Australian Government

Australian Digital Health Agency

Clinical Information System to National Provider Portal (CIS to NPP)
Conformance Profile

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Acknowledgements

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Document control

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Document information

Key information

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Product or document version	Date	Release comments
1.0	22 November 2019	Initial release
1.0	24 June 2025	The document presentation has been enhanced to align with current branding guidelines, however the content has not been changed.

Transition of Terms

Certain terms used within the context of this document have changed. The table provides a clear comparison of the historical terms used in text and their current equivalents for your reference.

Historical term	Current term
National eHealth Transition Authority (NEHTA)	The Australian Digital Health Agency (ADHA)

Table of contents

1 Introduction

1.1 Purpose

This document specifies software conformance requirements for Clinical Information Systems (CIS) connecting to the National Provider Portal (NPP) via B2B CIS to NPP Gateway. These requirements are used to assess clinical information systems for conformance to help minimise risks to clinical safety, information privacy and security, and maximise the benefits of connecting to the NPP.

1.2 Intended audience

The intended audience includes the following organisations:

- Agency conformance teams;

- Health software vendors; and

- Health jurisdictions and healthcare providers.

Contracted Service Providers (CSP) are not included as it is currently out of scope for this project.

1.3 Development of these requirements

Clinical safety hazards assessment, privacy impact assessment and international and Australian standards on information security and privacy have been used to identify risks and related mitigation controls informing the conformance requirements in this document.

2 General Background and Scope

2.1 Background

A Clinical Information System (CIS) traditionally contains discrete records of personal health information created and accessed by a healthcare provider organisation. A CIS may be well designed to mitigate the risks to clinical safety, information security and privacy within the organisational boundary of a provider organisation, even when exchanging health information with other selected healthcare provider organisations. However, there is an increased level and number of risks when sharing patient information and accessing health information via the NPP.

Conformance requirements for CIS connecting to the NPP via B2B CIS to NPP Gateway Service have been developed to minimise these risks and maximise the benefits of the NPP to healthcare recipients and healthcare providers. Conformance testing provides one mechanism through which these risks can be mitigated.

Other mechanisms for risk mitigation may include, but not be limited to, implementation guidelines, local policies or procedures, user education and training. Risk mitigations other than conformance testing are out of scope for this document. CIS connecting to the NPP via B2B CIS to NPP Gateway Service has a flexible solution option to use or not to use HI services.

2.2 Scope

Conformance requirements in this document apply to CIS connecting to the NPP via B2B CIS to NPP Gateway Service.

3   Use Cases

The Agency provides a set of use cases which are linked to a limited set of test cases that exercise the conformance requirements. These are to assist vendors with validating their implementation aligns with the conformance requirements found in this document. The three use cases are:

Use Cases No.	Use Case Name
UC.CIStoNPP.001	An authorised user of a Clinical Information System (CIS)accessing My Health Record (MHR) from National Provider Portal (NPP) within their own CIS using web-browser component.
UC.CIStoNPP.002	An authorised user of a Clinical Information System (CIS) accessing My Health Record (MHR) from National Provider Portal (NPP) within their own CIS using system browsers.
UC.CIStoNPP.003	Clinical Information System (CIS) to National Provider Portal (NPP) user configuration of vendor's CIS.

https://developer.digitalhealth.gov.au/specifications/national-infrastructure/ep-2876-2019/dh-2883-2019

4   Conformance Requirements

This section contains conformance requirements applicable to clinical information systems connecting to the NPP System via B2B CIS to NPP Gateway service.

4.1   Mandatory requirements

This section lists the mandatory software conformance requirements for clinical information systems connecting to the NPP via B2B CIS to NPP gateway service.

Requirements listed as mandatory are mandatory within the context of the related use cases. A CIS that implements a use case must conform to the mandatory requirements for that use case.

