Australian Government

Australian Digital Health Agency

# Health Connect

# Strategy

**Australian Digital Health Agency**

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**Acknowledgement of Country**

All partners acknowledge and respect Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of Country throughout Australia and their continuing connection to land, seas and community. We pay our respects to their cultures and to Elders past and present.

**Thank you to partners and contributors**

Thank you to the partners, organisations, healthcare providers and Australians from all walks of life who contributed to the Health Connect Australia Strategy and broader consultations. We appreciate all who gave their time, experience and expertise to contribute to Australia's digital health transformation journey.

**Role of the Australian Digital Health Agency**

The Australian Digital Health Agency (the Agency) is a corporate Commonwealth entity supported by all Australian governments to accelerate adoption and use of digital services and technologies across the Australian health ecosystem, as set out under the Public Governance, Performance and Accountability (Establishing the Australian Digital Health Agency) Rule 2016 (Agency Rule). The Agency Rule was created under the *Public Governance, Performance and Accountability Act 2013*. Under the Agency Rule, the Agency is charged with developing a digital health strategy at the national level for Australia.

The Agency has a key role in delivering the Intergovernmental Agreement on National Digital Health 2023–2027 (Intergovernmental Agreement), which has been signed by all Australian governments. The Agency delivers cross-jurisdictional priorities, as set out in the Intergovernmental Agreement.

Along with our partners, the Agency is responsible for leading and coordinating the implementation of the strategy and maintaining a national view of its progress. The Agency is also responsible for some key elements of the strategy, including the continued expansion of My Health Record and other platforms that support the secure and safe use of digital health systems across the nation.

**ISBN**

978-0-6459861-6-7

# Contents

# Introduction

Australia has made significant strides in improving the scope, breadth and capabilities of its digital health ecosystem at the national, state and territory, and local levels. Nationally, the implementation of the My Health Record system in 2012 helped to address gaps in information availability within the healthcare ecosystem, using standards and technologies available at the time. Jurisdictions and private organisations have also made significant investments in digital health. The movement to modern electronic medical record systems and work done through community-led digital health standards development processes such as the HL7™[1] Sparked Accelerator provide a foundation for a modern ecosystem of digital health interoperability standards across the country.

Over the past decade, digital health has transformed globally, with the rise of contemporary information-sharing standards such as FHIR®;[2] the proliferation of new models of care, such as virtual care, as well as wearable technology, artificial intelligence (AI) and mobile health apps; and increased threats to data security. However, challenges such as digital health inequity and low digital literacy levels remain.

The National Digital Health Strategy 2023–2028 emphasises continuing the transformation journey of digital health, building on the considerable improvements made in the past decade. The strategy's vision focuses on driving system interoperability and the fast, seamless exchange of information across multiple care settings, disciplines and jurisdictions. The strategy recognises that a step change in enabling true interoperability across the various ecosystem components is required. Such a change needs to go beyond current efforts that have addressed specific challenges in specific areas of the ecosystem (for example, the continued deployment of large-scale electronic medical record systems in a jurisdiction, or targeted national use cases such as electronic prescribing).

1 HL7 is a trademark of Health Level Seven International and is registered with the United States Patent and Trademark Office
2 FHIR® (Fast Healthcare Interoperability Resources®) is a standard for exchanging healthcare data that enables different electronic health systems to communicate and share information. HL7 Sparked, the Australian FHIR Accelerator, is a community comprising government, technology vendors, provider organisations, peak bodies, practitioners and domain experts that accelerates the creation and use of national FHIR® standards in healthcare information exchange.

# Problem statements

The Australian Digital Health Agency's National Healthcare Interoperability Plan defines a shared vision for long-term interoperability in the Australian healthcare environment. It recommends priority actions across governments, the health technology sector and private healthcare organisations to increase interoperability and improve workflows, accessibility and outcomes within the healthcare sector.

The Interoperability Plan identifies several barriers that impede effective national interoperability within digital health:

- the limited use of national healthcare identifiers and the National Clinical Terminology Service
- difficulty in discovering what information health services hold about an individual, beyond what is available in the My Health Record system and in an individual organisation's system
- concerns about the security of health information, particularly when exchanging information between systems
- a lack of clarity among healthcare providers about their professional and legal obligations in handling and sharing health information
- limited policy drivers (such as legislative and financial drivers) to encourage sector-wide participation and implementation of interoperable solutions and standards
- the absence of nationally agreed information sharing structures (such as the following sharing structures in use across Australia: HL7 v2, HL7 Clinical Document Architecture [CDA™],[3] HL7 FHIR® and Integrating the Healthcare Enterprise standards) and agreed profiles within such structures
- the additional challenges in regional, rural and remote settings due to historical gaps in digital connectivity and technology.

