Australian Government

Australian Digital Health Agency

My Health Record
App Vendor Guide to the Connection Process

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1   Introduction

1.1   Purpose

This document describes the process involved in developing an application (app) that connects with the My Health Record system.

1.2   Intended audience

The intended audience for this document is software developers planning to create mobile applications (apps) that connect with the My Health Record system.

1.3   Scope

This document is limited to discussing software connections to the My Health Record system. It covers:

- an overview of the My Health Record system
- app developer opportunities
- key resources
- steps to connect to the My Health Record system
- key support contacts.

2 My Health Record

2.1 Overview

The My Health Record system gives individuals, their representatives and their healthcare providers the ability to view their digital health record in one central online location.

The primary purpose of the My Health Record system is to support the provision of healthcare through faster, safer and more efficient communication of health information. Founded in 2012 as the Personally Controlled Electronic Health Record (PCEHR), the My Health Record system has undergone expansions to the services it provides to individuals and healthcare providers alike.

2.2 Enabling apps to connect with My Health Record

A key objective of the My Health Record system is to drive meaningful use of stored information by opening data to app developers with innovative health solutions. App developers have the opportunity to access the wealth of data in the My Health Record system to create compelling and unique apps for individuals.

The aim is to drive meaningful use by promoting the engagement and empowerment of individuals through improved access and use of My Health Record data via apps that give individuals better access to health information.

The My Health Record strategy includes collaborating with app developers to construct Application Programming Interfaces (APIs) that they find valuable, fostering app and solution innovation while ensuring privacy and security compliance across app solutions and refining and expanding data architecture and standards to maximise meaningful use.

A set of APIs constructed using the HL7 developed Fast Healthcare Interoperability Resources (FHIR) standard, allow app developers to access and upload My Health Record data of consenting patients. The My Health Record system holds a variety of health information that is accessible for use in apps, including:

2.2.1 Clinical records

- Shared Health Summary
- e-Referral
- Specialist Letter
- Discharge Summary
- Event Summary
- Diagnostic Imaging Report
- Pathology report

2.2.2 Medicine records

- eHealth Prescription record
- eHealth Dispense record

- Pharmacist Shared Medicines List

2.2.3 Personal health information
- Personal Health Note (Consumer apps only)
- Personal health summary

2.2.4 Advance care planning
- Advance Care Directive Custodian Record (also referred to as Advance Care Document Custodian)
- Advance Care Planning Document

2.2.5 Childhood development information
- Consumer Entered Achievements (Consumer apps only)
- Consumer Entered Measurements
- Child Parent Questionnaire

2.2.6 Medicare records
- Medicare/DVA Benefits Report
- Australian Organ Donor Register
- Pharmaceutical Benefits Report
- Australian Immunisation Register

The set of API's will evolve over time as the My Health Record system matures and is prioritised by app developer demand. App developers will be notified when an API is updated or added, so that there is time to make any necessary or desired changes to their app. Refer to the *FHIR Gateway API Specification* [FHIRGAS] in the Developer Centre[1] for detailed information about available API's.

2.3 Choosing how to connect with My Health Record

There are many ways to develop an app that can connect with the My Health Record system API's, including the following app types:

1   **Mobile applications** are developed to run natively on a specific mobile device or platform (e.g. iOS, Android).

2   **Web applications** are powered by a web browser (e.g. Chrome, Firefox, Safari etc.) through the internet. Web applications are typically built using HTML, CSS and JavaScript and served through a mobile or desktop browser. Web applications can be built to look and feel just like a native application but will always runs through a visible browser.

3   **Hybrid applications** are usually coded in HTML, CSS and JavaScript. They are run through an invisible browser which has been packaged into a native application. This enables the application to have the look, feel and functionality of a native application. Hybrid applications allow developers to minimise development time as minimal work is required to target various mobile operating systems. An additional benefit of using a hybrid application framework includes allowing developers to access Native API calls which can be used to

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[1] https://developer.digitalhealth.gov.au/

enable binary security mechanisms from the device itself. Hybrid Applications can also be distributed through native application stores (allowing for additional vetting).

4 **Progressive web applications** can appear and behave as native applications on mobile devices but do not require installation of the application on the device.

The type of app and how data will be transmitted, will determine the model for interacting with the My Health Record system. For example, an app may connect directly to the My Health Record system via the My Health Record FHIR® Gateway, or via an intermediary server managed by the app developer.

