Australian Government

NATIONAL CANCER SCREENING REGISTER

National Cancer Screening Register (NCSR)

Summary Guide for Pathology Laboratories reporting to the NCSR for the National Cervical Screening Program

Document number	NCSR-CL-PRD-066
Version	1.0
Status	Final
Date	26 March 2025

T 1800 627 701

A Cervical: Reply Paid 90964, Sunshine VIC 3020
Bowel: Reply Paid 90965, Sunshine VIC 3020

W www.ncsr.gov.au

Contents

Overview

The National Cancer Screening Register (NCSR) is an Australian Government initiative that supports the National Cervical Screening Program (NCSP) and the National Bowel Cancer Screening Program (NBSCP). The NCSR commenced operations in 2017 to support the introduction of the new Medicare Benefits Schedule (MBS) items, supporting testing for Human papillomavirus (HPV) and liquid-based cytology (LBC).

1. Purpose

This document has been developed to inform Accredited Cervical Pathology Providers of the information requirements for reporting to the NCSR and has been revised in line with key stakeholder feedback and publication of the National Cancer Screening Register Rules 2017 and the NPAAC requirements 2024. Please contact the NCSR via ncsrpathology@health.telstra.com for a copy of the full technical Pathology Integration Guide to access further information, including:

- how to integrate with the NCSR, including onboarding and technical requirements
- how to request a screening history
- transmission of cervical screening test and histopathology results.

2. Reporting Requirements

There are mandatory information reporting requirements for submitting information to the NCSR which apply to all reporting methods.

There are NCSR data requirements for:

- Participant Identifiers and Demographics
- Laboratory/Message Identifiers
- Provider Identifiers
- Results Identifiers

When sending participant details to the NCSR it is important to note the following:

- All messages that do not contain either an IHI or Medicare number are likely to require manual intervention when attempting to match the participant. It is not sufficient to supply only the laboratory MRN and Laboratory Accession Number (LAN).
- Messages that supply participant data that match the Medicare database, including either IHI, Medicare number, or both, will result in the faster turnaround times.
- Laboratories are encouraged to store this identifier and include it in all future messages to the NCSR as it will aid in matching. However, if a mismatch has occurred it is a requirement that this identifier then be removed from the affected patient record.
- Messages will pass validation if the complete address is supplied, including suburb, state and postcode. Omitting state will affect validation even if the postcode has been supplied. Omitting the correct postcode will also cause validation issues and delay responses. The NCSR will accept all the results for participants residing overseas and Australian residents that have been requested by AUSHIC provider and have been processed in Australia. However, no correspondence will go to an overseas address.

3. Participant Identifiers

The following table lists the reporting requirements for the Patient Identifier details.

Key to Reporting Requirement:

- R – Required/Mandatory
- RE – Required if known
- O – Optional (will be stored by register)

The correct use of Medicare numbers and accurate spelling of surname, first name and date of birth is critical to avoid manual intervention and diversion of messages to a 'manual matching queue'. Messages will be processed fastest when these identifiers are supplied, along with an RRN which was supplied by the NCSR in a history response.

Table 1: Reporting requirements for Patient Identifier details

All Laboratories		HL7 Interface Users Only		
Participant Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Participant Identifier List	R	PID-3	Laboratory Patient ID 7654321^^^LAB^MR or 7654321^^^LAB^PI (LAB' is assigning authority NATA. Number may contain alpha characters, and NCSR is not defining the length) National Individual Healthcare Identifier (IHI) 8003601243017725^^^AUSHIC^NI NOTE: Must be 16 digits Medicare Card Number 21882253741^^^AUSHIC^MC	At least one (preferably more) of Individual Healthcare Identifier (IHI), Medicare number, Department of Veteran Affairs (DVA) or NCSR Participant ID is required. Required – to include at least the Laboratory Patient ID. This identifier will be included in all subsequent messages between the NCSR and the laboratory to facilitate identification of participants. Medicare, DVA and IHI numbers are required if known. Where provided, the format must comply with this guide, otherwise they will be rejected. To clarify, if entered in your LIS as a '0' or '<space>' and sent within a subsequent message, the message will not pass validation and will be rejected. If unknown, these identifiers should not be populated. ID's provided must include an assigning authority and pass validation rules, including IHI and Medicare number length and

