

Australian Government Australian Digital Health Agency

National Healthcare Identifiers Roadmap

2023-2028

Connecting Australian Healthcare National Healthcare Interoperability Plan

Australian Digital Health Agency

ABN 84 425 496 912 Level 25, 175 Liverpool Street, Sydney, NSW 2000 Telephone 1300 901 001 or email <u>help@digitalhealth.gov.au</u> www.digitalhealth.gov.au

Disclaimer

The Australian Digital Health Agency ("the Agency") makes the information and other material ("Information") in this document available in good faith but without any representation or warranty as to its accuracy or completeness. The Agency cannot accept any responsibility for the consequences of any use of the Information. As the Information is of a general nature only, it is up to any person using or relying on the Information to ensure that it is accurate, complete and suitable for the circumstances of its use.

Document control

This document is maintained in electronic form and is uncontrolled in printed form. It is the responsibility of the user to verify that this copy is the latest revision.

Copyright © 2024 Australian Digital Health Agency

This document contains information that is protected by copyright. All Rights Reserved. No part of this work may be reproduced or used in any form or by any means – graphic, electronic or mechanical, including photocopying, recording, taping, or information storage and retrieval systems – without the permission of the Australian Digital Health Agency.

All copies of this document must include the copyright and other information contained on this page.

ISBN 978-0-6459861-2-9



Contents

1	Introduction	4
I	Healthcare identifiers	4
	Background	5
	Purpose	5
	Future state	6
2	Objectives	9
2	Strategic drivers	10
	Digital Health Blueprint and Action Plan 2023–2033	10
	Primary Health Care 10 Year Plan	11
	National Digital Health Strategy	11
	Connecting Australian Healthcare – National Healthcare Interoperability Plan 2023–2028	11
	National Agreement on Closing the Gap	12
	COVID-19 pandemic	12
3	Future state for healthcare identifiers	13
Ŭ	Legislation	13
	Policy	13
	Data matching and data quality	14
	Operational improvement	14
4	Timelines	15
5	Activities	16
U	Legislation and policy	17
	Starting FY2023-24	17
	FY2025-26	18
	FY2026-27	19
	HI Service improvement	20
	FY2024-25	20
	FY2025-26	21
	FY2026-27	
	Architecture and data standards	23
	FY2024–25	
	FY2025–26	
	FY2026–27	
	Operational improvement	
	FY2023-24	
	FY2024–25	27
6	Alignment of activities with the National Healthcare Interoperability Plan actions	30
7	HI stakeholders	33
8	Glossary	34

section 1 Introduction

THIS SECTION INCLUDES:

- Healthcare identifiers
- Background
- Purpose
- Future state

Healthcare identifiers

Uniquely identifying individuals, healthcare providers and healthcare provider organisations is the most important capability for supporting interoperability.¹ Healthcare identifiers used consistently across all public, private, and non-government organisation health and aged care settings ensure consumers and healthcare providers have confidence that we know to whom care is provided, where this occurred, and who provided it. It also improves the accuracy of information shared, gives individuals greater control over access permissions to their information and increases the quality of information used for planning, quality improvement and research purposes.

Australia has a well-established Healthcare Identifiers Service (HI Service):

- Every individual receiving healthcare in Australia is eligible for a unique Individual Healthcare Identifier (IHI).
- Healthcare providers registered under relevant national, state or territory laws, and members of a professional association that meets the legislative criteria, are eligible for a unique Healthcare Provider Identifier – Individual (HPI-I).
- Healthcare provider organisations registered with the HI Service have a unique Healthcare Provider Identifier Organisation (HPI-O).

Australian Digital Health Agency (2023), <u>Connecting Australian Healthcare – National Healthcare Interoperability Plan 2023–2028</u>, Australian Digital Health Agency.

Background

The HI Service was established in 2010. The 2018 review² of the interactions between the *Healthcare Identifiers Act 2010* (HI Act) and the operation of the HI Service found that Australia has built a national healthcare identifier capability, but it is not being used to its fullest possible extent and therefore potential benefits are not being fully realised. The 2020 review³ of the *My Health Records Act 2012* recommended actions to improve the use of HPI-Os and HPI-Is and noted the need to identify organisations that provide services that support healthcare, such as home care services.

Priority area 1 of the <u>Connecting Australian Healthcare – National</u> <u>Healthcare Interoperability Plan 2023–2028</u> includes an action to develop a National Healthcare Identifiers Roadmap to support the wider take-up of healthcare identifiers and associated benefits. The Interoperability Plan was approved in April 2023 by the Health Chief Executives Forum and published in July 2023.

The Interoperability Plan is governed by the <u>Council for Connected</u> <u>Care</u>. The Council was established to oversee the implementation of the Interoperability Plan, including monitoring and reporting on progress against actions.

Purpose

The HI Roadmap aims to enhance transparency for all stakeholders within a connected Australian healthcare system. It outlines the activities to be undertaken by government agencies with unique and shared functions across the healthcare identifiers domain, essential for achieving the envisioned future state.

The HI Roadmap identifies the activities required to:

- enhance the operation and effectiveness of the HI Service and associated legislation
- support healthcare organisations, administrative organisations, care and support organisations and government programs to implement integration with the HI Service and use healthcare identifiers in the most consistent and effective way to maximise the benefits of national identifiers.

² Australian Department of Health and Aged Care (2018), <u>Healthcare Identifiers Act and</u> <u>Service Review – Final report</u>, Australian Department of Health and Aged Care.

