



Australian Government

Australian Digital Health Agency

Connecting Australian Healthcare

National Healthcare Interoperability Plan 2023-2028

Quarterly Progress Report
(July 2024 to September 2024)

Issued 31 October 2024





Publication date: 31 October 2024

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Acknowledgements

The Australian Digital Health Agency is jointly funded by the Australian Government and all state and territory governments.

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Introduction

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) 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 fifth 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).



Status of actions – quarterly progress report (July – September 2024)

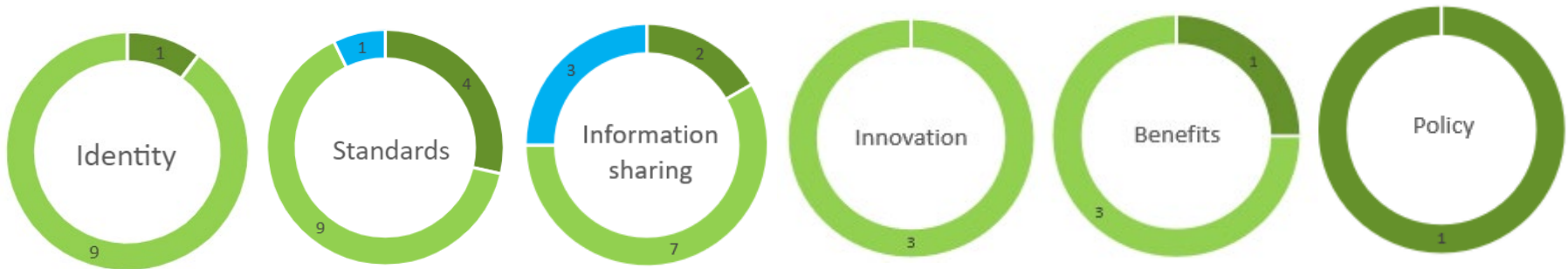
9 actions completed

- ✓ Actions 1.3, 2.5, 2.7, 2.9, 2.13, 3.3, 3.5, 5.3, 6.1*

31 actions on track

- ✓ 19 immediate/ ongoing actions
- ✓ 12 short/ medium-term actions

4 short or medium-term actions will commence later in 2024-25 or 2025-26 as per schedule



■ Completed ■ On track ■ Not commenced (future work) ■ Behind schedule

* Completed actions: Action 1.3 Healthcare Identifiers Roadmap; Action 2.5 Standards catalogue; Action 2.7 Standards guiding principles; Action 2.9 Engage standards stakeholders; Action 2.13 Develop a conformance framework; Action 3.3 Procurement guidance; Action 3.5 GP and aged care facility interoperability; Action 5.3 Assess digital health maturity models; Action 6.1 Policy review



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 (2024-25 to 2026-27).

Progress highlights

With the publication of the [National Healthcare Identifiers Roadmap 2023-2028](#) in June 2024, the Agency, Department of Health and Aged Care and Services Australia have moved quickly to implementing the 12 activities that are to commence by 2024-25. More detail on these activities can be found in the Roadmap's first quarterly progress report at the end of this report.

Over 5,000 healthcare services have now registered with Provider Connect Australia™ (PCA™) and the service has recently been upgraded to allow clinical and practice management software system to connect to the service through a SMART on FHIR interface.

The Agency commenced the Directory project on 1 July 2024. The existing Health Provider Directory will be enhanced and integrated with the National Health Services Directory and other core health directories to create a single access point for health and service information within the proposed national Health Information Exchange.