All Laboratories		HL7 Interface Users Only		
Participant Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
			NOTE: 11 digits required, the last digit is the Medicare Individual Reference Number (IRN) Department of Veterans Affairs WX123268^^^AUSDVA NOTE: Maximum of 9 Characters/Digits NCSR Participant ID 9889133^^^NCSR^MR	check digits as appropriate, and DVI maximum length and start character, otherwise the message will be rejected. When a prior history request has been sent and received by the laboratory then the NCSR Participant ID (RRN) should be included in the results message, where able to be stored in the LIS by the lab, in future messages for that participant, along with the Laboratory Patient ID to facilitate matching. Specify these identifiers according to the HL7 Australia Standard. All possible identifiers should be in the one field separated by the HL7 separator character '~' If none of these are available, the request will not be processed automatically and will be held for manual operator action.
Family Name	R	PID-5	Full name SMITH^MARY JANE^^^MS^^L One name Only MADONNA^^^^^^L Anonymous / Name Withheld UNKNOWN^^^^^^L	Required – At least one of Family Name and/or Given name must be provided. If only one name is known, or the participant is to be recorded as anonymous, this must be provided in the family name field per the permissible format. Note: The matching process remains the same for anonymised names. Full stops or symbols cannot be used in place of names.
Given Name/s	RE	PID-5	Full name SMITH^MARY^JANE^^MS^^L	
DOB	R	PID-7	YYYYMMDD	Required - YYYYMMDD

All Laboratories		HL7 Interface Users Only		
Participant Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Biological Sex	R	PID-8	M – Male F – Female A – Ambiguous O - Other U – Unknown, not stated.	Required – using the single letter codes listed in Permissible Format If an IHI number is shown in PID-3, this 'Sex' is what NCSR uses to verify the Participant's IHI. Messages should only use biological sex in this field, and only where biological sex = F
Indigenous status	RE	PID-10	1 - Aboriginal but not Torres Strait Islander origin 2 - Torres Strait Islander but not Aboriginal origin 3 - Both Aboriginal and Torres Strait Islander origin 4 - Neither Aboriginal nor Torres Strait Islander origin 9 - Not stated/inadequately described	Where this status is provided by the requesting clinician, a laboratory must report one of the codes 1-4. If only a Yes/No response is provided by the requesting clinician, all results should be reported as code '9 – Not stated/inadequately described'. If not captured, then should not be populated – Refer to METeOR 291036 'Indigenous status'.
Address (Home / Mailing)	R	PID-11	271 GILBERT PL^^DENISTONE^NSW^2114^AUS^H~PO BOX 123^^Sydney^NSW^2000^^M Unknown or no fixed address UNKNOWN^^^NSW^^^H (or M)	Required – NCSR will use both the Mailing and Residential addresses if available, though a minimum of one address is required for validation. Refer to AS 5017-2006. Address type 'M' = mailing, 'H' = home If address unknown, detail to that affect to be provided. This will however go into manual workflow for validation as it will not pass address validation. State is required for unknown addresses. NCSR will accept all the results requested by AUSHIC provider and were processed in Australia but no correspondence will go to an overseas address. Overseas address may be supplied however the NCSR will not send any correspondence to an overseas address. The 'Address Type' component is mandatory.

All Laboratories		HL7 Interface Users Only		
Participant Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Suburb / State / Postcode / Country	RE	PID-11	See above If Country other than AUS ensure provided in PID-11.6 as 3-character codes as defined by ISO 3166-1 e.g. 118 Elizabeth St^^Mount Victoria^Wellington^6011^NZL^M	Required (if known) – These are used for reporting so unless the address is unknown the Suburb, State and Postcode should be provided as separate sub-fields and NOT as 271 GILBERT PL DENISTONE NSW 2114^^^^^^H State is required for an AUS address (including if 'unknown') and it will be validated against the set "NSW, VIC, ACT, NT, TAS, QLD, WA, SA". (UPPERCASE, exact) Other values will not accepted. If a Postcode is supplied, it will be validated. Invalid postcodes (including '0000') will not be accepted. The 'Address Type' component is mandatory.
Contact number (Home / Mobile) **Email Address (Home)**	RE	PID-13	Use PID 13 for Participants Home Phone, Mobile/Cellular Phone and email address as follows: 0299999999^PRN^PH^^61^2^9999999 0418999999^PRN^CP^^61^418^999999 ^NET^X.400^user@domain.com.au Home number, Cell Phone number and email address can be provided in the one field separated by ~ Use PID-14 for business numbers.	Required (if known) – This field includes up to three XTN repeaters for the participant. Refer to HL7 V2.4 Chapter 2 XTN datatype. Phone numbers: Numeric values, and '+' only. Must contain NO spaces or punctuation or extra characters such as ()- [] Home phone landlines must be 10 digits and have the Telecommunication use code of PRN and equipment type of PH Mobiles phone numbers must be 10 digits and have the Telecommunication use code of PRN and equipment type of CP Email address: Must contain NO spaces. The format of the email address should follow the standard format of an email address, including the username and domain separated by the "@" symbol i.e., user.name@domain.com.au