³ Australian Department of Health and Aged Care (2020), <u>Review of the My Health Records</u> <u>legislation – Final report</u>, Australian Department of Health and Aged Care.

Future state

The Interoperability Plan describes the future state of the HI Service as one where the Australian, state and territory governments – as joint owners, funders and users – are committed to using national healthcare identifiers:

- National healthcare identifiers are readily available and universally used by all individuals and healthcare providers in all health information exchanges.
- The healthcare identifiers are adopted and used in future digital health initiatives involving health information sharing.
- Mismatch of individuals' identification is reduced or eliminated.
- Management of identifiers and associated artefacts (such as digital certificates) is simple, streamlined and effective.
- Individuals use identifiers to control their information, manage their privacy and receive better and safer care.

The healthcare identifiers support the sustainability of Australia's healthcare system by increasing the quality, accuracy and completeness of health information used for research, public health and health policy at national, state and territory levels.

This HI Roadmap outlines the activities that need to occur to enable Australia to move from its current state to a future state. Table 1 provides traceability between healthcare identifiers as they relate to the specific problems of the current state, the benefits from wider HI adoption and the implementation of HI Roadmap activities essential in delivering the envisioned future state. More details are provided in section 5.

Problem statement	Future state	Benefits	Supporting HI Roadmap activities
No consistency in HI use across healthcare programs	HIs incorporated as identifiers in all health, aged care and disability programs of work	coordinated care Improved quality of care Improved data for 	 HIA-2 Australian Government policy position for HI Service adoption HIA-4 Template policies and guidelines on HI use HIA-5 HI use in consumer applications HIA-16 Clinical systems architecture and design HIA-17 HI stakeholder and communication plan HIA-18 Education materials for HI Service

Table 1: Future state of healthcare identifiers (HIs)

Table 1: Future state of healthcare identifiers (HIs) (cont.)

Problem statement	Future state	Benefits	Supporting HI Roadmap activities
Error resolution not integrated in the patient journey and not in real time, so IHI retrieval delayed	Errors corrected at presentation by the person directly involved with the patient	 HIs available when needed in clinical workflow No delays to clinician or consumer 	 HIA-4 Template policies and guidelines on HI use HIA-6, 7, 8, 9, 10, 11 HI Service improvement HIA-16 Clinical systems architecture and design HIA-17 HI stakeholder and communication plan HIA-18 Education materials for HI Service
Inconsistent understanding of HI Act and HI Service	Consistent understanding of permitted uses and benefits of HIs	 User confidence that the HI Service can always be used Broader adoption within clear guidelines 	HIA-1 HI legislative reform program HIA-3 Simplified guide to the HI Act HIA-17 HI stakeholder and communication plan HIA-18 Education materials for HI Service HIA-20 Enhanced governance
HI Service processes not optimised and can be difficult to engage with	HI Service processes streamlined and easy to use and efficient	 Barriers to use of the HI Service removed Broader adoption across the healthcare spectrum 	HIA-1 HI legislative reform program HIA-12 HPI-O guidance HIA-14 Update technical standards HIA-15 HI Service architecture and future extensibility HIA-19 HI support model and future operational requirements
HIs utilised sparingly beyond healthcare workflows, limiting secondary use of data ⁴ , or introducing privacy/ misidentification risk through probabilistic and other data matching mechanisms Inability to deliver cost savings to all Australian governments through different use of identifiers across health and care sectors	HIs routinely used for research, analytics and linkage of datasets	 More robust and accurate linkage of data, increasing quality of data use Improved research, planning and performance outcomes 	 HIA-1 HI legislative reform program HIA-2 Australian Government policy position for HI Service adoption HIA-16 Clinical systems architecture and design HIA-17 HI stakeholder and communication plan HIA-18 Education materials for HI Service

4 Australian Digital Health Agency (2024), <u>Secondary use of data</u>, Australian Digital Health Agency.

Problem statement	Future state	Benefits	Supporting HI Roadmap activities
IHIs cannot always be obtained for some population cohorts at the time they are needed for exchange of clinical information	An identifier can always be retrieved at the time it is needed in a consultation	 User confidence that the HI Service can always be used More timely uploading of information to My Health Record and clinical information exchange 	HIA-6, 7, 8, 9, 10, 11 HI Service improvement HIA-13 HI Service conformance review and update HIA-10 IHIs for newborns
Some HI technical specifications and standards are out of date and do not support real-time use	HI Service provides the support and technical infrastructure needed to meet future demand and timely user support	 User confidence that the HI Service can always be used Streamlined support for users Latest versions of specifications and standards in place Robust governance ensures specifications are maintained routinely and transparently 	HIA-14 Update technical standards



THIS SECTION INCLUDES:

Strategic drivers

The HI Roadmap provides the strategic steps and milestones to support the wider adoption of healthcare identifiers. In particular, the HI Roadmap:

- defines the future state policy, processes and functionality required for effective collection, use and exchange of healthcare identifiers
- outlines the activities of this future state, to realise the full benefits of national unique individual, provider and organisational identification
- lists the lead agencies responsible for each activity and the financial year of commencement.

The implementation of the HI Roadmap will lead to:

- increased use of healthcare identifiers in clinical information exchange and to support planning, research and health system performance and monitoring to underpin health system reform
- improved match rates to ensure that clinical workflows are not negatively impacted by failed matches
- improved and more robust processes to support the needs of particular consumer cohorts, such as newborns and people who are not eligible for Medicare
- legislation, policy and functionality that will prepare the HI Service for emerging use cases and specific consumer cohorts
- health services that have local policies, procedures, business processes and architectures in place to optimise the use of healthcare identifiers
- significantly enhanced analytics, achieved by streamlining the linkage of patient datasets and leveraging artificial intelligence. This improvement will support care planning, outcome monitoring, and performance assessment, as well as personalising healthcare.

