



Implementation Guidance

Masking of address and communication details in clinical documents

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Background

A number of family safety risks have been raised regarding the inclusion of address and communication contact information of health care individuals in clinical documents (for example telephone number and email address) uploaded to the My Health Record system. This information could be used to locate an estranged child or partner through the child's record.

It is currently a technical requirement that the patient address field is not to be omitted from clinical documents. However, it should be noted that the individual's address information does not have to be provided in clinical documents as there are allowable null values for the attribute such as "unknown address", "masked for privacy reasons", or "no fixed address".

This "Electronic Communication Detail" for healthcare individuals is an optional requirement in clinical documents. Organisations can choose to include or exclude any communication information for the healthcare individual.

The Australian Digital Health Agency Clinical Reference Group support the omission of address and communication information in clinical documents if the author decides this is in the best interest of the patient. This position was taken on the basis that clinical documents sent "point-to-point" will continue to include patient addresses and contact information.

Healthcare providers have reported some issues when viewing documents with some values removed, predominantly when the older versions of the agency provided stylesheets are used for rendering the clinical documents.

When the authoring organisation chooses to omit the address and communication information, the organisation should implement one of the below recommendations to mask the address as well as exclude the communication information. The approach varies depending on the clinical document type.

If you require further advice relating to masking address and contract information, please contact our support team at help@digitalhealth.gov.au or 1300 901 001.

Intended audience

The intended audience includes the following organisations:

- healthcare providers
- developers and vendors of digital health systems.

1. Recommendations for Document Producer

1.1 Masking address in clinical documents

The following masking recommendations apply only to the structured data of My Health Record clinical documents. Additional mechanisms to mask information in attachments (e.g. PDF attachments) will need to be considered by each implementer.

1.1.1 Clinical document types that allow the nullFlavor "MSK" (masked)¹

The relevant document types are as follows:

- Advance Care Planning
- Discharge Summary

¹ Guidance on masking addresses for Pharmacist Shared Medicines List is documented in the My Health Record Pharmacist Shared Medicines List Conformance Profile.

- eHealth Pathology Report
- eHealth Diagnostic Imaging Report
- Event Summary
- Shared Health Summary
- Specialist Letter.

When null value “MSK” is allowed in the clinical document, the software should use nullFlavor “MSK” and <StreetAddressLine> text to indicate the address is “masked”.

For example:

```
<addr nullFlavor="MSK" />
```

```
Example: CdaLibrary (c#)
address.AddressAbsentIndicator = AddressAbsentIndicator.Masked;
```

N.B. This works in the CDA Library version 4.5.2 and above. There was a bug in previous versions of the library producing “ASKU” instead of “MSK”.

Refer to the latest sample codes via <https://github.com/AuDigitalHealth/clinical-document-library-dotnet>.

1.1.2 Clinical document types that only allow nullFlavor “NA” and no other values

The relevant document types are as follows:

- eHealth Prescription Record
- eHealth Dispense Record
- eReferral.

When only null value “NA” is allowed in the clinical document, the software should use the <StreetAddressLine> text to indicate the address is “masked”.

For example:

```
<addr use="H">
<streetAddressLine>masked</streetAddressLine>
<country>Australia</country>
</addr>
```

Example: CdaLibrary (c#)

```
address.AustralianAddress.UnstructuredAddressLines = new List<string> { "masked" };
```

```
NB CdaLibrary adds default country
<country>Australia</country>
```

1.2 Exclude Electronic Communication Detail in clinical documents

One or more of the communication details of the healthcare individual can be optionally included in all clinical documents. These communication details should be represented as the “Electronic Communication Detail” specified in the Clinical Document CDA Implementation Guide² and Structured Content Specification³ relevant to each clinical document type.

² <https://developer.digitalhealth.gov.au/search?query=implementation+guide>

³ <https://developer.digitalhealth.gov.au/search?query=structured+content+specification>

If the author chooses to omit one or more Electronic Communication Detail of the healthcare individual, the software should exclude the following components in the clinical document.