All Laboratories		HL7 Interface Users Only		
Participant Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Contact number (Business / Mobile)	O	PID-14	Please provide one work phone number (WPN) 0299999999^**WPN**^**PH**^^61^2^9999999	Phone number: Numeric values, and '+' only. Must contain NO spaces or punctuation or extra characters such as ()- [] Work phone numbers must be 10 digits and have the Telecommunication use code of WPN and equipment type of PH
Primary Language	RE	PID-15	3602^Polish or ^Polish	Required (if known) – Refer to METeOR 460123, 'Preferred language'
Country of birth	RE	PID-23	3307^Poland or ^Poland	Required (if known) – NCSR has changed the default HL7 rules to enable code, name, or code and name to be provided in accordance with this example. However, country codes provided must conform to METeOR 659454 'Country of Birth' codes for Australia. These are identified from the Australian Bureau of Statistics, Standard Australian Classification of Countries (SACC), 2016. Additionally, METeOR 696778 (text representation) can also be used.

Note: Under the NCSR legislation Pathology Laboratories are not responsible for notifying the NCSR of opt out or consent. The healthcare provider or the participants themselves will complete the forms required to opt-out of the program.

4. Laboratory/Message Identifiers

The following table lists the reporting requirements for the Laboratory Identifier details for a given message.

Key to Reporting Requirement:

- R – Required/Mandatory
- RE – Required but can be Empty (Mandatory, if known)
- O – Optional (will be stored by register

Table 2: Reporting requirements for the Laboratory Identifier details

All Laboratories		HL7 Interface Users Only		
Laboratory Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Sending Laboratory Name	R	MSH-4.1	Pathology Laboratory Name^LAB^AUSNATA	Sending Pathology Laboratory Name (as approved by NATA) should contain the Laboratory Name sending the results. Note as this is also used for routing, any changes will require changes on NCSR end otherwise messages will fail.
Sending Laboratory Identifier	R	MSH-4.2	Pathology Laboratory Name^**LAB**^AUSNATA	'LAB' must be replaced by the sending laboratory number assigned by NATA. Note as this is also used for routing, any changes will require changes on NCSR end otherwise messages will fail.
Approved Laboratory Name Performing Test	R	OBR-3.2	<number>^Pathology Laboratory Name^LAB^AUSNATA	The Filler Order is to include the approved Laboratory that is performing the test, which will often be the same as that above. NCSR uses OBR-3 but if ORC-3 is filled it must match, as per the HL7 standard, or it will be rejected.

All Laboratories		HL7 Interface Users Only		
Laboratory Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Approved Laboratory Identifier Performing Test	R	OBR-3.3	<number>^Pathology Laboratory Name^LAB^AUSNATA	Note: The NCSR uses the Approved Laboratory Performing the Test in OBR-3 (which needs to match ORC-3 if that is valued) as the Laboratory that is the filler (is responsible for the results submission). OBX-15 is also used for this purpose as a unique identifier of the responsible producing service. This may be an external provider with their own NATA accreditation. The NCSR will accept a value in OBX-15. Any follow-up, if required, with the Laboratory for whatever reason, will be with the Laboratory identified as the filler in OBR-3. If the Laboratory intends for the NCSR to follow up a result with the secondary laboratory responsible for producing the result, this will need to be transmitted in separate ORC/OBR segment.
Date/Time of Message	R	MSH-7	20180223154900+1000	YYYYMMDDHHMMSS+HHMM Minimum YYYYMMDDHHMM
Message Control ID	R	MSH-10	ABC_20180215.20849 20180215.20849	Unique ID assigned by the laboratory for that message e.g. <sending facility>_<date>.n{nnnnnnn..} See HL7AUSD-STD-OO-ADRM-2018.1 for recommended format
Episode Number	R	OBR-20	LN=123456789 LN=1-23456789 LN=12-3456789	LN=<episode number> NOTE: May be referred as Laboratory Number, Laboratory Accession Number, LAN Must be the same for amended results as that for the original result

5. Provider Identifiers

The following table lists the reporting requirements for the Provider Identifier details.