These barriers can be broadly categorised into 3 distinct but connected groups – legislative and policy challenges, change and adoption barriers, and technical constraints.

The extensive research and consultation efforts that informed the strategy and the Interoperability Plan consistently reiterated the criticality of legislative and policy settings to enable standardised and secure information sharing across Australian jurisdictions. Australia's federated structure and resulting patchwork of Commonwealth and jurisdictional information sharing and privacy legislation make it challenging to deliver standardised and interoperable information-sharing capabilities nationally.

From a technology standpoint, substantial investment has been made across Australia in health information systems and solutions. However, this investment is spread across multiple technology solutions that typically aim to solve relatively specific problems within geographic or organisational boundaries. Many of these solutions do not align with a holistic strategy for the Australian healthcare ecosystem, and they have resulted in:

3 CDA is a trademark of Health Level Seven International and is registered with the United States Patent and Trademark Office.

- the same information being captured, managed and exchanged multiple times to support different use cases
- a limited ability to effectively reuse previous investments
- different approaches being used to address the same needs across different organisations
- difficulty in understanding how to discover, locate and access information
- information not being available
- clinical systems and organisations maintaining numerous connections to other systems, with a variety of interface styles
- healthcare providers needing to maintain multiple authentication credentials to facilitate information sharing.

In turn, this complexity creates an administrative and financial burden on healthcare organisations (for example, managing contracts for a variety of third-party service providers). The overall health system is also burdened, because investment is inefficient and the complexity creates a barrier to effective data sharing.

# Intent

The National Digital Health Strategy's objectives and the Interoperability Plan's recommendations have been brought together to form the Health Connect Australia program's intent. Health Connect Australia aims to deliver a significant improvement to national digital health interoperability in Australia over the coming 5 years.

**Intent of Health Connect Australia**

Health Connect Australia will establish, evolve, innovate and refine a set of nationally consistent capabilities, products and standards, to facilitate health information sharing across existing systems and meet the evolving needs of consumers and healthcare providers.

At its core, Health Connect Australia is focused on delivering common approaches to healthcare interoperability that span the Australian health ecosystem. Health Connect Australia is not a single product. Instead, it is a collection of capabilities (legislative, policy and technical capabilities) seeking to address identified gaps in the digital health ecosystem and facilitate national health information sharing and availability. Health Connect Australia is not only about Australian Government–led investments to modernise national digital health infrastructure and capabilities. It also intends to provide all health system stakeholders with a set of reusable architectural patterns and principles that can be used to drive their own investments, which, collectively, can drive overall system interoperability. These patterns and principles will be released as architecture artefacts, implementation guides, technical specifications and conformance requirements. They will also be included in the Agency's Digital Health Procurement Guidelines and the National Digital Health Standards Catalogue where appropriate.

Using nationally consistent capabilities is a fundamental prerequisite to connecting healthcare providers, consumers and stakeholders across the country and transforming the Australian healthcare ecosystem. National interoperability and connectivity will enable the efficient exchange of health information, which will facilitate better health outcomes and help to empower consumers to actively manage their health.

The design and development of Health Connect Australia is informed by research conducted by the Agency that found that:

- Consumers want better access to their health information and choice in who can access it. Specifically, they want:
  - a single channel to access and upload their own health information; this includes consumers in rural, remote and regional areas and Aboriginal and Torres Strait Islander consumers and carers
  - to select the format and method of receiving documents (for example, an electronic request by SMS) and be notified when new documents are available or there are changes in their circumstances (for example, if there are limited care plan sessions remaining)

  - their historical health information shared between healthcare providers, such as when transferring to a new healthcare provider, when they have a care team or during transfers of care
  - the ability to provide consent for healthcare providers to access their health information and remove this access if required
  - choice of healthcare provider to fulfil a referral or request
- Healthcare providers seek interoperability and standardisation to enable access to patient health information. Specifically, they want:
  - their clinical systems to be interoperable – that is, to work with other systems and allow for timely access to and sharing of health information so there are no delays in providing care to patients
  - a single channel to access and contribute to a comprehensive patient record to facilitate better patient care
  - standardisation of collected health information to ensure quality and patient safety and avoidance of repeat investigations and testing
  - digitisation of workflows to avoid delays in care or loss of documentation
  - continuous health information exchange, which is core to a functional healthcare system design and for consumer-centric care.