Broad adoption of healthcare identifiers with a high level of data quality will also position the health system to work effectively in the wider digital economy. This will link to the broader social services, aged care, the National Disability Insurance Scheme and housing and homelessness services that contribute to individuals' health and wellbeing.

The shared vision of government is that all digital health ecosystem participants utilise a consistent approach to identity management. Healthcare identifiers play a significant role as the common identifiers across health and care services to underpin data quality and health systems interoperability. This alignment will enable high-quality and sustainable healthcare. This vision encapsulates 2 of the key objectives for healthcare identifiers:

- To drive quality and consistency in identification of individuals, providers and healthcare organisations to mitigate the risks to clinical quality and safety and reduce negative patient experiences that occur due to inefficient identification and access to health data
- To enable interoperability across health systems, regardless of jurisdiction and whether they are in the public or private sector, to improve the overall quality of the health system and health outcomes.

The HI Roadmap supports the underlying principle stated in the Interoperability Plan that:⁵

National healthcare identifiers will support interoperable digital systems and solutions. Healthcare identifiers support information sharing by accurately identifying healthcare recipients, healthcare providers and healthcare organisations involved in an exchange. This inspires confidence that information is only accessible by approved healthcare providers, and information shared is for the right individual and improves the safety of the care provided.

Strategic drivers

Digital Health Blueprint and Action Plan 2023–2033

The Digital Health Blueprint outlines the Australian Government's 10-year vision for the role that digital health capabilities will continue to play in delivering a more person-centred, connected and sustainable health system for Australians. This includes driving a greater adoption of the HI Service to support connected care. The Blueprint Action Plan highlights the initiatives the Australian Government is investing in to meet the target outcomes identified in the Blueprint and outlines key delivery partners and progress.

⁵ Australian Digital Health Agency (2023), <u>Connecting Australian Healthcare – National Health-</u> <u>care Interoperability Plan, 2023–2028</u>, Australian Digital Health Agency.

Primary Health Care 10 Year Plan

The focus of the Primary Health Care 10 Year Plan is on Australia's primary healthcare services provided through general practices, Aboriginal community-controlled health services, community pharmacies, allied health services, mental health services, community health and community nursing services and dental and oral health services. The plan also focuses on the integration of primary healthcare with hospitals and other parts of the health system, aged care, disability care and social care systems. This seeks to make better use of digital technologies to deliver more connected and accessible services, and to use data to support better care and more informed consumers.

National Digital Health Strategy

Australia's National Digital Health Strategy, supported by a Strategy Delivery Roadmap, places people at the centre of a connected and digitally enabled healthcare system. It sets a vision and pathway to better serve the needs of Australians today, and into the future, by creating a more connected, person-centred digital health system and realising the benefits digital technology offers individuals, the community, governments, industry and providers.

Connecting Australian Healthcare – National Healthcare Interoperability Plan 2023–2028

The Interoperability Plan is listed as 'Outcome 1: Digitally enabled' within the National Digital Health Strategy. The use of healthcare identifiers is a key enabler of the aims of the Interoperability Plan: that is, to create a connected healthcare system that can easily transfer information within and between clinical systems. One of the key challenges in ensuring this interoperability, however, is the correct and consistent identification of individuals and providers. This challenge is directly resolved by the implementation and use of national healthcare identifiers, which ensure that data is connected to the correct individual, provider and organisation by providing a number that is unique nationwide. The implementation of the Interoperability Plan will empower providers to deliver enhanced, more effective and more personalised care to patients, which will in turn see improved patient experience and clinical outcomes. There are actions outlined within the Interoperability Plan that will leverage the use of the HI Service across the health landscape for initiatives such as the Health Delivery Modernisation program, widening use of electronic prescriptions and the improvement of funding models.



National Agreement on Closing the Gap

National Agreement on Closing the Gap (the National Agreement) aim is to enable Aboriginal and Torres Strait Islander people and governments to work together to overcome the inequality experienced by Aboriginal and Torres Strait Islander people and achieve life outcomes equal to all Australians.

At the centre of the National Agreement are four Priority Reforms that focus on changing the way governments work with Aboriginal and Torres Strait Islander people.

The Priority Reforms will:

- 1. Strengthen and establish formal partnerships and shared decision-making
- 2. Build the Aboriginal and Torres Strait Islander communitycontrolled sector
- 3. Transform government organisations so they work better for Aboriginal and Torres Strait Islander people
- 4. Improve and share access to data and information to enable Aboriginal and Torres Strait Islander communities make informed decisions.

COVID-19 pandemic

A nationwide shift towards a robust digital health system is universally considered to be a necessary step to support a modern health ecosystem, especially in the wake of the COVID-19 pandemic. Healthcare identifiers support the widespread implementation of effective digital health strategies in several ways. By ensuring the correct identification of both provider and patient, healthcare identifiers guarantee a consistent standard of data quality and help develop the trust of both consumers and providers. These put the patient first by providing greater access to a better quality of care, and support healthcare providers by giving access to streamlined systems, processes and services while enhancing the quality of care they can provide. They also provide assurance to healthcare providers of the patient's identity and the provenance of health information.