The two interaction models available are **consumer/self-care**, and **consumer connection via platform**.
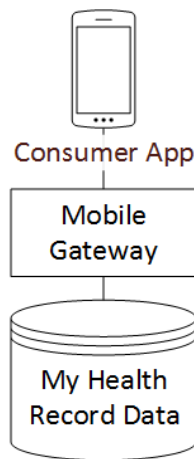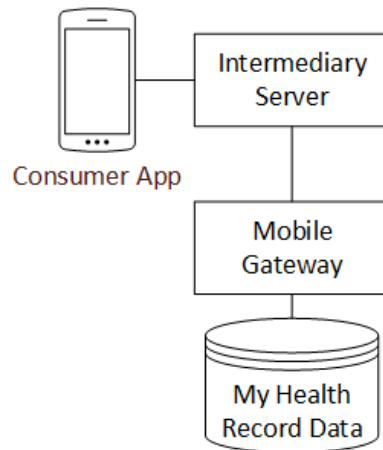

Figure 1 - Consumer/self-care

Figure 2 - Consumer connection via platform

3   App developer requirements

The System Operator takes the security of an individual's health and other personal information very seriously. The Agency takes robust precautions to protect personal information we hold from misuse and loss, and from unauthorised access or disclosure. It is important to understand the obligations that need to be adhered to before registering to connect an app with the My Health Record system.

An app developer connecting with the My Health Record system is required to comply with a range of obligations set out under the following legislation:

- *My Health Records Act 2012* [MHRA2012]

- *My Health Records Regulation 2012* [MHRR2012]

- *My Health Records Rule 2016* [MHRR2016].

The full set of obligations and requirements are set out in the *Portal Operator Registration Agreement (PORA),* and interoperability requirements publications on the Developer Centre, namely:

- *Consent Requirements and Guidelines* [CRG2020]

- *Operations Requirements and Guidelines* [ORG2020]

- *Presentation Requirements and Guidelines* [PRG2020]

- *Security Requirements and Guidelines* [SRG2020].

Below is a sample of the requirements an app developer will need to meet before being considered eligible to access the My Health Record system production environment.

- The app developer must have a head office and be registered in Australia.

- My Health Record data cannot leave Australia - and cannot be accessed, backed up, or managed by service providers from overseas (for example, onshore technical support only).

- There must be a clear mechanism in place for obtaining informed consent from consumers to collect, use or disclose their My Health Record data. This should be in a simple and user-friendly reading format.

- The app must be for the purpose of healthcare.

- If not already applicable, the app developer must opt-in to being subject to the Privacy Act, and therefore be required to adhere to the rules relating to, for example, data privacy and informed consent.

- The app must utilise strong cryptography to secure My Health Record data at rest, and when in transit.

4 Key Resources

4.1 Joining the developer community

An online community is available for app developers, who may be new or established in the app space, to connect and collaboratively source information about integrating apps to the My Health Record system. The Developer Centre (https://developer.digitalhealth.gov.au) hosts a wide range of helpful resources for app developers, including technical documentation and frequently asked questions to assist with app development and testing. An account is required to access these resources (https://developer.digitalhealth.gov.au/user/register).

4.2 Using the Developer Centre resources

To assist with the connection process, the following key resources are available on the Developer Centre (https://developer.digitalhealth.gov.au/mobile).

Table 1 - Developer Centre

Stage	Resources
Registration	*Portal Operator Registration Form*
App development	*Operations Requirements and Guidelines* *Consent Requirements and Guidelines* *Security Requirements and Guidelines* *Presentation Requirements and Guidelines* *API Release Notes and API Specifications* *API Data and Error Mapping* *Mobility Defect and Problem Incident API Response Changes.*
Seeking production environment access	*Production Environment Access Request* (PEAR) form *Portal Operator Registration Agreement* (PORA)
After production access	*Managing Your App in Production* outlines the process for notifying the My Health Record System Operator (System Operator) about incidents and other events, such as changes and upgrades to apps that connect to the My Health Record system.

5 Steps to connect to My Health Record

Below you will find the steps to connect with the My Health Record system, including information about registering your organisation and app, development and testing, and what you need to know about declaring your app's conformance to mandatory requirements. A My Health Record team member will reach out to you to help guide you through the connection process.