REQ-01	**Access NPP within the patient record in CIS.**
	The CIS SHALL NOT allow access to the NPP until a patient record has been opened and is active within the CIS.
Additional Notes	
Priority	Mandatory

REQ-02	**Associate HPI-O with CIS user account.**
	Each organisation's HPI-O number used to access the NPP SHALL be directly associated to a single organisation entity within the vendor's software where that HPI-O is registered against that entity.
Additional Notes	A single HPI-O cannot be used by many registered HPI-O organisations within the vendor's
Priority	Mandatory

REQ-03	**Associate HPI-I with CIS user account.**
	Each user's HPI-I number used to access the NPP SHALL be directly associated to a single user account within the vendor's software.
Additional Notes	A single HPI-I cannot be used by many users within the vendor's software.
Priority	Mandatory

REQ-04	Manual entry of healthcare provider identifiers.
	The software SHALL support the manual entry of all types of healthcare provider identifiers (HPI-Is, HPI-Os).
Additional Notes	Automated input of healthcare identifiers in local systems is the preferred method. However, in the early stages of HI implementations, some HPI-Os and HPI-Is will be captured manually until vendors transition to automated processes for all types of healthcare identifiers.
Priority	Mandatory

REQ-05	Web browser component supports minimum screen resolution.
	The web browser component SHALL support the minimum screen resolution of 1024 x 768.
Additional Notes	This is intended to mitigate the risk of displaying incomplete health information which could lead to clinical information not being displayed as intended while also preventing the need for horizontal scrolling.
Priority	Mandatory

REQ-06	Error message displaying.
	All errors returned from the NPP to CIS via the web service interface SHALL be displayed to the user of the vendor's software.
Additional Notes	When the initial HTTP POST request is made to the NPP interface providing the patient and connection details the CIS must display any error messages that are returned when the HTTP status code is not '200 OK'.
Priority	Mandatory

4.2   Conditional requirements

This section lists the conditional software conformance requirements for clinical information systems connecting to the NPP via B2B CIS to NPP Gateway Service.

Requirements listed as conditional are conditional within the context of the related use cases. Support for conditional requirements associated with a use case is mandatory, subject to the condition stated in the requirement.

REQ-07	New session for NPP for each patient record.
	When selecting to view a patient record in NPP and embedding the view within a CIS web browser component, the CIS SHALL: • Open a new NPP browser window with the CIS patient in context's details within a web browser component which is under the control of the application. • Close any prior NPP browser windows for any existing CIS patients which were in context. Alternatively, the view can be launched utilising the systems browser (the default operating system browser).
Additional Notes	This requirement is to limit confusion for the CIS user with regard to the alignment between the patient within the context of the CIS and the patient in the NPP session.
Priority	Mandatory

REQ-08	Web browser component back and forward buttons.
	When embedding the NPP view within a CIS web browser component, the CIS SHALL: • Ensure there is a "navigate back" button, provided either natively by the browser or provided by the CIS; • Ensure there is "navigate forward" button, provided either natively by the browser or provided by the CIS.
Additional Notes	In order for correct navigation of the NPP, back and forward buttons are required.
Priority	Mandatory

REQ-09	**Validation of manually/OCR-input HPI-Is and HPI-Os.**
	If the software supports the manual or OCR input of healthcare provider identifiers (individual and organisation), the software SHALL ensure that:
	• all sixteen digits are included;
	• the identifier is stored as sixteen continuous digits (no spaces);
	• the identifier is validated using the Luhn check digit algorithm; and
	• the sixth digit of the identifier equals the value below:
	- '1' for HPI-I, or
	- '2' for HPI-O.
	If the healthcare provider identifier fails any of the above checks, the software SHALL disallow its storage/use in the local system and alert the operator.
Additional Notes	This requirement mitigates the risk of transcription errors when obtaining HPI-Is and HPI-Os from channels other than B2B or an electronic message/CDA document containing these identifiers. Conformance with this requirement does not however provide any assurance that a correctly input healthcare provider identifier has been associated with the right healthcare provider individual/organisation in the local system, which can only be achieved by validating the healthcare provider identifier with the HI Service, as described in requirement 10040.
	Implementers should note that the sixth digit of the identifier is different from the above for IHIs and the CSP registration numbers:
	• '0' for IHIs; and
	• '3' for CSP registration numbers.
Priority	Mandatory

REQ-10	**Healthcare Identifier formatting.**
	HI Service identifiers (e.g. IHI, HPI-O and HPI-I) values SHALL be formatted as four groups of four digits with a space separating each four-digit group (e.g. 8300 0000 0000 0000) when displayed to users.
Additional Notes	For Healthcare Identifier consistent rendering.
Priority	Recommended