SECTION 3

Future state for healthcare identifiers

THIS SECTION INCLUDES:

- Legislation
- Policy
- Data matching and data quality
- Operational improvement

To achieve the optimal use of healthcare identifiers for health, aged care, disability, administration and research, the HI Roadmap aims to raise maturity of use to the following future state:

Legislation

• The *Healthcare Identifiers Act 2010* (HI Act) and the proposed healthcare identifiers legislative reform support all processes and parties involved directly or indirectly in the end-to-end healthcare process, the public health purposes of information required to manage the health sector effectively and efficiently, and research and evaluation to support continued improvements to outcomes for patients.

Policy

- Use of national healthcare identifiers is a mandatory requirement of healthcare initiatives focused on digital enablement that identify a consumer, healthcare provider individual or healthcare provider organisation.⁶
- All jurisdictions have policies that acknowledge the role of the HI Service and the requirements for use.
- HPI-Is, and HPI-Os that use a seed and network structure, allow controls and data analysis at a meaningful level and meet consumer and provider expectations that they are able to identify the specific provider and organisation involved.

⁶ Mandatory use of identifiers does not mean they must be included in every transaction. Care process must still be able to proceed where an identifier cannot be found or does not exist.

Data matching and data quality

- Integration with the HI Service is implemented in such a way that IHIs are visible to administrative and clinical users when they view a clinical or patient administration system (PAS).
- Meaningful error messages for failed transactions are returned in real time to the individual registering the patient at a health service or providing the clinical service.
- Wherever possible, IHIs, HPI-Is and HPI-Os are integrated into all systems supporting clinical workflows and are available for any form of clinical communication or handover.

Operational improvement

- Identifier matching errors are minimised.
- Management of healthcare identifiers and associated artefacts like digital certificates is simple, effective and streamlined.
- Effective processes are in place for managing healthcare identifiers across the lifecycle from birth to death.



SECTION 4 🕘 📃 🛑 **Timelines**

	Starting FY2023-24	FY2024-25	FY2025–26	FY2026-27	FY2027–28
Leg	islation and Policy				
Lead	Department of Health	and Aged Care (DoHAC)			
	HIA-1 – Legislative ref				
	HIA-2 – Australian Go	vernment policy position for			
		Lead	DoHAC		
			•	of a simplified guide to	the HI act
		Lead	DoHAC and Agency		
				cies and guidelines on ⊢ -	ll use
				Agency	
				HIA-5 – HI use in consu	umer apps
l Se	ervice Improvement				
	Lea	d Agency and Services A	Australia		
		HIA-6 – Data matching	and data quality improve	ements	
		HIA-7 – Review existing	g messages and respons	es	
	Lea	d DoHAC, Agency and So	ervices Australia		
		HIA-8 - Improvements	to data matching for Ab	original and Torres Stra	it Islander peoples
		Lead	d Agency and Services	Australia	
			HIA-9 – Enhanced sea	rch considerations	
			HIA-10 – IHIs for newb		
				DoHAC, Agency and S	
				HIA-11 - Consumer-em	powered matching
۱rch	itecture and Data Stand				
	Lea	d Agency and Services			
			ovider Identifier - Organ	isations - Guidance on	appropriate structure
	Lea	d Agency			
			nformance review and u	pdate	
	Lea	ad Agency and Services			
		HIA-14 – Update techn			
				chitecture and future e	xtensibility
				Agency	
				HIA-16 – Clinical syste and design	ms architecture
pera	ational Improvement				
_ead	Agency				
	HIA-17 – Develop and	implement HI stakeholder	r engagement and comm	nunication plan	
	HIA-18 - Developmen	t of education materials fo	or HI Service		
_ead	Agency and Services	Australia			
	HIA-19 – HI support n	nodel and future operation	al requirements		
	Lea	d DoHAC, Agency and S	ervices Australia		

SECTION 5 Activities

THIS SECTION INCLUDES:

- Legislation and policy
- HI Service improvement
- Architecture and data standards
- Operational improvement

This section provides an overview of each of the HI Roadmap activities. The activities are grouped into 4 categories: Legislation and policy, HI Service improvement, Architecture and data standards, and Operational improvement. The focus is on activities primarily undertaken by Australian Government agencies to support the public and private sectors to expand the adoption of healthcare identifiers. The proposed financial year of commencement does not include the timeframes that will be required by health service change and adoption activities to occur. It will be the responsibility of the lead organisations to engage with relevant government organisations and stakeholders in delivering these activities, as they will need to draw on support from other government organisations and stakeholder experience and expertise to be successful.

The activities are assigned a financial year to reflect the planned commencement date, although the activity may not necessarily commence at the beginning of the financial year. Stakeholders from across the Australian health ecosystem will need to be engaged to ensure that the activities deliver successful outcomes.



Legislation and policy

Starting FY2023-24

HIA-1 - Legislative reform program

Lead: Department of Health and Aged Care

Description: As the use cases for healthcare identifiers expand, and the parties involved and mechanisms for information flow evolve, there are increasing challenges being identified with the HI Act. Reform is needed to address these challenges and simplify interpretation to enable confident and appropriate use of the HI Service to support interoperability across health. This program of work has commenced as part of the Health Delivery Modernisation program.

Intended outcomes

- The HI Act supports current and emerging use cases and provides a clear framework to optimise use of healthcare identifiers in line with the original intent.
- Legislative reform supports essential workflows and flow of information across health services and their integration partners, to ensure that no barriers impede access and utilisation – for example, authorising the National Health Services Directory to store and use HPI-Os and HPI-Is as a point of validation for integration partners.