Key to Reporting Requirement:

- R – Required/Mandatory
- RE – Required but can be Empty (Mandatory, if known)
- O – Optional (will be stored by register)

Table 3: Reporting requirements for the Provider Identifier details

All Laboratories		HL7 Interface Users Only		
Provider Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Test Requestor Provider ID	R if no provider address in ORC-24 RE if provider name only in OBR16 AND address in ORC-24	OBR-16.1	Individual (Medicare Provider No) 4445758F^GLADMIN^BOB^^^Dr^^^AUSHICPR If no number (address required) ^GLADMIN^BOB Additional Provider Numbers that can be provided as well as the Medicare provider number separated by ~. Healthcare Provider Individual Identifier (HPI-I) 8003619900015717^GLADMIN^BOB^^^Dr^^^AUSHIC^^^^NPI Healthcare Provider Individual at an Organisation HPIO 8003619900015717@8003621566684455^GLADMIN^BOB^^^Dr^^^AUSHIC^^^^HPIO Laboratory assigned number ABC123456^GLADMIN^BOB^^^Dr^^^<Laboratory NATA number>	NCSR uses OBR-16 but if ORC-12 is filled it must match as per the HL7 standard of it will be rejected. The provider ID must include the assigning authority such as AUSHICPR or AUSHIC. If it is a Laboratory assigned number, it is to include the laboratory NATA number as the assigning authority If no Medicare Provider ID is present, then the provider name and address MUST be provided in ORC24 Laboratory assigned numbers will be accepted. In this situation the address should be provided to avoid potential issues with duplicate Laboratory assigned numbers. Alternative IDs (Including a Registry Identification Number - RIN) may also be included if known in addition to the Medicare provider number.

All Laboratories		HL7 Interface Users Only		
Provider Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Test Requestor Family Name	R	OBR-16.2	4445758F^GLADMIN^^^^^^^AUSHICPR	NCSR uses OBR-16 but if ORC-12 is filled it must match as per the HL7 standard. If only one name, then use the family name field. If only provided in the given name field, message will be rejected.
Test Requestor Given Name/s	RE	OBR-16.3	4445758F^GLADMIN^BOB^^^Dr^^^AUSHICPR	NCSR uses OBR-16 but if ORC-12 is filled it must match as per the HL7 standard. Full name should be provided if available. Given name on its own is insufficient.
Test Requestor Address	RE if Provider No valued in OBR-16.1 R if Provider No not valued in OBR-16.1	ORC-24	271 GILBERT PL^^DENISTONE^NSW^2114^AUS^M	Address of requestors organisation / practice NOTE: If the requestor has a Medicare Provider ID, NCSR will match to Medicare master data for the address and phone number information. If no Provider ID, both name and address MUST be provided. State will be validated against the set "[NSW, VIC, ACT, NT, TAS, QLD, WA, SA]". Other combinations will not be accepted.
Test Requestor Phone	RE	ORC-23	0299999999 May optionally be a fully specified XTN datatype e.g. 0299999999^WPN^PH^^61^2^9999999	Phone number of the requestor / organisation / practice. NO spaces or punctuation. Numeric values, and '+' only.
Test Requestor Organisation	RE	ORC-21	ABCD Organisation^L^8003621566684455^^^AUSHIC^NOI Or as a minimum ABCD Organisation	Organisation / Practice name for the requestor

All Laboratories		HL7 Interface Users Only		
Provider Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Test Collector Provider ID	RE	OBR-10	Individual 4445758F^SMITH^Helen^S^^Dr^^^AUSHICPR Individual with Laboratory assigned number ABC123457^SMITH^Helen^S^^Dr^^^<Laboratory NATA number> Additional Provider identifiers can be provided in addition to the Medicare provider number separated by ~. Department/Facility/Organisation Internal reference number E32^Royal Brisbane and Womens Hospital^RBWH^^^^^^<NATA Number> External reference number ABCD Organisation^L^8003621566684455^^^AUSHIC^NOI	ID of the collector. This may be any ID for the person, department, or facility that collected the specimen. If this is the GP or other specialist this will be the Medicare Provider ID, but only if provided. If individual does not have a Provider ID or HPI-I number, then additional information is required. Refer last example. If the requestor and the collector are known to be the same, map the requestor details into this field rather than using other terminology designating such. For Public Hospitals this will often be the department or facility. Laboratory assigned numbers will be accepted as previously with the State and Territory's. Should be sent with the Labs NATA number as signing authority.
Test Collector Family Name	RE	OBR-10	4445758F^SMITH^^^^^^^AUSHICPR See above for more details	See above
Test Collector Given Name/s	RE	OBR-10	4445758F^SMITH^Helen^S^^Dr^^^AUSHICPR See above for more details	See above