REQ-11	**Recommended browsers and operating systems.**
	CIS systems are recommended to use of the following web-browsers and operating systems as found in section 5.1. When not using one of the recommended browsers and operating systems, vendors SHALL ensure the rendering of the NPP content displays as seen in the compatible browser.
Additional Notes	The NPP has been tested to render correctly with the stated browser versions and operating systems. This is intended to mitigate the risk of browser incompatibility issues, which could affect the way information such as tables and figures are displayed.
Priority	Mandatory

REQ-12	**Supporting the allowed CDA attachment types.**
	When embedding the NPP view within a CIS web browser component, the CIS SHALL support the rendering of the following MIME types which are allowed as linked attachments within the MHR CDA documents: • .gif image/gif; • .jpg image/jpeg; • .jpeg image/jpeg; • .pdf application/pdf; • .png image/png; • .tif image/tiff; and • .tiff image/tiff.
Additional Notes	In order to correctly display the clinical CDA documents, the required MIME types must be supported.
Priority	Mandatory

REQ-13	**Patient identifier preference.**
	If connected through HI service, the preferred patient identifier for the NPP SHALL be a validated IHI number.
Additional Notes	A validated IHI number is considered a stronger identifier than a Medicare number or DVA number.
Priority	Recommended

4.3   Recommended requirements

This section lists the recommended software conformance requirements for Clinical Information Systems connecting to the NPP via B2B CIS to NPP Gateway Service.

Requirements listed as recommended are recommended within the context of the related use cases. Support for recommended requirements associated with a use case is strongly encouraged though not mandated.

REQ-14	Pre-populate first six digits of the healthcare identifier.
	The software SHOULD enable the display of the first five digits of the healthcare identifier and are the same for all healthcare identifiers in Australia – 8003 6 – and the sixth digit varies depending on the type of healthcare identifier as follows.
	HI Sixth digit variations: '1' for HPI-Is; and '2' for HPI-Os.
Additional Notes	The first six digits of the IHI remain the same for all IHIs in Australia.
Priority	Recommended

REQ-15	**Auditing capability.**
	The Clinical Information System SHOULD have the capability to audit interactions with the NPP via B2B CIS to NPP Gateway Service.
Additional Notes	Local auditing of significant transactions is considered good software practice and may be important from a medico-legal perspective.
Priority	Recommended

REQ-16	**Instruct users of best practice when launching NPP in the system browser.**
	When using the system browser, vendors SHOULD provide information in their supporting documentation such as user help guides, or provide an advisory text in the products online help documentation, for users to log out of the National Provider Portal patient session when viewing a different patient within their CIS.
Additional Notes	This requirement is to limit confusion for the CIS user with regard to the alignment between the patient within the context of the CIS and the patient in the NPP session.
Priority	Recommended

Appendix A Recommended browsers and operating systems

If you insert cross references to an appendix (References tab), in the Reference type drop list, and select "Numbered item".

The NPP has been tested to render correctly with the stated browser versions and operating systems. This is intended to mitigate the risk of browser incompatibility issues, which could affect the way information such as tables and figures are displayed.

Browser Type	Browser Version	Operating System			
		Windows 7	Windows 8.1	Windows 10	Mac OS 10.13.16
Internet Explorer	11 and later	Y	Y	Y	N
Firefox	65 and later	Y	Y	Y	Y
Chrome	72 and later	Y	Y	Y	N

*Y = Yes *N = No

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Acronyms

Acronym	Description
CIS	Clinical Information System
CSP	Contracted Service Provider
NPP	National Provider Portal
IHI	Individual Healthcare Identifier
DVA	Department of Veterans' Affairs
HPI-O	Healthcare Provider Identifier – Organisation
HPI-I	Healthcare Provider Identifier - Individual
HI service	A national system for uniquely identifying eligible healthcare providers and individuals (patients).

References

This appendix lists all the documents referred to by this document. At the time of publication, the document versions listed below were valid. However, readers are encouraged to refer to the most recent version of these documents.

[AS5021]	AS 5021:2005 - The language of health concept representation, Standards Australia, 2005
[DOHA2011]	Concept of Operations: Relating to the introduction of a Personally Controlled Electronic Health Record System – September 2011 Release, Department of Health and Ageing & NEHTA, 2011
[HIACT2010]	Healthcare Identifiers Act 2010