- Subject of Care > Participant > Electronic Communication Detail
- Subject of Care > Participant > Electronic Communication Detail > Electronic Communication Medium
- Subject of Care > Participant > Electronic Communication Detail > Electronic Communication Usage Code
- Subject of Care > Participant > Electronic Communication Detail > Electronic Communication Address

Example: <telecom> tag is omitted.

```
<recordTarget typeCode="RCT">
  <patientRole classCode="PAT">
    <id root="c33fda89-b54e-41b1-afaf-7c986ef73384" />
    <addr use="H">
      <streetAddressLine>masked</streetAddressLine>
    </addr>
    <patient>
      <name use="L">
        <family>Harding</family>
        <given>Frank</given>
        <given>Troy</given>
        <prefix>Mr</prefix>
      </name>
      .....
    </patient>
  </patientRole>
</recordTarget>
```

2 Recommendations for HIPS implementers

For implementers using HIPS to package and upload clinical documents, refer to below recommendations according to the HIPS web service methods.

2.1 Upload and Supersede Document

Sites utilising the HIPS web service method UploadOrSupersedeDocument can follow the advice in section 1 of the document for masking address and contact details in clinical documents before using this web service to package and upload the documents to the My Health Record system.

2.2 Discharge Summary Level 1A

2.2.1 Masking address

If the PatientAddress and PatientContactDetails elements are excluded in the UploadOrSupersedeDischargeSummaryLevel1A web service call, HIPS will utilise the information stored in the database to complete these information items in the CDA document it creates.

In order to create CDA documents with masked address information in HIPS, the following minimum PatientAddress element structure is recommended:

```
<ns:PatientAddress>
  <ns:AddressLine1>masked</ns:AddressLine1>
  <ns:AddressPurpose>Residential</ns:AddressPurpose>
  <ns:CountryName>Australia</ns:CountryName>
</ns:PatientAddress>
```

This will override the HIPS behaviour for incorporating the stored address data and result in a CDA document with Home Address specified as “masked, Australia”.

2.2.2 Exclude Electronic Communication Detail

If your HIPS database contains patient communication details [provided in HL7⁴ V2 messages PID-13 & 14], a minimum PatientContactDetails element must be included in order to override HIPS incorporating stored contact details for the patient into the CDA document.

```
<ns:PatientContactDetails>
    <ns:Detail>masked</ns:Detail>
    <ns:Medium>Mobile</ns:Medium>
</ns:PatientContactDetails>
```

2.3 Pathology or Diagnostic Imaging

When invoking the UploadOrRemoveImaging/Pathology methods, HIPS utilises the information in the PID segment from the provided HL7 V2 messages to update the patient address and contact information in the database and to author the CDA document.

2.3.1 Masking address

Masking addresses when using these methods can be achieved by incorporating empty segments for patient address (PID-11).

For example:

```
PID|||000000001^^^621A^MR~4950481651^^^^MC||Biscuit^Sally^^|19840404|F|||400 George
ST^^Brisbane^QLD^4000^^H||^PRN^CP^^^^0427102023|^WPN^CP^^^^0427102023|
```

2.3.2 Exclude electronic communication details

Masking contact details is achieved by incorporating empty segments for contact details segments (PID-13 and 14 respectively).

For example:

```
PID|||000000001^^^621A^MR~4950481651^^^^MC||Biscuit^Sally^^|19840404|F|||400 George
ST^^Brisbane^QLD^4000^^H||^PRN^CP^^^^0427102023|^WPN^CP^^^^0427102023|
```

Using these blank segments results in a database update to the “new” address and communication details of the patient. The resulting CDA document will not contain any communication details for the patient and the address will be stated as “Australia”.

If you would like to discuss the masking of address and contract information in more detail, please contact our support team at help@digitalhealth.gov.au or 1300 901 001.

Appendix

The following clinical document template packages allow null values for patient address information:

Advance Care Planning

Allows null values "MSK", "NA" and "UNK"	3A	relaxed	1.2.36.1.2001.1006.1.226.1 (version 39881)
	3A	default	1.2.36.1.2001.1006.1.226.2 (version 39881)

⁴ HL7 and CDA are trademarks of Health Level Seven International and are registered with the United States Patent and Trademark Office.