All Laboratories		HL7 Interface Users Only		
Provider Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Approved Pathology Practitioner (APP) Provider ID	R	OBR-32	0626518F&DOCTOR&PAUL&&&Dr&&&AUSHICPR Note '&' used as above is subcomponent of name. NCSR does not use the other components of this record. HPI-Is are not currently used by the NCSR and Provider number should be sent.	Approved Pathology Practitioner who authorised release of results. AU standard does allow this to be the physician or other clinician who interpreted the observation and is responsible for the report content. This is often the pathologist billing provider, and must be provided, as the official Medicare provider. This field does not allow for multiple ID's
APP Family Name	R	OBR-32	See above	If only one name, then use the family name field.
APP Given Name/s	RE	OBR-32	See above	Full name should be provided if available. Given name on its own is insufficient.

6. Results Identifiers

Program Code

- All HPV tests will be coded with the 'HPV' program code irrespective of the date collected.
- All separate Cytology tests (PAP and LBC only) will be coded with the 'PAP' program code, but use the relevant recommendation codes depending on the date collected (R pre 1/12, M post 1/12)
- All HPV tests that are part of co-tests or reflex testing will have a program code of 'HPV' and **must** be sent to the NCSR as one combined HL7 message or will be rejected back to the lab.

HPV

The following table lists the reporting requirements for HPV results.

Key to Reporting Requirement:

- R – Required/Mandatory
- RE – Required if known
- O – Optional (will be stored by register)

Table 4: Reporting requirements for HPV results

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Type of Test	R	OBR-4	35904009^Human papillomavirus DNA detection^SCT	Defines HPV as test type
Filler Order Number	R	OBR-3	<unique ID>^<Pathology Laboratory Name>^<NATA Number>^AUSNATA	If ORC-3 is also filled it must be the same as OBR-3. This includes details of the laboratory that actually performed the test, which may be different than the laboratory submitting the result.

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Date/Time Sample Received	R	OBR-14	20180223154900+1000	YYYYMMDDHHMMSS+HHMM If seconds not provided, will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location.
Date/Time Test Requested	R	OBR-27.4	^^^20180223154900+1000 NOTE: 4th element of OBR-27	NOTE: OBR-6 is no longer used, use OBR-27 YYYYMMDDHHMMSS+HHMM If seconds not provided, will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location. Note: Request date cannot be less that the Collected, received and reported dates
Date/Time Sample Collected	R	OBR-7	20180223154900+1000	If ORC-7 also has a value, then both must be the same otherwise it will be rejected. YYYYMMDDHHMMSS+HHMM If seconds not provided, will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location. Note: Request date cannot be less that the Collected, received and reported dates
Date/Time Results Reported	R	OBR-22	20180223154900+1000	YYYYMMDDHHMMSS+HHMM If seconds not provided, will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location. Note: Request date cannot be less that the Collected, received and reported dates This is the Date/Time initially authorised and reported to the HCP.

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Results Status Indicator	R	OBR-25 OBX-11	F (Final), C (Corrected)	NCSR should only receive final and corrected results. When a result is submitted the first time they should be final results. If subsequently corrected, the OBR/OBX status indicator should indicate such. NOTE: Withdrawn logic not yet implemented, manual process to be used.
Laboratory Performing the Test	O	OBX-15	<number>^Pathology Laboratory Name^LAB^AUSNATA	The NCSR uses the Approved Laboratory Performing the Test in OBR-3 (which needs to match ORC-3 if that is valued) as the Laboratory that is the filler (is responsible for the results submission). OBX-15 is also used for this purpose as a unique identifier of the responsible producing service. This may be an external provider with their own NATA accreditation. The NCSR will accept a value in OBX-15. Any follow-up, if required, with the Laboratory for whatever reason, will be with the Laboratory identified as the filler in OBR-3. If the Laboratory intends for the NCSR to follow up a result with the secondary laboratory responsible for producing the result, this will need to be transmitted in separate ORC/OBR segments.
Observation format type	R	OBX-2	Those used in NCSR include: CE – Coded Entry (LOINC or SNOMED) FT – Formatted Text (Display) ST – String Data DT – Date (YYYYMMDD) NOTE ED – Encapsulated data and TX not used	This field contains the format of the observation value in OBX. FT must be in the format: TXT^Display format in text^AUSPDI NOTE: NCSR will allow use of DT if the date is formatted as YYYYDDMM for batch expiry details but if it does not match that format will be rejected. Use ST instead to ensure detail captured in that case with the same LONIC codes