# Strategic goals

**Table 1 highlights the Health Connect Australia strategic goals and considerations for the program's initiatives.**

**Table 1: Health Connect Australia strategic goals and considerations**

| Strategic goal | Information access:<br>Improve access to health information for the right people at the right time | Consumer-centric:<br>Enable consumers to control their healthcare journey | Digital transformation:<br>Establish national digital health infrastructure and tools to support health outcomes | Trusted and secure:<br>Ensure information is secure, high quality and addresses privacy concerns |
|---|---|---|---|---|
| **Considerations** | • Health information is accessed – including through sharing of information across public and private providers and states and territories – where and when it's needed, based on access rights and the use of national healthcare identifiers<br>• Health information is discoverable and accessible at the point of care in real time<br>• Remote monitoring supports reporting of chronic conditions<br>• Healthcare provider and consumer health information are integrated across consumers' healthcare journeys<br>• Business analytics and artificial intelligence are used to drive health insights<br>• Policy and regulation support national health information use, access, sharing and data sovereignty<br>• National legislative settings are needed to support cross-border information sharing<br>• Lack of accessibility, including internet connectivity, and infrastructure to support information exchange, particularly in rural and remote locations, is a key consideration | • Consumers are empowered to manage their wellbeing across emergency, acute and community care systems<br>• Consumers are empowered to access, manage and control their information<br>• A seamless care experience across consumer health journeys is supported, reducing the need for consumers to re-tell their story and provide information multiple times across their healthcare journey<br>• Australians have equitable access to health information<br>• Policy and legislation reflect consumer choice in who can access and use their health information<br>• Consumers can engage in information sharing with their care team<br>• The needs and experiences of consumers are a focus in the design and implementation of Health Connect Australia's digital solutions | • Modern technology is used to build the Health Connect Australia components and ensure national scalability<br>• How users interact with services is enhanced through seamless and efficient digital channels<br>• Enterprise architecture standards and patterns are applied to technology system design<br>• National infrastructure is used and reused, leveraging current investments<br>• Information technology system duplication and technical debt maintenance are reduced, and reusability of system components is improved<br>• A single path for health professionals to provide health and service information is achieved<br>• Health Connect Australia facilitates the capture, access and exchange of information across the health ecosystem<br>• The human aspect of digital transformation, including training and support for users of the system, is managed<br>• The long-term sustainability of digital initiatives, including environmental impact and resource management, is ensured | • Health information is secured, and use of advanced cybersecurity protocols to protect sensitive information from breaches and cyber attacks is ensured<br>• Policy and regulatory settings cultivate digital health adoption and improve processes for funding, use and innovation. Regulatory settings are flexible to accommodate policy change.'<br>• All users' identities leverage national identifier services<br>• The quality of information provided is trusted and usable at the point of care<br>• Health information is aligned with international and Australian standards<br>• Efficiency and financial sustainability are promoted<br>• The quality of uploaded information is improved<br>• Traceability and auditability of access to information underpins information exchange<br>• Privacy regulations and international best practices are adhered to, upholding high standards of privacy, data security and trust<br>• Users and staff are educated about data security and privacy principles<br>• Authorisation and consent framework underpins participation |

# Architecture

The Health Connect Australia architecture is designed to create a seamless, interoperable digital health ecosystem that enables secure, efficient and standardised information exchange across the healthcare sector. Built on a federated model with reusable technology and interoperability patterns, it supports flexible integration while ensuring alignment with national standards and evolving healthcare needs.

## Principles and design

To maximise interoperability in the Australian health ecosystem and break the current pattern of investing in siloed systems, the Health Connect Australia architecture (Figure 1) is founded on a common set of core capabilities. It remains flexible and adaptable to deal with the broadest range of health system requirements and models of care.

To achieve the goals of Health Connect Australia, the Agency and the Australian Government will oversee and implement key aspects of the technology delivery. True success, however, will come from all health system technology investments aligning to the nationally agreed common architectural approaches and adopting agreed national standards. A structured approach to the delivery and adoption of the Health Connect Australia architecture will be taken to support prioritised use cases. Investment in foundational systems described within the Health Connect Australia architecture will be targeted to ensure they can be reused across various applications and use cases. The Health Connect Australia architecture approach describes:

- a federated model to allow interconnected health information technology systems to function in a unified manner – this model balances the use of centralised components delivered nationally and local system components
- a common technology framework to support multiple legislative and policy models
- interoperability patterns that establish reusable technology approaches, ensuring seamless system integration and data exchange.