HIA-2 - Australian Government policy position for HI Service adoption

Lead: Department of Health and Aged Care

Description: There is currently no formal cross-agency policy position held by the Department of Health and Aged Care, the Agency or Services Australia on the use of the HI Service. This has led to new programs being implemented that are not leveraging the HI Service and to the continued creation of siloed data. A clear policy direction is needed within these agencies on the use of the HI Service.

In addition, the Australian Government has a number of potential funding, performance and accreditation levers that could be applied to promote widespread adoption of the HI Service. Each of these will need to be assessed for feasibility, to identify the implications of the change on the health system and for realistic time frames. This will involve reviewing the range of Australian Government identifiers used for different purposes across the health system and identifying opportunities to rationalise and simplify these. This can leverage the review already undertaken as part of the Health Delivery Modernisation program.

This initiative will also involve identifying existing policies that could include requirements for HI Service usage and assessing implementation impacts and time frames required for jurisdictional changes to enable compliance and develop policy updates and implementation plans.



Legislation and policy (cont.)

Intended outcomes

- Clear Australian Government policy position on use of healthcare identifiers in national health programs. This would be based on current permitted uses and may be expanded after the legislative reform program is completed.
- Increased adoption of healthcare identifiers to support national interoperability of health systems.
- Clear direction for states, territories and the private health sector on appropriate use of healthcare identifiers.

FY2025-26

HIA-3 - Development of a simplified guide to the HI act

Lead: Department of Health and Aged Care

Description: Across the health system there is an inconsistent understanding of the HI Act and its implications for identifier use in health processes, constraining adoption and limiting the full scope of benefits that could be achieved. Development of a user-friendly overview of the HI Act, clarifying intent and approved collection, use and disclosure of healthcare identifiers, will increase confidence and provide an input to local policies and program decisions.

Intended outcomes

- A guide to the HI Act appropriate for use by all health services that provides a clear understanding of the HI Act in its current form.
- Clarity for health services, giving confidence to use the HI Service.

HIA-4 - Template policies and guidelines on HI use

Leads: Department of Health and Aged Care, Australian Digital Health Agency

Description: Most health services do not have specific policies on healthcare identifier use or optimisation. The focus of this activity is to develop guidelines and template policies to support health services to increase their healthcare identifier maturity and establish consistent processes that will optimise the value of healthcare identifiers.

Intended outcome

• Health services will have endorsed policies on healthcare identifier use in place for their organisation, with supporting processes that embed robust quality practices and effective use.

FY2026-27

HIA-5 - HI use in consumer applications

Lead: Australian Digital Health Agency

Description: A rapidly increasing number of consumer health apps and mHealth devices currently fall outside the scope of conformance processes and use a variety of identifiers. To support consumers to have visibility of all their health information, these would benefit from use of IHIs. This work is to analyse the requirements for healthcare identifier use in consumer health apps and look for opportunities to introduce conformance requirements and establishment of minimum standards. In some instances, this will be dependent on the legislative changes being delivered through HIA-1 and HIA-2.

Intended outcomes

- Policy on use of healthcare identifiers in health apps and mHealth.
- Updated conformance requirements (if applicable).
- Consumers can access an integrated view of all their health information regardless of the system, device or app in which it was collected, subject to privacy and security considerations.





HI Service improvement

FY2024-25

HIA-6 – Data matching and data quality improvements

Leads: Australian Digital Health Agency, Services Australia

Description: This activity will provide data matching and data quality improvements by performing analysis and engagement with stakeholders to develop and implement a delivery plan of identified improvements. This is building upon known existing concerns about data matching and data quality, such as reducing retired IHI record search results, failed messages searches and the need to review effectiveness of healthcare identifier status flags.

Intended outcomes

- Decreased rework required from healthcare professionals to improve data quality and matching. Non-matches will have a message that explains what specific action needs to occur.
- Reduced recurring errors that arise through incomplete data matching results.
- Improved data quality and error resolution rates.

HIA-7 – Review existing messages and responses

Leads: Australian Digital Health Agency, Services Australia

Description: This activity will review existing error and information messages and their usage and will confirm their actual response criteria. It will normalise messages and rationalise them as necessary. The subsequent message set (amended or not) will be tested with relevant stakeholder working parties to ensure consistent message handling.

Intended outcomes

- Effective message handling that supports effective use of the HI Service.
- Increased understanding of current issues around messages (error and information).
- Increased customer satisfaction with meaningful messages that are fit for purpose.

HIA-8 – Improvements to data matching for Aboriginal and Torres Strait Islander peoples

Leads: Department of Health and Aged Care, Australian Digital Health Agency, Services Australia

Description: This activity will conduct analysis and engagement with Aboriginal community-controlled health organisations and key stakeholders to work on developing and implementing a plan of identified data matching improvements for Aboriginal and Torres Strait Islander peoples. It will





HI Service improvement (cont.)

include investigation into possible design model(s) of interaction with the HI Service for Aboriginal and Torres Strait Islander peoples that will ensure accurate and consistent identification, with trust and community at the centre. This will work as an enabler for access to digital health services and improved healthcare service delivery.

Intended outcomes

- Increased data match rates for Aboriginal and Torres Strait Islander peoples.
- Improved access and engagement with digital health systems and services for Aboriginal and Torres Strait Islander peoples and organisations providing healthcare.
- Empowering this group by assisting the community-controlled sector to enhance consumer identification. This ensures that Aboriginal and Torres Strait Islander peoples maintain control over their data and have access to relevant information.