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Code / Detail	R	OBX-3/5	Codes as per LOINC Codes for HPV table OBX|<x>|CE|<LOINC Code>^<LOINC Code Description>||<LOINC Code Value>^< LOINC Code Value Description>|||||F (or C)	Individual OBX segments with the various components and codes required for HPV screening tests. See Table following and the example below
Formatted Text Report	O	OBX-3/5	OBX|<x>|FT|TXT^Display format in text^AUSPDI||<formatted text detail>|||||F	All Laboratory systems should also send a formatted text report of the individual coded entries in a display segment. This segment is mandatory for histopathology reports.
Program Code	R	OBX-3/5	OBX|<x>|CE|19774-9^NCSR program^LN||HPV^HPV renewal program Minimum format OBX|<x>|CE|19774-9^^LN||HPV	Mandatory results segment with LOINC code 19774-9 must be sent with the text 'HPV' for HPV tests irrespective of the date of sample collection. If a LBC is part of the same test, because of positive HPV(Reflex test) or Co-test, the Program code must be 'HPV'.
Sequence Number	RE	OBR-1 OBX-1	<number>	If more than one OBR or OBX segment, must be numbered and be sequential.

Examples or clarifications of above

Test Type, Requestor, Collector, accession number, Approving Pathologist	OBR|x||1100002-1^GI^9999^AUSNATA|35904009^Human papillomavirus DNA detection ^SCT|||20160714093000+1000|||4445758F^GLADMIN^BOB^^^Dr^^^AUSHICPR||||20160714113000+1000||4445758F^GLADMIN^BOB^^^Dr^^^AUSHICPR||||LN=1100002||20170717222327+1000||LAB|F||^^^20160714000000+1000^^R^^ROUTINE|||||0626518F&DOCTOR&PAUL&&&Dr&&&AUSHICPR
Expiry Dates	OBX|x|ST|8257-8^Wash Buffer Expiry^LN||1219|||||F Or OBX|x|DT|8257-8^Wash Buffer Expiry^LN||20191201|||||F
Coded Entries	OBX|x|CE|53903-1^HPV test collection method^LN||A1^Practitioner-collected sample|||||F OBX|x|CE|19763-2^HPV Test Specimen Site^LN||B1^Cervical|||||F OBX|x|CE|67098-4^Reason for HPV test^LN||C1^Primary screening HPV test|||||F Note not all coded entries required are shown above
Program Code	OBX|x|CE|19774-9^Study^LN||HPV^HPV Renewal Program|||||F
Formatted Text/Display field	OBX|x|FT|TXT^Display format in text^AUSPDI||\.br\ HPV Collection Method Practitioner-collected sample\.br\ Reason for HPV Test Primary screening HPV test|||||F NOTE: above is only showing part of the text Important: Correct use of text formatting is essential for the results to be stored and viewed correctly.
HPV Test Results **Need not be in priority order**	OBX|x|CE|77379-6^HPV test result-oncogenic HPV^LN||D1.1^Type 16 detected|||N|||F OBX|x|CE|77379-6^HPV test result-oncogenic HPV^LN||D1.2^Type 18 detected|||N|||F OBX|x|CE|77379-6^HPV test result-oncogenic HPV^LN||D2.2^Type one or more of the following detected 35, 39, 51, 56, 59, 66, or 68|||N|||F

Note: Positive HPV results must be accompanied by a second LBC OBR/OBX grouping unless sample is self-collected

7. LOINC Codes for HPV Results

The list of LOINC codes for reporting HPV results is provided below, all fields are required unless otherwise stated.

Table 5: LOINC Codes for HPV Results

LOINC Code	Code	Item to be Coded
53903-1	**HPV Test Collection Method**	
	A1	Practitioner-collected sample
	A2	Self-collected sample
19763-2	**HPV Test Specimen Site**	
	B0	Not stated
	B1	Cervical (Note: Self collected samples cannot be coded as B1-Cervical)
	B2	Vaginal
	B3	Other gynaecological site
67098-4	**Reason for HPV Test**	
	C1	Primary screening HPV test (or repeat HPV test after unsatisfactory C1 HPV test)
	C2	Follow-up HPV test
	Co-test	
	C3.1	Co-test - Test of cure
	C3.2	Co-test - Investigation of signs or symptoms
	C3.3	Co-test - Other, as recommended in guidelines
	C4	Other
	C5	HPV Test of Cure