Identity progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|---|---|------------|----------|--|
| 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 | <p>The Department of Health and Aged Care (the Department) continues to work with stakeholders to raise the importance of healthcare identifiers in underpinning connected care. Consultation has also included consideration of the settings needed for use of healthcare identifiers across the broader care economy, including in aged and disability care, to support better transitions of care.</p> <p>Services Australia has commenced three new projects that support the adoption and use of healthcare identifiers in existing and future digital health initiatives, funded under the Strengthening Medicare Budget measure:</p> <ul style="list-style-type: none">• HI Service New Entity Types• HI Service Allied Health HPI-I Registration Improvements• HI Service: Legislation Readiness. <p>Services Australia is also ready to support the uploading of care and support plans to the My Health Record as part of the My Aged Care – My Health Record Integration Project.</p> |
| 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>Services Australia continues to work with the Birth of a Child Program on opportunities to include the IHI as part of the service, including assessing existing webservices for suitability in assigning IHIs to newborns as close as possible after birth.</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 2024-25 |
|--|--|------------|----------|--|
| 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 | Complete | The Agency in collaboration with the Department of Health and Aged Care and Services Australia, published the National Healthcare Identifiers Roadmap 2023-2028 in June 2024. The first quarterly progress report against the 20 activities in the Healthcare Identifiers Roadmap can be found at the end of this report. |
| 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 conducted internal analysis to provide a quantitative and qualitative review of Individual Healthcare Identifier (IHI) match rates, drivers of non-match rates and current pain points. This analysis has been used to develop a HI Data Matching Insights and Recommendations Report to provide an up-to-date view of IHI match rates, inform future stakeholder engagement and opportunities for improvement. |
| 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 continues to work closely with states, territories and private health organisations to progress their transition timeline plans and support the implementation of HPI-Is in clinical document uploads to the My Health Record (MHR). WA Health and St John of God no longer require an exemption for uploading HPI-Is to the MHR. |

* 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 2024-25 |
|---|-------------------------------|------------|----------|--|
| 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 | On track | As part of the 2024-25 Strengthening Medicare Budget measure, Services Australia has commenced a discovery project into the consistent classification of consumers, healthcare professionals and healthcare organisations. This will complement work the Agency is undertaking on the guidance of organisation structures and inform the registration and set up of healthcare organisations to support both digital health and health administration use cases. |
| 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 | The Department is working with stakeholders to identify the legislative settings for directory services, including the NHSD, to support digital health programs and secure and seamless information flows. |
| 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 | Healthdirect continues to support state and territory initiatives and has progressed the following activities in the first quarter of 2024-25: <ul style="list-style-type: none">The Department of Health Victoria deployed into production their integration to the NHSD FHIR (bulk) API, which will support electronic discharge summary workflow for the Victorian Hospital and Health Services.Support for NSW Health’s rollout of their Engage Outpatient project across the state, which enables electronic referrals from GPs into NSW Health outpatient clinics. This solution utilises the NHSD FHIR API to enable GPs to search and address these electronic referrals. |

* 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 2024-25 |
|---|--------------------|------------|----------|--|
| 1.8 Implementing the 2019 National Health Services Directory (NHSD) review (continued) | Healthdirect | Ongoing | On track | <ul style="list-style-type: none">Support for state and territory trials of enhanced scope of practice in community pharmacies by supporting additional granular pharmacy service characteristics (offerings) to enable consumers to find services relevant to their specific needs (such as treatment of UTI, oral contraceptive pill refill, etc.). <p>Continuous quality improvement of directory data is an ongoing activity, linked to the Provider Connect Australia adoption program and through data sharing partnerships. Healthdirect has also developed a Data Sourcing Strategy outlining the priority areas and approach to further the coverage and quality of data in the directory, as well as a three-year product roadmap.</p> |
| 1.9 Provider Connect Australia™ Roll out and support the implementation of Provider Connect Australia™. | The Agency | Immediate | On track | <p>As of 26 September 2024, 2,631 healthcare clinics comprising of 5,485 healthcare services have registered to Provider Connect Australia™ (PCA™) and 37 business partners have been onboarded. The project is continuing to engage with Allied Health peak bodies, private health insurers and healthcare providing organisations to connect to PCA™.</p> <p>The PCA™ service has also been upgraded to allow clinical and practice management software system to connect to the service through a SMART on FHIR interface.</p> |
| 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 | <p>The Agency commenced the Directory project on 1 July 2024. The project has engaged with Services Australia to transition the existing HI Service - HPD to the Agency. HPD will be enhanced and integrated with the NHSD and other core health directories to create a single access point for health and service information within the proposed national Health Information Exchange.</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



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 (2024-25 to 2026-27).

Progress highlights

The Sparked FHIR Accelerator program, a cooperative between the Agency, CSIRO, HL7 Australia and the Department of Health and Aged Care, has continued work to develop release 2 of the Australian Core Data for Interoperability and progress other work streams including eRequesting. Planning and initial workshops have been undertaken to support the development of an Australian version of the International Patient Summary.

In September 2024, the Agency issued a request for tender to build the internal technical platform capabilities and infrastructure integrations to enable FHIR interoperability capability for the My Health Record.

Following the publication of the initial version of the [Digital Health Standards Catalogue](#) in June 2024 further content has been added to enhance its functionality.