FY2025-26

HIA-9 – Enhanced search considerations

Leads: Australian Digital Health Agency, Services Australia

Description: This activity will establish current best practices and will evaluate options, feasibility and value of expanding identifying information. It will review options, benefits, risks, issues and impacts with relevant working parties and focus groups. It will provide defined recommendations for progression.

Intended outcomes

- Significantly increased match rate returns.
- Meeting of consumer expectations around why collecting the information is important and increased consumer input to high-quality data and reliability of matching.
- Increased alignment with other digital services and international experience.

HIA-10 - IHIs for newborns

Leads: Australian Digital Health Agency, Services Australia

Description: This activity will create a process for automatic allocation of IHIs for newborns that ensures a My Health Record can be created. It will include clinical records and ePrescribing from birth to inform neonatal care. There is also a need to get IHIs into hospitals in real time as part of the Birth of a Child program. This will support government strategies highlighted in the Interoperability Plan and Digital Health Blueprint and Action Plan.



Intended outcomes

- Optimised processes for managing IHIs for newborns, aligning with registration processes and enabling seamless and robust identification in all aspects of healthcare provision.
- Clear approach for healthcare providers to adopt the processes to manage IHIs for newborns.

FY2026-27

HIA-11 – Consumer-empowered matching

Leads: Department of Health and Aged Care, Australian Digital Health Agency, Services Australia

Description: This activity will analyse options to leverage existing electronic bookings and requests for admission activity or alternative solutions such as apps or patient portals to enable consumers to enter or verify registration data and reduce dependency on error-prone manual entry of consumer data. It will also identify options to enable consumers to more easily update information to ensure Services Australia details are consistent with details held by the consumers' healthcare providers.

Intended outcomes

- Simplified process at registration for clinic staff.
- Leveraged use of widely available technology.
- Consumers able to update their details more easily.
- Increased consumer empowerment.
- Increased quality of data as entered by the individual concerned.



Architecture and data standards

FY2024-25

HIA-12 – Healthcare Provider Identifiers – Organisation – Guidance on appropriate structures

Leads: Australian Digital Health Agency, Services Australia

Description: This activity will develop guidelines and improved processes to help health services of different types establish, support and maintain HPI-O structures that support health and care use cases.

It will review and streamline the allocation processes and business rules relating to HPI-Is and HPI-Os to address jurisdictional concerns.

Intended outcomes

- Health services have a clear understanding of the use of HPI-Os and the structures required to support the intended purpose.
- HPI-O structures are effective in supporting requirements for digital health, health and aged care claims and payments, care and support.

HIA-13 - HI Service conformance review and update

Lead: Australian Digital Health Agency

Description: This activity will review and update the HI Service conformance documentation to address opportunities to refine requirements that could support improved match rates.

Intended outcome

- Updated conformance requirements.
- Opportunities reviewed and identified to streamline conformance assessment.

HIA-14 – Update technical standards

Leads: Australian Digital Health Agency, Services Australia

Description: The technical specifications for the HI Service have not undergone a major review, yet there have been many changes to interoperability and integration standards – in particular the increasing use of FHIR® (Fast Healthcare Interoperability Resources). A review will be undertaken to ensure the HI Service can meet emerging requirements.

Working with the Australian Institute of Health and Welfare, this will include a review of supported standards, some of which are out of date.

Consideration of standards relating to service types and provider types would also be beneficial in the wider use of HPI-Is and HPI-Os.

Consideration will be given to improving digital channels to allow individuals to update their demographics in the HI Service as well as to attributes that ensure consistent and reliable identifier matching.



Architecture and data standards (cont.)

Intended outcomes

- HI Service uses contemporary technical and data standards aligned with endorsed health metadata standards as described in the Metadata Online Registry where appropriate.
- Technical specifications are in place that meet future requirements, including new interfaces based on FHIR®.

FY2025-26

HIA-15 - HI Service architecture and future extensibility

Leads: Australian Digital Health Agency, Services Australia

Description: In relation to architecture and future extensibility, an update may be required of the modelling performed by Services Australia to assess the impact of projected volumes as use of the My Health Record system and other programs gains momentum. Enhancements may also be required to the HI Service to maintain service levels. This will include a review of service levels and healthcare identifiers technical specifications to ensure they remain fit for purpose.

Intended outcome

 Accessible, accurate and meaningful modelling is available to inform system operations, architectural design, decision-making and service level agreements and to ensure continued appropriateness to meet current and planned health service use cases.

FY2026-27

HIA-16 – Clinical systems architecture and design

Lead: Australian Digital Health Agency

Description: This activity will develop guidelines on clinical systems architecture and functional requirements to support public and private health services in developing systems that enable optimal use of healthcare identifiers.

Intended outcomes

- Clear guidelines are available to support all health services to procure and design systems to use healthcare identifiers most effectively.
- More consistent and reliable use of healthcare identifiers to support digital health to improve quality of information and reduce risk of failed digital transactions.
- Improved consumer experience through increased reliability of matching and availability of healthcare identifiers to support information exchange.

National Healthcare Identifiers Roadmap 2023–2028



Operational improvement

FY2023-24

HIA-17 – Develop and implement HI stakeholder engagement and communication plan

Lead: Australian Digital Health Agency

Description: This activity will develop and implement a broad stakeholder engagement and communication plan for the HI Service to expand the knowledge of the important role healthcare identifiers perform in ensuring an integrated health system, improving outcomes and supporting secondary use to improve the quality and effectiveness of care and performance of the health system.