While the architecture is designed for broad reusability, certain foundational elements must be in place to ensure the effective deployment of initial use cases. These include:

- secure identity and authorisation mechanisms, ensuring that each participant can access information safely, following business rules and privacy protections
- a standardised approach to real-time data exchange, enabling seamless interoperability for healthcare entities across organisation, state and territory borders
- adoption of open national and international interoperability standards, ensuring health information can be accurately generated, shared and interpreted across systems using consistent data and terminology frameworks

- consumer choice, allowing individuals to select their care teams and determine how their health information is accessed, promoting transparency and personal agency in healthcare decisions.

These foundations have informed the development of the Health Connect Australia roadmap and architecture approach, outlined later in this document.

# A standards-driven approach: AU-CFI and Sparked

Health Connect Australia's technical interfaces and data payloads will be based on open, widely adopted interoperability standards such as FHIR® and SNOMED CT®. The modernisation of the National Digital Health Infrastructure, including My Health Record (MHR), will be guided by FHIR standards. Future deployments of Health Connect will also adopt FHIR as the preferred standard, unless a different standard is more appropriate for a specific context, use case, or requirement.

To support this, the Agency will lead the development of the AU Core Framework for Interoperability (AU-CFI) through collaborative community processes. AU-CFI will define API specifications for services within the Health Connect ecosystem, defining how requests and responses are structured and transmitted between systems.

Participation in the Health Connect environment will require national infrastructure providers, vendors, and industry stakeholders to adopt AU-CFI.

The Sparked initiative, which is an HL7® Australia FHIR Accelerator already underway, is accelerating the development of a foundational set of solution-agnostic FHIR standards tailored for Australian healthcare settings. This includes the creation of implementation guides (IGs) that support a wide range of information exchange scenarios and interoperability patterns.

Health Connect, including MHR on FHIR, will use both AU-CFI and Sparked outputs to deliver consistent, standards-based implementation guides that support a consistent approach required for seamless national interoperability.

All new specifications developed by the Agency for Health Connect Australia will be created in close consultation with the Australian implementer community. Stakeholders will be supported to work together to use common standards despite different practices and ways of working.

# Common technology to support multiple legislative and policy models

By enabling the reuse of common technology and interoperability patterns across multiple legislative and policy frameworks, the Health Connect Australia architecture reduces the need for separate, siloed investments in information-sharing solutions tailored to individual use cases with specific legal and policy requirements. Central to the architectural approach to Health Connect Australia is the concept of interoperability patterns. These patterns describe the different generic processes for interoperability that define a consistent and reusable technology approach within a federated environment. Technology investment from all parties operating as part of the ecosystem will align with the technology design that underpins these patterns. Relevant patterns can be adopted to ensure a consistent approach when addressing specific needs.

Health Connect Australia will enable the following 5 interoperability patterns:

- **consumer-mediated exchange,** which facilitates the sharing of information when the consumer plays a proactive role in managing the recipient of information
- **directed information exchange,** which facilitates the sharing of health information with a predetermined recipient of the information
- **discovered information exchange,** which facilitates the discovery of and access to shared health information based on search parameters defined by the person or organisation looking for information
- **information lifecycle,** which allows for lifecycle management of information published into the ecosystem, including the status of information
- **information publish,** which enables information to be made available in the digital health ecosystem so it can be accessed and discovered.