5.1 Vendor onboarding process overview

Figure 3 summarises the steps necessary to test your product prior to connecting to the My Health Record system. Section 5.2 describes these steps in more detail.
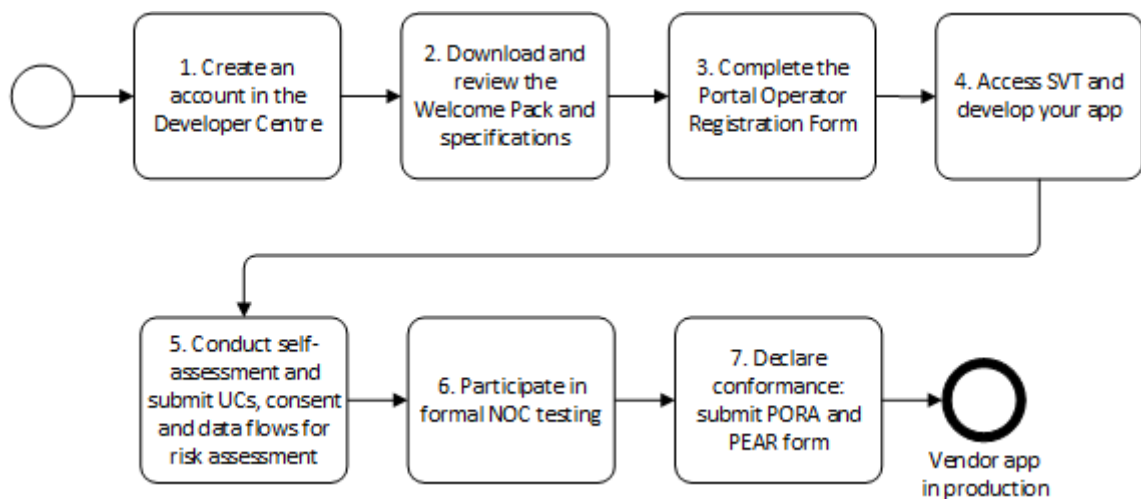

Figure 3 - Vendor onboarding process

5.2 Vendor conformance process description

Table 2 provides a description of vendor actions required for each step of the vendor conformance process.

The step numbers correlate to the numbers within the process flow described in Figure 3.

Table 2 - Required vendor actions

Step	Stage	Vendor action	Result
1	Register to join the My Health Record Developer Community	a Create an account at: https://developer.digitalhealth.gov.au/user/register. b Enter your personal information. c Accept the terms of use. d Complete the registration process.	• Access to requirements.
2	Review key documents	Read through the materials on the Developer Centre website (https://developer.digitalhealth.gov.au/mobile): • *Portal Operator Registration Agreement* • *Operations Requirements and Guidelines* • *Consent Requirements and Guidelines* • *Security Requirements and Guidelines* • *Presentation Requirements and Guidelines* • *API Release Notes and API Specifications* • *API Data and Error Mapping* • *Mobility Defect and Problem Incident API Response Changes* • *App Vendor Guide to the Connection Process (this document)* • *Portal Operator Registration Form* • *Managing Your App in Production.*	• Overview of the process and the requirements that must be satisfied to connect your app to the My Health Record system.
3	(Interaction Model 4 only) Obtain test certificate	Obtain a certificate for the intermediary server Please refer to the following website for more information on Gatekeeper certification https://www.dto.gov.au/standard/design-guides/authentication-frameworks/gatekeeper-public-key-infrastructure-framework/ a You may contact the My Health Record team via email or phone for assistance with this process: Email: help@digitalhealth.gov.au Phone: 1300 901 001	• Certificate issued
4	Register your software	Register by completing the *Portal Operator Registration Form*; you will need to provide details about your organisation and proposed app, such as the app's intended purpose and the way it will interact with the My Health Record system.	• Test kit: test cases, test data and unique credentials for accessing the My Health Record test environment.

Step	Stage	Vendor action		Result
5	Commence software product development and enhancement	b	Now that you can access the test environment, you can start developing your app so that it can connect with the My Health Record system, using the *API Mapping, API Specifications* and *API Release Notes* provided on the Developer Centre.	• Product is developed. • System Operator provides technical support for software design, development and testing.
		c	You may contact the My Health Record team via email or phone for assistance with this process: Email: help@digitalhealth.gov.au Phone: 1300 901 001	
6	Self-assessment testing	a	Once you have successfully integrated your app with the My Health Record system in the test environment, contact the My Health Record team: Email: help@digitalhealth.gov.au Phone: 1300 901 001	• Vendor has a history of successfully completed test cases and results. **Note:** The System Operator may wish to view these results as part of quality assurance activities that may be undertaken in the future.
		b	A team member will guide you through the next steps, which include:	
		i	testing your app using the test cases and test data provided in your test kit and providing the results to the My Health Record team for review	
		ii	a review of use cases, consent and data flows.	
7	Formal NOC testing		Conduct formal NOC testing observed by NIO: Attend a virtual session to test your app. This is to demonstrate that your app is functioning according to the API specifications. We refer to this as Notice of Connection (NOC) testing.	• NIO observe the formal testing and extracts log files and screen shots for verification of test case results. • When NOC testing is successful, you will receive a copy of the *Declaration of Notice of Connection.*
8	(Interaction Model 4 only) Obtain certificate		Obtain a certificate for the intermediary server Please refer to the following website for more information on Gatekeeper certification https://www.dto.gov.au/standard/design-guides/authentication-frameworks/gatekeeper-public-key-infrastructure-framework/	• Certificate issued

Step	Stage	Vendor action	Result
9	Declare conformance	After having successfully tested your app, to gain production access to the My Health Record system, complete and submit: i. *Production Environment Access Request* (PEAR) form ii. *Portal Operator Registration Agreement* (PORA).	• You will be granted authorisation to access the My Health Record Production Environment when the My Health Record System Operator is satisfied that NOC testing has been successfully completed, you have declared that your app conforms to the mandatory requirements and you agree to the terms as outlined in the PORA.