Standards progress update

| Action | Lead | Timeframe* | Status | Update Q1 2024-25 |
|---|------------|------------|----------|--|
| 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 production release of AMTv4 (Australian Medicines Terminology) was delivered on 26 September 2024. The CSIRO project team provided full technical support to implementers ahead of the go live date and will continue to provide support through to post go live. The updated Medicine Authoring Tool is now in production, with Australia being onboarded with SNOMED International's Managed Service in May 2024. Engagement across the sector with aged care organisations, diagnostic industry, Clinical Information System vendors, clinical colleges and healthcare organisations around the adoption of the NCTS, Ontoserver and SNOMED CT remains ongoing as part of the adoption program. |
| 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 | <p>The Agency has published its Clinical Digital Architecture (CDA) schema as FHIR logical models Implementation Guide (IG) in the Developer Portal, where it can be accessed by the implementer's community. This IG will play a central role in FHIR-facade type use cases for the modernised My Health Record.</p> <p>As one of the organisations supporting the 'Sparked' FHIR Accelerator program, the Agency has recently participated in the ballots of the HL7 AU Core, HL7 AU Base and HL7 AU eRequesting FHIR IGs. In addition to the ballots, the Agency continues its participation in the Clinical and Technical Design Groups.</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 2024-25 | |
|--------|--|----------------------------|---------|-------------------|--|
| 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 has continued to update its existing FHIR IGs to change their dependency from the HL7 AU Base FHIR IG to the HL7 AU Core FHIR IG, where viable, as part of monthly improvement sprints of work. Publication of the updated FHIR IGs in the Developer Portal is currently underway. The Agency has also continued to develop new FHIR IGs with content derived from HL7 AU Core and HL7 AU Base.</p> <p>Healthdirect has made further progress to implement and align to the FHIR standard as follows:</p> <ul style="list-style-type: none">• Decommissioned the NHSD FHIR v3 API on successful transition of all users to the FHIR R4 API.• Completed FHIR alignment work to support Endpoint resource as an independent entity for storing Secure Messaging Delivery (SMD) endpoint details for both Healthcare Services as well as the Practitioner Roles.• Completed the design to implement CSIRO's Ontoserver to enable the syndication of SNOMED terminology from the National Clinical Terminology Service and broader use within Healthdirect. Design work has also been completed to integrate with the Healthcare Identifier Service to enable the consumption of IHIs and the future upload of records to the My Health Record.• Continued to onboard booking providers to the FHIR ingestion integration pipeline to support automated sharing of booking details. |

* 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 2024-25 |
|--------|--|-------------------------|------------|----------|---|
| 2.3 | HL7 FHIR® AU usage (continued) | The Agency Healthdirect | Ongoing | On track | <ul style="list-style-type: none">Progressed work to transition Healthdirect's Service Finder and Symptom Checker products from the NHSD proprietary interface to the FHIR API, enabling the longer-term objective to decommission non-standards-based interfaces. |
| 2.4 | International standards participation Support Australian participation in international standards development. | The Agency AIHW | Ongoing | On track | <p>The Agency continues to actively engage with HL7, IHE, GS1 and SNOMED-CT internationally through multiple channels and standards development work. Engagement with the Global Digital Health Partnership also provides a valuable opportunity to drive aligned global standards activities across multiple countries and the wider global standards community. Our ongoing participation in Standards Australia committees also enables us to continue our participation within the ISO work program. Expansion of these activities to encompass other Standards organisations and standards development where it will support the Australian digital health agenda will continue to be considered as an ongoing part of the standards program.</p> <p>The AIHW continues to work with the WHO on ICD-11 to ensure it is fit-for-purpose in the Australian context, and to support the engagement between WHO and SNOMED International on aligning their standards for greater interoperability in the future.</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 2024-25 |
|---|------------|------------|----------|--|
| 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 | Complete | Following the publication of the initial version of the Digital Health Standards Catalogue in June 2024 further content has continued to be added to enhance the initial functionality and foundational elements. Work is commencing in November 2024 to define initial use cases for the planned curated content. Further individual standards will also continue to be added on an ongoing basis to enrich the content available to users with the total standards anticipated to exceed 1,200 prior to the end of 2024. |
| 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 | All workstreams of the NDHSP have been established. This includes: <ul style="list-style-type: none">• Leading and coordinating collaboration and engagement within the standards community (e.g. establishment of the Australian Digital Health Standards Advisory Group and Jurisdictional Roundtable)• Building capacity in the digital health technology sector (e.g. FHIR training)• Publishing the initial version of the Digital Health Standards Catalogue and Procurement Guidelines• Providing a mechanism for enhancing engagement within the digital health standards community (e.g. development and implementation of a stakeholder engagement plan)• Supporting the use and development of Aged Care Clinical Information Systems (e.g. Aged Care CIS recommended minimum system requirements). |