Intended outcome

An endorsed plan that defines:

- core messages
- activities to communicate changes to the HI Service, including policy or legislation changes
- processes to engage stakeholders in change processes
- reporting purpose, audience, coverage, frequency of reports
- feedback mechanisms
- · greater level of awareness of the HI Service uses and benefits
- higher levels of adoption and use of the HI Service.

HIA-18 – Develop education materials for HI Service

Lead: Australian Digital Health Agency

Description: This activity will develop audience-friendly materials to increase knowledge and understanding of the role of the HI Service and provide an easily accessible source for authoritative information. Materials may include:

- overview of healthcare identifiers what they are and why they are valuable
- · user guides to the HI Service and to each of the identifier types
- targeted guides for specific user types or use contexts
- online training and educational modules
- staff training guides and materials
- an implementation handbook to guide adoption and use of IHIs, HPI-Is and HPI-Os.

Intended outcome

- Consistent understanding by all HI Service stakeholders of the purpose of healthcare identifiers and how they can and should be used.
- Single, authoritative point of information able to be accessed by all HI Service stakeholders.



Operational improvement (cont.)

HIA-19 - HI support model and future operational requirements

Leads: Australian Digital Health Agency, Services Australia

Description: This activity considers a number of aspects of the technical operation of the HI Service:

- **Support arrangements:** Users have challenges with the support model for the HI Service, in particular identifying and being able to access the most relevant contact for different support requirements and being able to contact the HI Service directly for help. The roles of responsible officers and organisation maintenance officers in relation to the broader support model need to be reviewed to ensure there are no barriers to end users obtaining timely support.
- Monitoring and feedback processes: Review and enhance the monitoring and feedback processes on performance and usage of the HI Service. This would cover reporting between the HI Service operator and the Agency, between the service operator and health services to improve data quality and between the Agency and health services to evaluate use and opportunities to increase adoption. This will also seek to streamline the processes involved in notifying sites that there is a service outage or degradation in service affecting response times that could impact clinical service delivery.
- Establish ongoing continuous improvement: Consider how to best implement continual improvement of the HI Service through improvements to usage, access, education and communication about the HI Service; reporting, customer experience and interaction with the HI Service; and flexibility of the HI Service to futureproof it for changing models of care, for example, patient-centred, technological and new patient identification considerations such as increasing use of biometrics. This activity will develop a methodology for healthcare providers to objectively benchmark their record matching performance.

Intended outcomes

- More proactive approach to addressing any issues with use of the HI Service to improve data quality, accuracy of matching and broader use of healthcare identifiers across the sector.
- Support model that enables responsive resolution of end-user problems.
- Accessible, accurate and meaningful modelling is available to inform system operations, architectural design, decision-making and service level agreements and to ensure continued appropriateness to meet current and planned health service use cases.
- Established processes to continuously improve quality of match rates.
- Transparent reporting on utilisation and match rates.

FY2024-25

HIA-20 – Enhanced governance

Leads: Department of Health and Aged Care, Australian Digital Health Agency, Services Australia

Description: This activity will review and update the governance structure and processes for the HI Service, including oversight of implementation of this roadmap, to ensure that policy, functional and technical/performance requirements of all stakeholders continue to be met as the level of demand for the HI Service increases. The governance committees should include representation from all agencies with a stake in the HI Service.

Intended outcomes

- A governance structure that provides for increased state and territory representation and participation.
- Governance arrangements that provide a mechanism for all stakeholders in the HI Service to provide input into its strategic direction and operation.
- Inclusive decision-making around changes to the HI Service, including changes to business rules and a robust communication process to ensure all stakeholders have opportunities to provide input and receive advice on changes.
- Prioritisation of activities/enhancements to the HI Service.
- Transparent reporting on performance against service levels.
- Appropriate governance structure to monitor implementation of the HI Roadmap.

Figure 2 is an example of a visual representation of a consumer's clinical journey in the future state, where national healthcare identifiers have been implemented to support the discovery, access and sharing of information.

Patient journey



Figure 2: Patient journey – future state use of healthcare identifiers



Figure 2: Patient journey – future state use of healthcare identifiers (cont.)



Jane books an appointment online for a follow-up appointment with her GP. She completes a patient-reported outcome measures (PROM) survey and notes she is still in pain. HPI-I, HPI-O and IHI are used to make the booking. IHI ensures that the PROM survey results can be associated with the correct medical record and My Health Record.

Jane visits Dr Wilson for a review. Dr Wilson reviews the results on Jane's My Health Record, including the PROM. She prescribes an extended course of antibiotics using electronic prescribing. IHI is used to locate copies of diagnostic reports from the hospital stay on My Health Record and results of the PROM. HPI-I and HPI-O are used to log access to My Health Record, and the IHI, HPI-O and HPI-I are used for electronic prescribing.

The consultation ends and the practice manager lodges the Medicare claim online. Medicare claims benefit from a simpler environment and rationalised identifiers. IHI is attached to upload details to My Health Record.

Jane visits the pharmacy to collect her script, using her Active Script List (ASL) from her my health app. ASL is accessed using IHI. The PBS claims benefits from a simpler environment and rationalised identifiers. IHI is used for My Health Record upload of prescription details.

Dr Smith does a follow-up of his recent patients to check for any post-discharge complications to inform his practice. He sees that Jane was still in pain and needed further antibiotics, and that several patients had a similar experience, leading him to review his treatment protocols. IHI allows reliable upload to My Health Record to support follow-up. Doctors are able to get alerts if their patient has completed a PROM or patient-reported experience measures (PREM) using IHI and HPI-I/HPI-O.