LOINC Code	Code	Item to be Coded
77379-6	**HPV Test Result—Oncogenic HPV (see Appendix 6 for pre-renewal)** **Multiple OBX segments can be provided as is identified by your equipment**	
	DU	Unsatisfactory
	D0	Oncogenic HPV not detected
	D1.0	HPV 16/18 detected
	D1.1	Type 16 detected
	D1.2	Type 18 detected
	D1.3	Type 18/45 detected
	D2.0	Oncogenic HPV (not 16/18) detected
	D2.1	One or more of the following types detected: 31, 33, 45, 52, or 58
	D2.2	One or more of the following types detected: 35, 39, 51, 56, 59, 66, or 68
	Above need not be in order, NCSR will order as opposite	77379-6 - D1.0 - 1 77379-6 - D1.1 - 2 77379-6 - D1.2 - 3 77379-6 - D1.3 - 4 77379-6 - D2.0 - 5 77379-6 - D2.1 - 6 77379-6 - D2.2 - 7 77379-6 - DU - 8 77379-6 - D0 - 9
53903-1	**HPV Test Collection Method**	
	A1	Practitioner-collected sample
	A2	Self-collected sample
19763-2	**HPV Test Specimen Site**	
	B0	Not stated
	B1	Cervical (Note: Self collected samples cannot be coded as B1-Cervical)
	B2	Vaginal
	B3	Other gynaecological site

LOINC Code	Code	Item to be Coded
67098-4	**Reason for HPV Test**	
	C1	Primary screening HPV test (or repeat HPV test after unsatisfactory C1 HPV test)
	C2	Follow-up HPV test
	Co-test	
	C3.1	Co-test - Test of cure
	C3.2	Co-test - Investigation of signs or symptoms
	C3.3	Co-test - Other, as recommended in guidelines
	C4	Other
	C5	HPV Test of Cure
77379-6	**HPV Test Result—Oncogenic HPV (see Appendix 6 for pre-renewal) Multiple OBX segments can be provided as is identified by your equipment**	
	DU	Unsatisfactory
	D0	Oncogenic HPV not detected
	D1.0	HPV 16/18 detected
	D1.1	Type 16 detected
	D1.2	Type 18 detected
	D1.3	Type 18/45 detected
	D2.0	Oncogenic HPV (not 16/18) detected
	D2.1	One or more of the following types detected: 31, 33, 45, 52, or 58
	D2.2	One or more of the following types detected: 35, 39, 51, 56, 59, 66, or 68
	Above need not be in order, NCSR will order as opposite	77379-6 - D1.0 - 1 77379-6 - D1.1 - 2 77379-6 - D1.2 - 3 77379-6 - D1.3 - 4 77379-6 - D2.0 - 5 77379-6 - D2.1 - 6 77379-6 - D2.2 - 7 77379-6 - DU - 8 77379-6 - D0 - 9

LOINC Code	Code	Item to be Coded
8262-8	**HPV Test Type**	
	E1.1	Qiagen Hybrid Capture II
	E2.1	Roche Cobas 4800
	E2.2	Roche Cobas 6800
	E2.3	Roche Cobas 8800
	E3.1	Abbott m2000
	E3.2	Abbott Alinity m
	E4.1	Becton Dickinson Onclarity
	E5.1	Cepheid Xpert
	E6.1	Hologic Cervista
	E6.2	Hologic Aptima
	E7.1	Seegene Anyplex
	E8.1	Genera PapType
	E9.1	Euroimmun Eroarray
	E99	Other

8. HPV Instrument & Batch Data (Lot & Expiry Codes)

HPV Batch Data information must be provided if known for all cervical screening tests

Table 6: HPV Batch Data (Lot & Expiry Codes)

LOINC Code	Code	Item to be Coded
20430-5	**HPV Test Sample**	
	F0	Not stated
	F1	PreservCyt Solution
	F2	SurePath medium
	F97	Other commercial self-collection device
	F98	Specimen transport medium
	F99	Flocked or cotton swab

HPV Test Batch Information: Control kit	
8265-1	Lot number
8266-9	Expiry date
HPV Test Batch information: Cellular (LBC) Extraction Kit	
8267-7	Lot number
8268-5	Expiry date
HPV Test Batch Information: Nucleic Acid Extraction Kit	
8269-3	Lot number
8270-1	Expiry date
HPV test batch information: Amplification Kit	
8252-9	Lot number
8253-7	Expiry date
HPV Test Batch Information: Detection Kit	
8254-5	Lot number
8255-2	Expiry date
HPV Test Batch information: Wash Buffer	
8256-0	Lot number
8257-8	Expiry date
HPV Test Batch Information: Specimen Diluent	
8258-6	Lot Number
8259-4	Expiry Date