* 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 2024-25 |
|---|------------|------------|----------|---|
| 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 | Critical work on local standards development continues within the ‘Sparked’ program and other international standards development activities. Standards Gap analysis is ongoing within related Agency projects including development of the Standards Roadmap, Standards Catalogue and Procurement Guidelines. Tooling proposed to support the Gap Analysis process continues to be refined in line with the changing needs of the sector to ensure standards will continue to evolve to support the ongoing needs of Australian healthcare. |
| 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 | Complete | <p>Strengthening of partnerships with key Standards Development Organisations continues to ensure partnership agreements are in place. Partnership agreements with HL7 Australia, SNOMED, Standards Australia and IHE Australia are already in place, with further agreements in planning stages.</p> <p>The Agency has continued to encourage collaboration among standards stakeholders through the Australian Digital Health Standards Advisory Group. The Agency also holds regular meetings with the Medical Software Industry Association (MSIA) and engages with wider stakeholder groups to ensure that Agency work in the National Digital Health Standards Program is well informed and relevant to the wider sector.</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 2024-25 |
|---|------------|------------|---------------|---|
| 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 | On track | The Agency and CSIRO continue to drive this action forward through the Sparked Accelerator Program and other areas of engagement across the sector. This includes the recommendation of SNOMED CT ValueSets, LOINC ValueSet and other code systems as part of the AU Core Data for Interoperability R1 and AU eRequest Date for Interoperability R1. Expansion of engagement under the NCTS arrangements with CSIRO will also continue to support an increased focus on adoption. |
| 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 later in 2024-25 financial year under the National Clinical Terminology Service (NCTS) program of work. |
| 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 | <p>The Agency in collaboration with Services Australia and the Departments of Finance and Health and Aged Care are developing a draft for consultation Authentication Blueprint describing the use of OAuth and OpenID Connect in conjunction with the Australian Government Digital Identity system. Stakeholder consultation is planned for the second quarter of 2024-25.</p> <p>In September 2024, the Agency issued a request for tender to build the internal technical platform capabilities and infrastructure integrations to enable FHIR interoperability capability for the My Health Record.</p> <p>There is ongoing engagement with the sector to ensure capability uplift and understanding of HL7 FHIR. In addition, there is ongoing work underway via the Sparked program to localise HL7 FHIR standards which will then feed into a standards adoption roadmap.</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 2024-25 |
|--|------------|------------|----------|---|
| 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 | Complete | The Agency published its Conformance Framework in July 2024. The Conformance Framework provides a strategic overview of the purpose and function of conformance and how the Agency develops, operationalises, assesses, and maintains conformance schemes, profiles and artefacts. |
| 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 | Following the first release of the Australian Core Data for Interoperability (AUCDI R1) in June 2024, Sparked has continued work to develop release 2 and progress other work streams including works related to eRequesting. Balloting has recently been undertaken within HL7 International for AU Base FHIR Implementation Guide (4.2.2), AU Core FHIR Implementation Guide (1.0.0) and Draft AU eRequesting FHIR Implementation Guide (0.1.0). Planning and initial workshops have been undertaken through the Sparked Program to support development of a localised/Australian version of the International Patient Summary and begin to understand data requirements related to Reason for Encounter and Chronic Disease Management. |

* 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 (2024-25 to 2026-27)
- 3 actions are medium (2025-26 to 2027-28).

Progress highlights

In August 2024, the Agency published the [Aged Care Clinical Information System \(ACCIS\) Standards](#) – a list of recommended minimum software requirements for CIS including electronic Medication Management used in residential aged care homes. The ACCIS Standards will provide the foundations for future information sharing and interoperability by ensuring that critical elements are consistent across all software products used in aged care.

The Agency has also published a draft national [Health Information Exchange Architecture and Roadmap](#) for public consultation.