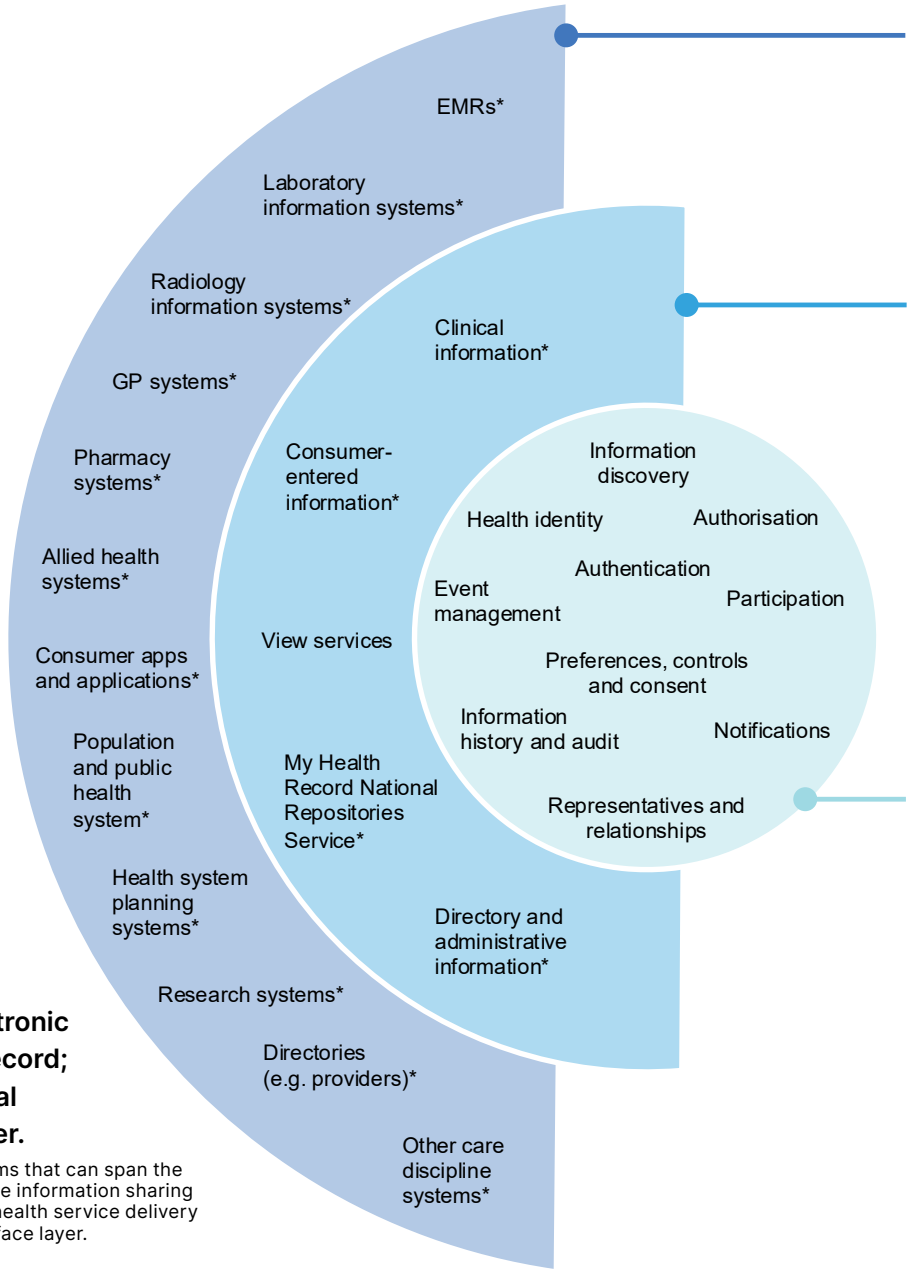
The 5 patterns are designed to complement each other. For example, the directed information exchange and consumer-mediated exchange patterns could work alongside each other to allow an electronic referral for a specialist to be sent directly to a specialist provider agreed to by a consumer and their general practitioner (via the directed information exchange). In parallel, they will allow a consumer to choose a different specialist provider (via the consumer-mediated exchange pattern) should they change their mind. The discovered information exchange pattern could then allow this information to be found in support of a future unrelated consultation as part of a consumer's longitudinal record.

This flexibility will enable the technical investments and capabilities that support Health Connect Australia to work effectively within the current legislative and policy environment, including the *My Health Records Act 2012* (Cth) and *Healthcare Identifiers Act 2010* (Cth). The Australian and state and territory governments can also undertake the necessary reform activities to enable a more unified health information sharing legislative and policy framework, which will be necessary to fully achieve the vision of Health Connect Australia.

# Health Connect Australia layered architecture

The Health Connect Australia architecture describes 3 layers that each contain distinct but interrelated capabilities. Combined, these capabilities provide a set of functions needed to deliver the overall Health Connect Australia vision, without introducing unnecessary complexity or coupling. Interoperability within and between these layers will be based on common standards to ensure information shared between systems across the health ecosystem is meaningful and usable (Figure 1).

**Figure 1: Health Connect Australia layered architecture**




**EMR: electronic medical record; GP: general practitioner.**

* Single systems that can span the functions of the information sharing layer and the health service delivery and user interface layer.

### Health service delivery and user interface layer

This layer includes the clinical information systems and administration systems that are integrated with the common services layer and will access the health information sharing layer to exchange clinical and personal health information between organisations.

