Agency	Short	Not commenced	This short-term action will be progressed in the 2024-25 financial year.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Policy tools



Policy Tools

Governments have many policy tools that could be used to support and accelerate interoperable solutions and standards. This priority area includes 1 immediate (2023-24) action to review policy tools.

Progress highlights

Stakeholder consultations and a desktop review of literature has been undertaken to identify policy tools that could be applied to promote the adoption of interoperability in Australia. The findings were shared with the Australian Government who committed to explore options to legislate information sharing in the 2023-24 Budget, which brings this action to its completion.



Policy tools progress update

Action	Lead(s)	Timeframe*	Status	Update Q1 23/24
6.1 Review policy tools Engage collaboratively with health departments and key stakeholders to review the effectiveness of current policy tools and assess the additional mechanisms required to support and accelerate interoperability.	The Agency	Immediate	Completed	In 2022 the Agency undertook an evidence review of policy tools to promote digital health system interoperability. The findings were shared with the Australian Government who committed to explore options to legislate information sharing in the 2023-24 Budget.

* Actions are categorised as Immediate (2023-24); Ongoing (2023-24 to 2027-28); Short (2024-25 to 2026-27); or Medium (2025-26 to 2027-28).



Australian Government

Australian Digital Health Agency

Thank you to the Council for Connected Care and to all governments and organisations who provided input to this report.