Wider consultation on the [Digital Health Procurement Guidelines](#), published in June 2024 as a draft for comment, is being undertaken to seek input into the ongoing development of the guidelines as content continues to expand to cover as many technology platforms and procurement processes as possible.



Information sharing progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|--|---|------------|----------|--|
| 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 | Work is ongoing with health departments to review current procurement processes and capability. Newly released draft Digital Health Procurement Guidelines will support this activity as the delivery of this tool is completed. |
| 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 | Work has commenced on stage 1 of the Producer Portal implementation, an extension of the Agency's Health API Gateway technology that will deliver a platform that enables the building and deployment of FHIR APIs, SMART on FHIR forms and other applications. Stage 1 will deliver integration of the Producer Portal into the existing Health API Gateway and will include identity and orchestration capabilities. A use case is also being built to demonstrate the value and capability of the Producer Portal and to provide a repeatable pattern for future use cases. |
| 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 | Complete | The initial version of the Digital Health Procurement Guidelines was published in June 2024 with the support of the Australian Digital Health Standards Advisory Group and Procurement Reference Group. Input from health departments and government agencies at state and federal levels and software developers has been integral to the development of the guidelines. Wider consultation is now being undertaken as the guideline content continues to expand to cover as many technology platforms and procurement processes as possible. |

* 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 2024-25 |
|--|------------|------------|----------|--|
| 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 | The Agency has initiated a project to expand the scope of the online interoperability toolkit to improve online engagement with the digital health community. The online platform will provide information and enable discussion topics for specific communities across software developers, healthcare providers and industry to enhance collaboration. |
| 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 | Complete | <p>The Agency has assessed the interoperability between GP and residential aged care facility systems and made recommendations that will inform future work on clinical information systems (CIS) information exchange standards pertinent to both aged care and GP systems.</p> <p>In August 2024, the Agency published the Aged Care Clinical Information System (ACCIS) Standards – a list of recommended minimum software requirements for CIS including electronic Medication Management (EMM) used in residential aged care homes.</p> |
| 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 | On track | Discussions on consent management have continued with jurisdictions. The findings from the preliminary review on consumer attitudes to choice commissioned by the Agency will be used to identify the next phase of analysis for design of appropriate authorisation and consent options, with a focus on key use cases that could be delivered early to build toward real time information sharing capabilities. |

* 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 | 2023-24 progress |
|---|------------------------------------|------------|----------|---|
| 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 | On track | The Agency has conducted a review of international literature on standards, policy, regulations, and guidelines and is now drafting a report of the relevant information. |
| 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 | On track | The Agency has completed its Care Teams Exploratory Research project across the care sector to better understand the role of care teams and where digital implementation could be leveraged to enhance care coordination. |
| 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. | Department of Health and Aged Care | Short | On track | <p>A draft national Health Information Exchange Architecture and Roadmap was published in October 2024 for public consultation.</p> <p>The Department is progressing discussions with jurisdictions and policy development work on supporting priority enabling functions including the settings for a provider directory to support digital health programs, FHIR regulation and approach to authorisation of information flows and access.</p> <p>The HIE Jurisdictional Advisory Group Legal and Policy Working Group (LPWG) has been established and commenced work to identify existing policy and legislative enablers and barriers to the sharing of health information. This will inform options for a national legislative framework to facilitate health information sharing. The group will also initially focus on the foundational elements necessary to support consistent health information sharing capabilities.</p> <p>The lead responsible for this action has changed from The Agency to the Department of Health and Aged Care</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).



Information sharing progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|--|------------------------|------------|---------------|---|
| 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 Capability Action Plan \(CAP\) 2024-2025](#) work program is underway and focuses on the higher education and vocational training sectors, Aboriginal and Torres Strait Islander peoples, and the delivery of the Digital Health Workforce (Hub).

There have been multiple events, workshops and Connectathons held so far in 2024-25 and opportunities to host additional interoperability challenges to accelerate standards adoption and implementation are being assessed.

The Agency has extended its contract with HL7 Australia for the delivery of the first tranche of FHIR training to support capability uplift and planning is underway for new course delivery for foundation courses and the development of new course materials. The Agency has also published its library of [Connected Care Education Resources](#) that includes links to existing interoperability education content.