End

Section 6

Alignment of activities with the National Healthcare Interoperability Plan actions

Actions related to healthcare identifiers specified in the Interoperability Plan are addressed in the HI Roadmap activities as follows (Table 2):

Da

Activity / Action	1.1: Using healthcare identifiers	1.2: Promoting healthcare identifiers	1.3: National Healthcare identifiers roadmap	1.4: Healthcare identifier matching	1.5: Review HPI-I conformance	1.6: Develop deeper network structures
HIA-1 – Legislative reform program	n/a	n/a	Yes	n/a	n/a	n/a
HIA-2 – Australian Government policy position for HI Service adoption	Yes	n/a	Yes	n/a	n/a	n/a
HIA-3 – Development of a simplified guide to the HI Act	n/a	Yes	n/a	n/a	n/a	n/a
HIA-4 – Template policies and guidelines on HI use	n/a	Yes	n/a	n/a	n/a	n/a

Table 2: Alignment of HI Roadmap activities to Interoperability Plan actions

Table 2: Alignment of HI Roadmap activities to Interoperability Plan Actions (cont.)

Activity / Action	1.1: Using healthcare identifiers	1.2: Promoting healthcare identifiers	1.3: National Healthcare identifiers roadmap	1.4: Healthcare identifier matching	1.5: Review HPI-I conformance	1.6: Develop deeper network structures
HIA-5 – HI use in consumer applications	Yes	n/a	n/a	n/a	n/a	n/a
HIA-6 – Data matching and data quality improvements	n/a	n/a	n/a	Yes	n/a	n/a
HIA-7 – Review existing messages and responses	Yes	n/a	n/a	n/a	n/a	n/a
HIA-8 – Improvements to data matching for Aboriginal and Torres Strait Islander peoples	n/a	n/a	n/a	Yes	n/a	n/a
HIA-9 – Enhanced search considerations	n/a	n/a	n/a	Yes	n/a	n/a
HIA-10 – IHIs for newborns	n/a	Yes	n/a	n/a	n/a	n/a
HIA-11 – Consumer- empowered matching	n/a	n/a	n/a	Yes	n/a	n/a
HIA-12 – Health Provider Identifiers – Organisation – Guidance on appropriate structures	n/a	Yes	n/a	n/a	n/a	Yes
HIA-13 – HI Service conformance review and update	n/a	n/a	n/a	n/a	Yes	n/a
HIA-14 – Update technical standards	Yes	n/a	n/a	Yes	Yes	n/a
HIA-15 – HI Service architecture and future extensibility	Yes	n/a	n/a	Yes	Yes	n/a
HIA-16 – Clinical systems architecture and design	n/a	n/a	Yes	n/a	n/a	n/a
HIA-17 – Develop and implement HI stakeholder engagement and communication plan	n/a	Yes	n/a	n/a	n/a	n/a

Table 2: Alignment of HI Roadmap activities to Interoperability Plan Actions (cont.)

Activity / Action	1.1: Using healthcare identifiers	1.2: Promoting healthcare identifiers	1.3: National Healthcare identifiers roadmap	1.4: Healthcare identifier matching	1.5: Review HPI-I conformance	1.6: Develop deeper network structures
HIA-18 – Development of education materials for HI Service	n/a	Yes	n/a	n/a	n/a	n/a
HIA-19 – HI support model and future operational requirements	Yes	n/a	n/a	Yes	Yes	n/a
HIA-20 – Enhanced governance	Yes	n/a	Yes	n/a	n/a	n/a

SECTION 7

HI stakeholders

Each of the stakeholders identified below is key to enabling best practice in the implementation and use of healthcare identifies, and as such are impacted by the activities identified on the National HI Roadmap.

Consumer Stakeholders

- Consumers
- Consumer Health Forum
- Consumer peak and representative groups
- Federation of Ethnic Communities Councils of Australia
- Other health, aged care and disability bodies

Delivery Partners and Collaborators

- Department of Health and Aged Care
- Australian Health Practitioner Regulation Agency (Ahpra)
- Independent Health and Aged Care Pricing Authority
- Healthcare software vendors
- Australian Digital Health Agency
- Office of the Australian Information Commissioner
- Researchers, planners
- National Infrastructure Operator
- Services Australia HI Service operator
- Australian Commission on Safety and Quality in Health Care
- Clinicians
- Non-Ahpra professional bodies
- Services Australia delivery of government payments and services
- Compliance regulators
- Public sector healthcare
- National Aboriginal Community Controlled Health Organisation
- States and territories
- Australian Institute of Health and Welfare
- Private sector healthcare
- Health infrastructure providers (e.g. real-time prescription monitoring, NHSD)

SECTION 8

Glossary

TERM	MEANING
ACAT	Aged Care Assessment Team
Agency	Australian Digital Health Agency
AHPRA	Australian Health Practitioner Regulation Agency
ASL	Active Script List
CNPD	Consolidated National Provider Directory
DoHAC	Department of Health and Aged Care
EMR	electronic medical record
FHIR®	Fast Healthcare Interoperability Resources
HI Service	Healthcare Identifiers Service
HPI-I	Healthcare Provider Identifier – Individual
HPI-O	Healthcare Provider Identifier – Organisation
IHI	Individual Healthcare Identifier
mHealth	mobile health
PAS	patient administration system
PREM	patient-reported experience measures
PROM	patient-reported outcome measures

Thank you to partners and contributors

This plan is the result of extensive consultation.

Thank you to all the governments, agencies, organisations and individuals who provided their time, expertise and advice during its development.



Australian Government Australian Digital Health Agency