Discharge Summary

Allows null value "NA" only	1A	relaxed	1.2.36.1.2001.1006.1.20000.18 (version 32620)	
	1B	relaxed	1.2.36.1.2001.1006.1.20000.19 (version 32620)	
	2	relaxed	1.2.36.1.2001.1006.1.20000.20 (version 32620)	
	3A	relaxed	1.2.36.1.2001.1006.1.20000.21 (version 32620)	
	3B	relaxed	1.2.36.1.2001.1006.1.20000.22 (version 32620)	
	1A	default	1.2.36.1.2001.1006.1.20000.23 (version 32620)	
	1B	default	1.2.36.1.2001.1006.1.20000.24 (version 32620)	
	2	default	1.2.36.1.2001.1006.1.20000.25 (version 32620)	
	3A	default	1.2.36.1.2001.1006.1.20000.26 (version 32620)	
	3B	default	1.2.36.1.2001.1006.1.20000.27 (version 32620)	
	Allows null values "MSK", "NA" and "UNK"	1A	relaxed	1.2.36.1.2001.1006.1.20000.18 (version 40382)
		1B	relaxed	1.2.36.1.2001.1006.1.20000.19 (version 40382)
		2	relaxed	1.2.36.1.2001.1006.1.20000.20 (version 40382)
		3A	relaxed	1.2.36.1.2001.1006.1.20000.21 (version 40382)
3B		relaxed	1.2.36.1.2001.1006.1.20000.22 (version 40382)	
1A		default	1.2.36.1.2001.1006.1.20000.23 (version 40382)	
1B		default	1.2.36.1.2001.1006.1.20000.24 (version 40382)	
2		default	1.2.36.1.2001.1006.1.20000.25 (version 40382)	
3A		default	1.2.36.1.2001.1006.1.20000.26 (version 40382)	
3B		default	1.2.36.1.2001.1006.1.20000.27 (version 40382)	

eHealth Prescription Record

Allows null value "NA" only	3A	relaxed	1.2.36.1.2001.1006.1.170.4 (version 36140)
	3A	default	1.2.36.1.2001.1006.1.170.5 (version 36140)

eHealth Dispense Record

Allows null value "NA" only	3A	relaxed	1.2.36.1.2001.1006.1.171.4 (version 36140)
	3A	default	1.2.36.1.2001.1006.1.171.5 (version 36140)

eHealth Pathology Report

Allows null values "MSK", "NA" and "UNK"	3A	relaxed	1.2.36.1.2001.1006.1.220.3 (version 40368)
	3A	default	1.2.36.1.2001.1006.1.220.4 (version 40368)

eHealth Diagnostic Imaging Report

Allows null values "MSK", "NA" and "UNK"	3A	relaxed	1.2.36.1.2001.1006.1.222.3 (version 40364)
	3A	default	1.2.36.1.2001.1006.1.222.4 (version 40364)

eReferral

Allows null values "NA" only	1A	relaxed	1.2.36.1.2001.1006.1.21000.13 (version 32624)
	1B	relaxed	1.2.36.1.2001.1006.1.21000.14 (version 32624)
	2	relaxed	1.2.36.1.2001.1006.1.21000.15 (version 32624)
	3A	relaxed	1.2.36.1.2001.1006.1.21000.16 (version 32624)
	3B	relaxed	1.2.36.1.2001.1006.1.21000.17 (version 32624)
	1A	default	1.2.36.1.2001.1006.1.21000.18 (version 32624)
	1B	default	1.2.36.1.2001.1006.1.21000.19 (version 32624)
	2	default	1.2.36.1.2001.1006.1.21000.20 (version 32624)
	3A	default	1.2.36.1.2001.1006.1.21000.21 (version 32624)
	3B	default	1.2.36.1.2001.1006.1.21000.22 (version 32624)

Event Summary

Allows null value "NA" only	3A	default	1.2.36.1.2001.1006.1.16473.6 (version 35754)
	3A	default	1.2.36.1.2001.1006.1.16473.7 (version 35755)
	3B	relaxed	1.2.36.1.2001.1006.1.16473.8 (version 35754)
	3A	relaxed	1.2.36.1.2001.1006.1.16473.9 (version 35754)
	3A	default	1.2.36.1.2001.1006.1.16473.10 (version 35754)
	3B	default	1.2.36.1.2001.1006.1.16473.11 (version 35754)
Allows null values "MSK", "NA" and "UNK"	3A	relaxed	1.2.36.1.2001.1006.1.16473.12 (version 36678)
	3B	relaxed	1.2.36.1.2001.1006.1.16473.13 (version 36678)
	3A	default	1.2.36.1.2001.1006.1.16473.14 (version 36678)
	3B	default	1.2.36.1.2001.1006.1.16473.15 (version 36678)

Pharmacist Shared Medicines List

Allows any null values including "MSK", "NA" and "UNK"	1A	Default	1.2.36.1.2001.1006.1.237.1
--	----	---------	----------------------------