Innovation progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|---|--|------------|----------|--|
| 4.1 Interoperability innovation challenges Run interoperability innovation challenges and “connectathons” to encourage interoperability. | The Agency | Ongoing | On track | Multiple events, workshops and Connectathons have been held so far in 2024-25 and further activities are planned with the Sparked program and as part of Standards Development organisations programs. Further opportunities to host additional interoperability challenges to accelerate standards adoption and implementation are being assessed. |
| 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 | <p>The Capability Action Plan (CAP) 2024-2025 work program has been divided into four program areas with ten projects to be undertaken by external stakeholders to support the Agency to meet the delivery of the key actions of the CAP by 2028.</p> <p>The Agency is currently undertaking a procurement process to acquire services to undertake the projects that include:</p> <ul style="list-style-type: none">• Higher Education sector workforce capability projects• Vocational Education Capability workforce programs• programs designed specifically for Aboriginal and Torres Strait Islander people• the delivery of the Digital Health Workforce (Hub)• informed upgrades to the On Demand Training environment• an Intermediate Clinical Safety course based on the NHS online program. |

* 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 progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|---|------------|------------|----------|--|
| 4.3 Develop education content Develop education content in partnership with users to increase awareness of interoperability. | The Agency | Immediate | On track | <p>The Agency has published its library of Connected Care Education Resources that includes links to existing interoperability education content.</p> <p>The Agency extended its contract with HL7 Australia for the delivery of the first tranche of FHIR training to support capability uplift. Since the commencement of the program in 2023 a total of 915 people have participated in the four types of courses covering Developers, Project Managers, Opportunities for SMART on FHIR and transitioning from HL7 V2 to FHIR. Planning is underway for new course delivery for foundation courses and the development of new course material to continue this work.</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).



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 4 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 (2024-25 to 2026-27).

Progress highlights

The Council for Connected Care, that governs the Interoperability Plan, met for the sixth time on 8 August 2024 and covered the Council's 2023-24 performance review and 2024-25 work priorities. The next meeting is scheduled for 14 November 2024 and will focus on older people and transitions in and out of aged care, including medication safety.

Planning continues for the next national interoperability survey that will be conducted in early 2025. In the interim, a sub-set of Interoperability Benchmark Survey questions are administered on a quarterly basis to monitor change.

The Agency, as a member of the Global Digital Health Partnership (GDHP), is working with member countries to develop a GDHP Digital Health Maturity Model. A survey of member countries is being conducted during October 2024 and a paper will be presented to the GDHP summit in January 2025. The build and implementation of the Digital Health Maturity Model is expected to commence in early 2025.



Benefits progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|--|------------|------------|----------|--|
| 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 | The survey results from the 2022 Interoperability Benchmark Survey can be found on the Agency's website . Planning continues for the next survey to be conducted in early 2025. In the interim, a sub-set of Interoperability Benchmark Survey questions are administered on a quarterly basis to monitor change. |
| 5.2 Publish annual report Publish an annual report on progress of the National Healthcare Interoperability Plan. | The Agency | Ongoing | On track | <p>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. The Council met for the sixth time on 8 August 2024. The meeting outcomes can be found on the Council's webpage.</p> <p>This is the fifth report on progress against the 44 actions in the Interoperability Plan. The first annual report (2023-24) was published on 1 August 2024.</p> |
| 5.3 Assess digital health maturity models Collaborate with jurisdictions to assess digital health maturity models. | The Agency | Immediate | Complete | The Agency has undertaken a review of national digital maturity assessments in healthcare, with a focus on models relevant to interoperability. The review is being used to inform Action 5.4. |
| 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 | On track | Through the Evidence & Evaluation workstream of the Global Digital Health Partnership (GDHP), and in collaboration with the Interoperability workstream, a GDHP Digital Health Maturity Model is being considered. Categories within the model may include interoperability, cybersecurity, policy environments, and clinical and human engagement. Member countries are currently being surveyed and a paper will be presented to the GDHP summit in January 2025. The build and implementation of the Digital Health Maturity Model is expected to commence in early 2025. |

* 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

This action is completed as reported in the first quarterly progress report.



Policy tools progress update

| Action | Lead(s) | Timeframe* | Status | Update Q1 2024-25 |
|---|------------|------------|-----------|---|
| 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. |



National Healthcare Identifiers Roadmap

Quarterly progress report (July 2024 to September 2024)

CONNECTING AUSTRALIAN HEALTHCARE
NATIONAL HEALTHCARE INTEROPERABILITY PLAN
2023-2028

Issued 31 October 2024



Background

The Australian Digital Health Agency (the Agency), in collaboration with the Department of Health and Aged Care (the Department) and Services Australia, has developed a [National Healthcare Identifiers Roadmap 2023-2028](#) that includes 20 activities to drive uptake of the Healthcare Identifiers Service.