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6 Support contacts

6.1 Registration, developer community and general enquires

My Health Record Team

help@digitalhealth.gov.au

6.2 For technical and testing support in the test environment

National Infrastructure Operator (NIO)

MyHealthRecordMobile@accenture.com

6.3 For production incident management and app changes

System Management

MyHealthRecord.Operations@digitalhealth.gov.au

Acronyms

Acronym	Description
CIS	clinical information system
FHIR	Fast Healthcare Interoperability Resources
NIO	National Infrastructure Operator
NOC	Notice of Connection
NPP	(My Health Record) National Provider Portal
PCEHR	Personally Controlled Electronic Health Record (This name has been replaced with My Health Record system.)
PEAR	Production Environment Access Request
PORA	Portal Operator Registration Agreement
SVT	Software Vendor Test
TEAR	Test Environment Access Request

Glossary

Term	Meaning
Application Programming Interface (API)	An application programming interface (API) is a particular set of rules and specifications that software programs can follow to communicate with each other. It serves as an interface between different software programs and facilitates their interaction, similar to the way the user interface facilitates interaction between humans and computers.
app	A type of application software that for the purposes of this document, can connect to the My Health Record APIs.
interoperability requirements	A collection of documents covering the mandatory requirements and optional guidelines for developers connecting an app to the My Health Record system: • *Operations Requirements and Guidelines* [ORG2020] • *Consent Requirements and Guidelines* [CRG2020] • *Security Requirements and Guidelines* [SRG2020] • *Presentation Requirements and Guidelines* [PRG2020].
My Health Record system	Previously called the PCEHR system or eHealth Record system.
National Infrastructure Operator (NIO)	The National Infrastructure Operator (NIO) is the business area responsible for providing and managing the My Health Record system on behalf of the System Operator.
Notice of Connection (NOC)	A notice issued by the My Health Record System Operator indicating that a system is ready to connect to the My Health Record system. NOC testing is the process of testing an app using test cases and test data provided by the System Operator. Tests are executed in the My Health Record Software Vendor Test (SVT) environment and are verified by the NIO.
Production Environment Access Request (PEAR) form	Form for app developers to apply for Production Environment access by providing the specific details of their app and declaring that the app conforms to the mandatory conformance requirements.
Portal Operator Registration Form (PORF)	The purpose of this form is for developer organisations to register as Portal Operators.
Portal Operator Registration Agreement (PORA)	The obligations of the app developer and System Operator, to be signed prior to being granted production environment access. Depending on the way your app will connect with the My Health Record system, the agreement may include different obligations.
Registered portal operator (RPO)	An operator of an electronic interface (i.e. portal) that facilitates access to the My Health Record system.
Software vendor test environment (SVT)	The My Health Record System test environment managed by the National Infrastructure Operator (NIO) to facilitate functional and integration testing of developer apps in order to obtain a Notice of Connection (NOC).

References

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[MHRA2012]   Australian Government, *My Health Records Act 2012*, https://www.legislation.gov.au/Details/C2015C00602/Html/Text

[MHRR2012]   Australian Government, *My Health Records Regulation 2012*, https://www.legislation.gov.au/Details/F2016C00093

[MHRR2016]   Australian Government, *My Health Records Rule 2016*, https://www.legislation.gov.au/Details/F2016L00095

[ORG2020]   Australian Digital Health Agency, *My Health Record - Operations Requirements and Guidelines v1.1*, https://developer.digitalhealth.gov.au/specifications/national-infrastructure/ep-3094-2020/dh-3087-2020

[PRG2020]   Australian Digital Health Agency, *My Health Record FHIR Gateway - Presentation Requirements and Guidelines v1.1*, https://developer.digitalhealth.gov.au/specifications/national-infrastructure/ep-3094-2020/dh-3090-2020

[SRG2020]   Australian Digital Health Agency, *My Health Record - Security Requirements and Guidelines v1.1*, https://developer.digitalhealth.gov.au/specifications/national-infrastructure/ep-3094-2020/dh-3089-2020