It is expected that the systems in this layer will predominantly be owned and operated by states and territories and private organisations that have adopted healthcare software products and will target specific clinical or consumer needs and workflows.

### Health information sharing layer

The systems in this layer will facilitate the sharing of health information through the adoption and application of standards.

Systems in this layer will conform and interact with the common service layer to ensure use of common functions such as consent, identity, authorisation, auditing, event management and participating in common discovery services to support location of information in this layer.

This layer not only includes systems that hold clinical data but also systems that hold consumer-entered or consumer-managed data or administrative data such as provider information. It also includes systems that present alternate views of data such as consolidation from multiple data sources.

Multiple systems will perform the functions of this layer, including those delivered by state and territories, private organisations and the Australian Government.

Systems in this layer may be combined with systems in the health service delivery and user interface layer when a single system both holds the data and provides access to the data via a user interface.

### Common services layer

This layer delivers the required common reusable foundation elements, including:

- functions such as authentication, participation, preferences, consent, representative, relationship and care team management functions that deliver a repeatable approach, establishing trust with participants in a national digital health ecosystem – this includes identity validation and authorisation to use and exchange health information
- services to support standardised patterns to trigger and deliver notifications to participants (e.g. publish subscribe services)
- audit capabilities (as required), allowing the history of digital health information (such as creation, view, update and exchange) to be viewed
- services to simplify discovery of health information stored across different digital health systems.

As this layer holds the common, centralised functions within the federated Health Connect Australia model, its functions are expected to be progressively delivered nationally across multiple phases of the program.

# Legislative and policy considerations

The Department of Health, Disability and Ageing, with jurisdictions and other key stakeholders, is leading work to develop and implement the necessary legislative and policy settings to enable Health Connect Australia.

The department is in the early stages of developing a robust legislative and policy health information sharing framework to streamline the collection, use and disclosure of health information nationally. This is in direct response to the legislative and policy challenges identified by the Interoperability Plan (see priority area 3 – information sharing).

The framework is expected to outline an authorisation and access control model that simplifies the authorisations and prohibitions for the collection, use and disclosure of health information that will be enabled through the technical approaches provided by Health Connect Australia. It will build on existing laws and policies and consider changes that might be required to more fully realise the benefits of Health Connect Australia, while protecting the privacy of consumers and individual healthcare providers.

In the short term, the department is leading legislative reforms to the *Healthcare Identifiers Act 2010* (Cth). The reforms will address some of the fundamental challenges to interoperability identified by the Interoperability Plan (namely greater and more consistent use of national healthcare identifiers) and lay the groundwork for the framework.

The department is also considering regulatory approaches to support adoption of national health information standards, which are critical to enabling interoperability. Stronger regulation of adoption of national health information standards, including mandating the use of FHIR®, are options being considered.

Any proposed legislative and policy changes must be informed by meaningful stakeholder engagement – including with jurisdictions, private organisations, healthcare providers and the community – as well as privacy impact assessments and policy impact analyses. Legislative changes are subject to Australian Government decisions and parliamentary processes. Jurisdictional agreement on necessary reforms is expected to be reflected in a new or amended Intergovernmental Agreement on National Digital Health.

The technical architecture approach is designed to support a range of legislative and policy frameworks from the outset. Efforts to simplify and better align the legislative and policy landscape will be crucial to ensuring early benefit from Health Connect Australia initiatives and to fully achieving the program's goals in the longer term. Ensuring architectural flexibility will allow Health Connect Australia to rapidly cater to future national and jurisdictional policy priorities as they emerge.

# Representative healthcare journeys

Representative healthcare journeys are included in this document to illustrate the real-world impact of Health Connect Australia and demonstrate how improved interoperability can enhance patient care and system efficiency. By comparing current challenges with the future Health Connect Australia enabled experience, these journeys provide a tangible representation of how seamless information exchange supports better decision-making, reduces administrative burdens and fosters a more connected healthcare ecosystem.

These examples serve as a practical guide to understanding the benefits of digital transformation and the role of standardised, interoperable solutions in shaping the future of healthcare.

Figures 2 and 3 provide a comparison of a current healthcare journey and a future journey supported by Health Connect Australia, illustrating the real-world impact of achieving Health Connect Australia's goals. The current barriers to information sharing, shown in Figure 2, are resolved in Figure 3 through Health Connect Australia's information sharing.

Figures 2 and 3 show a representative journey and are not intended to constrain journeys or prescribe a specific journey for all scenarios.