Healthcare identifiers are fundamental to a connected healthcare system as they support information sharing by accurately identifying the healthcare recipient, provider and organisation, ensuring information is shared for the right individual to the right provider. This will improve the quality, safety and efficiency of care provided and puts Australians even more firmly at the centre of their own healthcare experience.

The Healthcare Identifiers Roadmap is an action in [the Connecting Australian Healthcare – National Interoperability Plan 2023-2028](#) that is governed by the [Council for Connected Care](#) and is critical for progressing national digital health programs including sharing by default for pathology and diagnostic imaging reports, electronic prescribing, electronic requesting, MyMedicare and the national Health Information Exchange.

This is the first quarterly progress report against the 20 activities in the Healthcare Identifiers Roadmap.

Summary of progress

Of the 20 activities in the Healthcare Identifiers Roadmap, all 12 that were to commence in 2023-24 or 2024-25 have commenced:

- HIA-1: Legislative reform program
- HIA-2: Australian Government policy position for HI Service adoption
- HIA-6: Data matching and data quality improvements
- HIA-7: Review existing messages and responses
- HIA-8: Improvements to data matching for Aboriginal and Torres Strait Islander peoples
- HIA-12: Health Provider Identifier – Organisations: Guidance on appropriate structures
- HIA-13: HI Service conformance review and update
- HIA-14: Update technical standards
- HIA-17: Develop and implement HI stakeholder engagement and communication plan
- HIA-18: Development of education materials for the HI Service
- HIA-19: HI support model operational requirements
- HIA-20: Enhanced governance.



Healthcare Identifiers Roadmap progress update

| Activity | Lead(s) | Start date | Status | Update | |
|----------|---|------------------------------|---------|---------------|--|
| 1 | HI legislative reform program | Department | 2023-24 | On track | The Department has conducted significant consultation on the current Healthcare Identifiers legislative and policy framework to identify potential reforms to support better use and adoption that will be needed to underpin health information sharing. Work to identify and progress priority amendments is occurring in parallel with communication and education on permissible uses under the current framework. |
| 2 | Australian Government policy position for HI Service adoption | Department | 2023-24 | On track | The Department has worked with states and territories to identify current uses of healthcare identifiers across healthcare settings and initiatives to understand the current state of adoption. This work is supporting proactive consideration of how to build in the use of healthcare identifiers to key programs and in support of digital health initiatives, such as ePrescribing. |
| 3 | Development of a simplified guide to the HI act | Department | 2025-26 | Not commenced | This activity will be progressed in the 2025-26 financial year. |
| 4 | Template policies and guidelines on HI use | Department Agency | 2025-26 | Not commenced | This activity will be progressed in the 2025-26 financial year. |
| 5 | HI use in consumer applications | Agency | 2026-27 | Not commenced | This activity will be progressed in the 2026-27 financial year. |
| 6 | Data matching and data quality improvements | Agency Services Australia | 2024-25 | On track | <p>Services Australia updated the Healthcare Identifiers (HI) Service in the June 2024 release to enable improved Individual Healthcare Identifiers (IHI) matching. Some changes have delivered immediate improvements in match rates and others require software developers to make changes to their products. Services Australia has also conducted internal analysis to provide an up-to-date view of IHI match rates. The HI Data Matching Insights and Recommendations Report will be used to support the development and implementation of a delivery plan of identified improvements.</p> <p>Stakeholder engagement is underway to discuss the change impact of the June 2024 improvements and to explore additional changes needed for data matching improvements.</p> |