Shared Health Summary

Allows null value "NA" only	3A	relaxed	1.2.36.1.2001.1006.1.16565.4 (version 32620)
	3B	relaxed	1.2.36.1.2001.1006.1.16565.5 (version 32620)
	3A	default	1.2.36.1.2001.1006.1.16565.6 (version 32620)
	3B	default	1.2.36.1.2001.1006.1.16565.7 (version 32620)
Allows null values "MSK", "NA" and "UNK"	3A	relaxed	1.2.36.1.2001.1006.1.16565.8 (version 36326)
	3B	relaxed	1.2.36.1.2001.1006.1.16565.9 (version 36326)
	3A	default	1.2.36.1.2001.1006.1.16565.10 (version 36326)
	3B	default	1.2.36.1.2001.1006.1.16565.11 (version 36326)

Specialist Letter

Allows null value "NA" only	1B	default	1.2.36.1.2001.1006.1.16615.9 (version 146)
	2	default	1.2.36.1.2001.1006.1.16615.10 (version 147)
	3A	default	1.2.36.1.2001.1006.1.16615.11 (version 148)
	1A	default	1.2.36.1.2001.1006.1.16615.12 (version 149)
	1A	relaxed	1.2.36.1.2001.1006.1.16615.13 (version 32624)
	1B	relaxed	1.2.36.1.2001.1006.1.16615.14 (version 32624)
	2	relaxed	1.2.36.1.2001.1006.1.16615.15 (version 32624)
	3A	relaxed	1.2.36.1.2001.1006.1.16615.16 (version 32624)
	3B	relaxed	1.2.36.1.2001.1006.1.16615.17 (version 32624)
	1A	default	1.2.36.1.2001.1006.1.16615.18 (version 32624)
	1B	default	1.2.36.1.2001.1006.1.16615.19 (version 32624)
	2	default	1.2.36.1.2001.1006.1.16615.20 (version 32624)
	3A	default	1.2.36.1.2001.1006.1.16615.21 (version 32624)
	3B	default	1.2.36.1.2001.1006.1.16615.22 (version 32624)
	1A	relaxed	1.2.36.1.2001.1006.1.16615.23 (version 35416)

Allows null value "NA" only	1B	default	1.2.36.1.2001.1006.1.16615.9 (version 146)
	2	default	1.2.36.1.2001.1006.1.16615.10 (version 147)
	3A	default	1.2.36.1.2001.1006.1.16615.11 (version 148)
	1A	default	1.2.36.1.2001.1006.1.16615.12 (version 149)
	1A	relaxed	1.2.36.1.2001.1006.1.16615.13 (version 32624)
	1B	relaxed	1.2.36.1.2001.1006.1.16615.14 (version 32624)
	2	relaxed	1.2.36.1.2001.1006.1.16615.15 (version 32624)
	3A	relaxed	1.2.36.1.2001.1006.1.16615.16 (version 32624)
	3B	relaxed	1.2.36.1.2001.1006.1.16615.17 (version 32624)
	1A	default	1.2.36.1.2001.1006.1.16615.18 (version 32624)
	1B	default	1.2.36.1.2001.1006.1.16615.19 (version 32624)
	2	default	1.2.36.1.2001.1006.1.16615.20 (version 32624)
	3A	default	1.2.36.1.2001.1006.1.16615.21 (version 32624)
	3B	default	1.2.36.1.2001.1006.1.16615.22 (version 32624)
Allows null values "MSK", "NA" and "UNK"	1B	relaxed	1.2.36.1.2001.1006.1.16615.24 (version 35416)
	2	relaxed	1.2.36.1.2001.1006.1.16615.25 (version 35416)
	3A	relaxed	1.2.36.1.2001.1006.1.16615.26 (version 35416)
	3B	relaxed	1.2.36.1.2001.1006.1.16615.27 (version 35416)
	1A	default	1.2.36.1.2001.1006.1.16615.28 (version 35416)
	1B	default	1.2.36.1.2001.1006.1.16615.29 (version 35416)
	2	default	1.2.36.1.2001.1006.1.16615.30 (version 35416)
	3A	default	1.2.36.1.2001.1006.1.16615.31 (version 35416)
	3B	default	1.2.36.1.2001.1006.1.16615.32 (version 35416)

Acronyms

ASKU	asked but unknown
HIPS	Integration product previously known as the Health Identifier and PCEHR System
MHR	My Health Record
MSK	masked
PID	patient identification segment

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Australian Digital Health Agency ABN 84 425 496 912, Level 25, 175 Liverpool Street, Sydney, NSW 2000 digitalhealth.gov.au
Telephone 1300 901 001 or email help@digitalhealth.gov.au

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