Figure 4 provides a high-level overview of the system interactions that underpin the first 2 stages of the representative journey shown in Figure 3. A more complete view of the interactions throughout this journey can be found in the Health Connect Australia Architecture Approach document.

**Figure 2: Representative current-state healthcare journey, highlighting pain points**





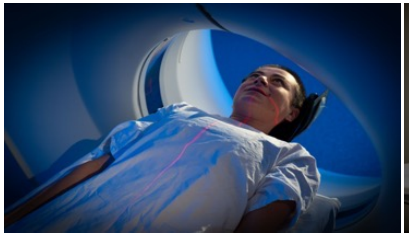
| Trigger and Transfer | Acute Care | GP Care | Diagnostic Imaging | Specialist Care |
|---|---|---|---|---|
| A Consumer experiences a health event, and an ambulance is called. | The Consumer is transferred to hospital. | The Consumer makes a GP appointment to discuss their recent ED hospitalisation. | ⚠ The Consumer makes a Diagnostic Imaging appointment with recommended provider and must remember to bring paper request. | ⚠ The Consumer makes a specialist appointment with the recommended provider and must remember to bring paper referral. |
| ⚠ A Paramedic arrives with limited information about the patient. | ⚠ The ED clinician receives limited information about the patient and their condition from verbal handover and handwritten incident notes. | ⚠ The Consumer shares information that they can remember about their ED visit and discharge summary. | The Diagnostic Imaging provider runs the tests and analyses. | ⚠ The Specialist contacts the GP for access to further health information but doesn't receive this within the appointment. |
| ⚠ The family and carer share limited information about the Consumer's health. The Paramedic requires more detail but cannot access it. | ⚠ The ED clinician requires further information and requests it from other HCPs but does not receive it in a timely manner. | ⚠ The GP requests the discharge summary and Diagnostic Imaging reports from the hospital but do not receive them within the appointment. | ⚠ The Consumer is not notified when their results are ready, and they call their GP to check. | ⚠ The Specialist provides care based on available information. |
| The Paramedic administers initial treatment. | The Consumer is triaged, has Diagnostic Imaging taken, and receives treatment. | The GP makes a request for new Diagnostic Imaging as part of their care plan. | ⚠ The GP checks if results have been received and calls the Diagnostic Imaging provider for results. | ⚠ The Specialist updates the consumer's care plan and provides them with a new physical copy. |
| ⚠ The Paramedic informs the hospital about the incoming patient. | ⚠ The Consumer is discharged from the ED with a physical discharge summary. Their GP is not notified about their hospital visit. | ⚠ The Consumer receives a paper request with a provider recommendation. | ⚠ The Consumer makes a GP appointment to discuss their results and receives a paper specialist referral with provider recommendation. | ⚠ The Specialist may not notify the GP of any updates. |

⚠ Pain point

ED: emergency department; GP: general practitioner.

*Note: Secure messaging is also used to transfer health information between care settings.

**Figure 3: Representative future-state healthcare journey, highlighting activities enabled by Health Connect Australia**