Healthcare Identifiers Roadmap progress update

| Activity | Lead(s) | Start date | Status | Update | |
|----------|--|--------------------------------------|---------|---------------|---|
| 7 | Review existing messages and responses | Agency Services Australia | 2024-25 | On track | <p>The HI Service June 24 release enabled improvement with Retired IHI status response. This has been implemented in a 'switched off' state pending industry engagement.</p> <p>Services Australia has commenced discovery into the adoption of and transition to FHIR as a data standard and as a web service protocol with implementation planned for 2025-26. Review of existing messages and responses will be included in the wider FHIR upgrade project with implementation planned for 2025-26.</p> |
| 8 | Improvements to data matching for Aboriginal and Torres Strait Islander peoples | Department Agency Services Australia | 2024-25 | On track | <p>Discovery work to identify options that could facilitate better data matching has commenced. The Agency and Services Australia presented at the Sparked Rural and Remote Health Equity Roundtable on IHI matching and data quality. Service Australia has also attended the AMSANT Communicare and Digital Health Forum to discuss difficulties in linking health care information for people living in remote communities. Information gathered during these sessions will contribute to the development of a plan of improvements delivered under HIA-6 Data Matching and Data Quality Improvements. Planning is also underway for further stakeholder engagements in 2024-25.</p> |
| 9 | Enhanced search considerations | Agency Services Australia | 2025-26 | Not commenced | <p>This activity will be progressed in the 2025-26 financial year.</p> |
| 10 | Individual Healthcare Identifiers for newborns | Agency Services Australia | 2025-26 | Not commenced | <p>This activity will be progressed in the 2025-26 financial year.</p> |
| 11 | Consumer empowered matching | Department Agency Services Australia | 2026-27 | Not commenced | <p>This activity will be progressed in the 2026-27 financial year.</p> |
| 12 | Healthcare Provider Identifier – Organisations: Guidance on appropriate structures | Agency Services Australia | 2024-25 | On track | <p>The Agency has started external consultation on appropriate national location identifiers, for consideration in the development of the guidance material on Healthcare Provider Identifier – Organisations (HPI-O) structures, as a prerequisite for this activity.</p> |



Healthcare Identifiers Roadmap progress update

| Activity | Lead(s) | Start date | Status | Update | |
|----------|--|------------------------------|---------|---------------|--|
| 13 | HI Service conformance review and update | Agency | 2024-25 | On track | The Agency, in collaboration with Services Australia, has completed risk assessment workshops to inform changes to the HI Service conformance requirements. These changes address the IHI matching improvements delivered in June 2024, as well as previous stakeholder feedback. |
| 14 | Update technical standards | Agency Services Australia | 2024-25 | On track | The Agency completed a draft FHIR implementation guide, which will inform Services Australia's discovery work on a future HI Service FHIR interface. Services Australia has commenced discovery into the adoption of and transition to FHIR as a data standard and as a web service protocol with implementation planned for 2025-26. FHIR standards will provide increased data accuracy, completeness, consistency and reliability, meaning that no information is lost in interpretation between systems. |
| 15 | HI Service architecture and future extensibility | Agency Services Australia | 2025-26 | Not commenced | This activity will be progressed in the 2025-26 financial year. |
| 16 | Clinical systems architecture and design | Agency | 2026-27 | Not commenced | This activity will be progressed in the 2026-27 financial year. |
| 17 | Develop and implement HI stakeholder engagement and communication plan | Agency | 2023-24 | On track | The Agency, in consultation with the Department of Health and Aged Care and Services Australia, has commenced drafting a Healthcare Identifiers stakeholder engagement and communications plan. |
| 18 | Development of education materials for HI Service | Agency | 2023-24 | On track | Existing Agency resources have been updated and published in the Connected Care education resources library, located in the Interoperability Toolkit Connected Care education resources - Overview (digitalhealth.gov.au) . Work is underway to develop additional educational resources where a gap has been identified. |



Healthcare Identifiers Roadmap progress update

| Activity | Lead(s) | Start date | Status | Update |
|---|--------------------------------------|------------|----------|---|
| 19 HI support model and future operational requirements | Agency Services Australia | 2023-24 | On track | The Agency has documented the existing support and operation model for the HI Service as a baseline for review to identify gaps and improvements. |
| 20 Enhanced governance | Department Agency Services Australia | 2024-25 | On track | <p>Work has commenced in reviewing and updating the governance structure and processes for the HI Service, starting with the establishment of the Healthcare Identifiers Working Group. This group will facilitate intergovernmental collaboration between the Department of Health and Aged Care, the Australian Digital Health Agency, and Services Australia on the implementation of the HI Roadmap, the Interoperability Plan and other HI Service improvement initiatives.</p> <p>Oversight of reforms and adoption of healthcare identifiers to support digital health programs and initiatives will be undertaken by the Digital Health Oversight Committee. This will ensure planning and implementation activities are informed by the perspectives of all jurisdictions and key Commonwealth digital health delivery partners.</p> |



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