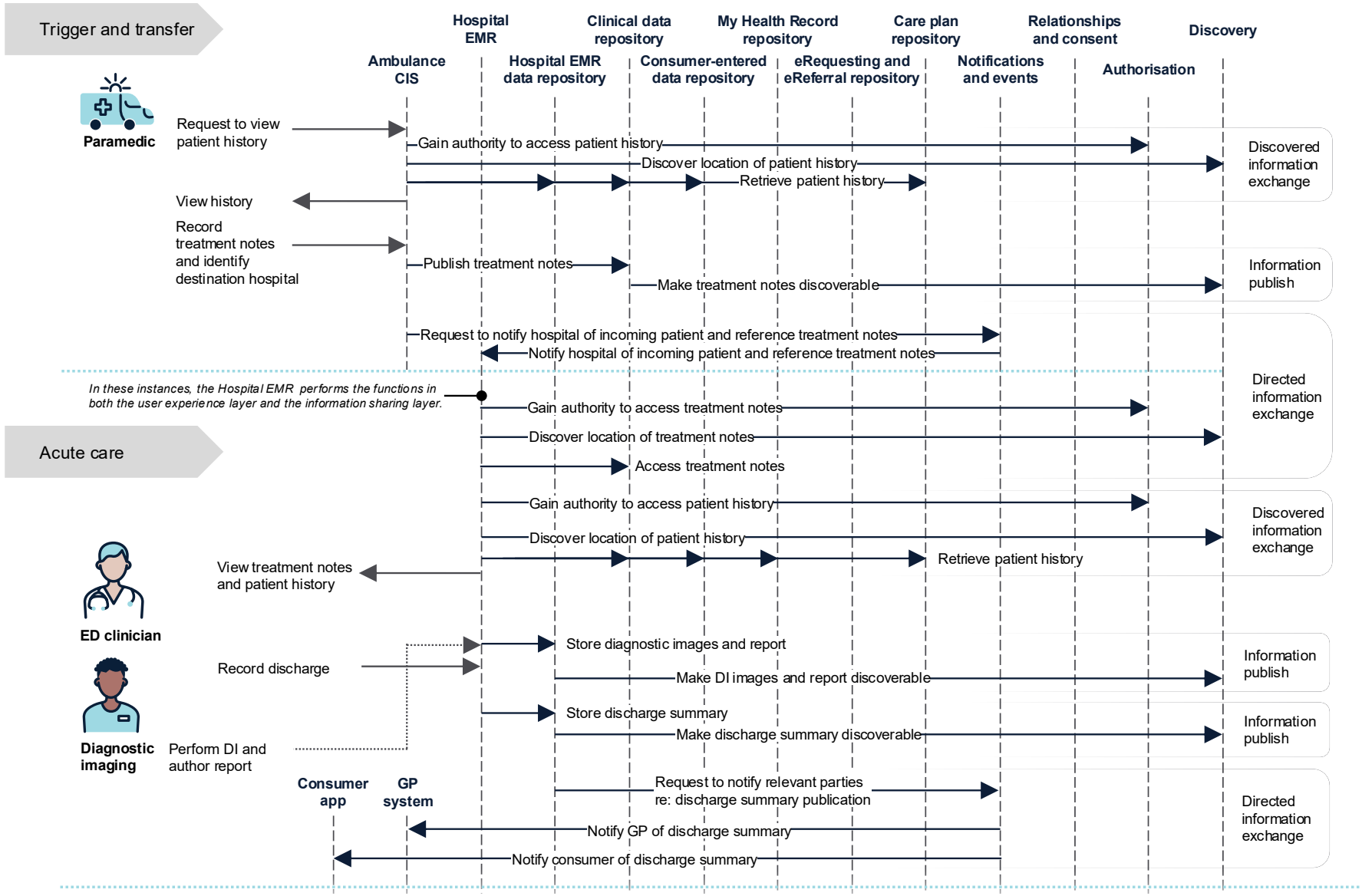


| Trigger and transfer | Acute care | GP care | Diagnostic imaging | Specialist care |
|---|---|---|---|---|
| A consumer experiences a health event, and an ambulance is called. | The patient is transferred to hospital. | HC The GP contacts the patient to arrange an appointment to discuss their recent ED visit and diagnostic imaging results. | HC The patient makes an appointment with the recommended diagnostic imaging provider and shares the eRequest. The eRequest is retrieved by the provider. | HC The patient makes a specialist appointment with the recommended provider and adds the specialist to their care team, which gives them access to their information. |
| HC The paramedic arrives with a full view of the patient's medical history. | HC The ED clinician can access the patient's full medical history and the paramedic's incident notes in advance. | HC The GP makes an eRequest for follow-up diagnostic imaging testing as part of their care plan. | The diagnostic imaging provider runs the tests and analyses. | HC The specialist looks up the patient's health information to provide care based on the full information available. |
| The paramedic administers initial treatment. | The patient is triaged, has diagnostic imaging taken, and receives treatment. | HC The patient receives an eRequest with a provider recommendation, clearly stating that they can attend a provider of their choice. | HC The patient and GP are notified about the test results being ready and accessible. | HC The specialist updates the patient's care plan, which gets updated in the patient's health record. |
| HC The paramedic informs the hospital about the incoming patient and sends incident notes. | HC The patient is discharged from ED with a digital discharge summary and digital diagnostic imaging results, and their GP is notified about their hospital visit. | The patient agrees with the GP to use their recommended diagnostic imaging provider. | HC The GP contacts the patient to discuss the results and recommends a specialist. The patient agrees with the recommended provider and the eReferral is sent directly to the specialist. | HC The GP can access any of the specialist's contributions to the patient's care plan. |

HC Activity enabled through Health Connect Australia

ED: emergency department; GP: general practitioner.

**Figure 4: High-level overview of the system interactions that underpin the first 2 stages of the representative user journey shown in Figure 3**




CIS: clinical information system; DI: diagnostic imaging; ED: emergency department; EMR: electronic medical record; GP: general practitioner