HPV Test Batch Information: Negative Control Kit	
8260-2	Lot Number
8261-0	Expiry Date
HPV Test Batch Information: Elution (cobas® 4800 system only)	
8263-6	Lot Number
15412-0	Expiry Date
HPV Test Batch Information: Proteinase K (cobas® 4800 system only)	
15413-8	Lot Number
15414-6	Expiry Date

9. HPV Recommendation Codes

Table 7: HPV Recommendation Codes

LOINC Code	Code	Item to be Coded
19773-1	**Recommendation**	
	M0	No recommendation
	M1	Re-screen in 5 years
	M2	Re-screen in 3 years
	M3	Repeat HPV in 12 months
	M4	Co-test in 12 months
	M5	Retest in 6 weeks (RETIRED)*
	M5a	Collect LBC at 6 weeks
	M5b	Repeat HPV test within 6 weeks
	M6	Refer for colposcopic assessment
	M7	Test taken at time of colposcopy, no recommendation
	M8	Discharge from program
	M9	Other management recommendation
	M10	Co-test in 3 years
	MS	Symptomatic –clinical management required
	MP	Rescreen in 2 years (RETIRED)*

19774-9	**Program**	
	HPV	Required – HPV results to be coded with HPV program code

10. Renewal Cytology

The following table lists the reporting requirements for cytology results.

Key to Reporting Requirement:

- R – Required/Mandatory
- RE – Required if known
- – Optional (will be stored by register)

Table 8: Reporting requirements for cytology results

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Type of Test	R	OBR-4	417036008^Liquid based cervical cytology screening^SCT	Defines LBC as test type
Filler Order Number	R	OBR-3	<unique ID>^<Pathology Laboratory Name>^<NATA Number>^AUSNATA	If ORC-3 is also filled it must be the same as OBR-3.
Date/Time Sample Received	RE	OBR-14	20180223154900+1000	YYYYMMDDHHMMSS+HHMM If seconds not provided will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location.

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Date/Time Test Requested	R	OBR-27.4	^^^20180223154900+1000 NOTE: 4th element of OBR-27	NOTE: OBR-6 is no longer used, use OBR-27 YYYYMMDDHHMMSS+HHMM If seconds not provided will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location.
Date/Time Sample Collected	R	OBR-7	20180223154900+1000	If ORC-7 is also valued, then both must be the same otherwise it will be rejected. YYYYMMDDHHMMSS+HHMM If seconds not provided will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location.
Date/Time Results Reported	R	OBR-22	20180223154900+1000	YYYYMMDDHHMMSS+HHMM If seconds not provided will still be accepted. NCSR will accept times without the time zone, although this is a variation to the HL7 specification. If not provided NCSR will add the time zone based on a record of the originating laboratory and the current time zone based on the recorded location.
Results Status Indicator	R	OBR-25 OBX-11	F (Final), C (Corrected)	NCSR should only receive final and corrected results When a result is submitted the first time they should be final results. If subsequently corrected, the OBR/OBX status indicator should indicate such. NOTE: Withdrawn logic not yet implemented, manual process to be used.

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Observation format type	R	OBX-2	Those used in NCSR include: CE – Coded Entry (LOINC or SNOMED) FT – Formatted Text (Display) NOTE ED – Encapsulated data and TX not used	This field contains the format of the observation value in OBX. FT must be in the format: TXT^Display format in text^AUSPDI
Code / Detail	R	OBX-3/5	Codes as per LOINC Codes for LBC table ***OBX***|***<x>***|***CE***|***<LOINC Code>***^<LOINC Code Description>||***<LOINC Code Value>***^< LOINC Code Value Description>|||||***F (or C)*** See example in Section 8.2 and below	Individual OBX segments with the various components and codes required for LBC tests.
Formatted Report	O	OBX-3/5	OBX|<x>|FT|TXT ^Display format in text^AUSPDI||<formatted text detail>|||||F	Some Labs LIS systems will also send a formatted text report of the individual coded entries. Although not used by the NCSR this will be accepted.

All Laboratories		HL7 Interface Users Only		
Results Identifiers	**Reporting Req.**	**HL7 Field**	**Permissible Format/Example**	**Notes**
Program Code	R	OBX-3/5	***If LBC is part of an HPV*** OBX|<x>|CE|19774-9^NCSR program^LN||HPV^HPV renewal program ***If LBC only*** OBX|<x>|CE|19774-9^NCSR program^LN||PAP	Mandatory results segment with LOINC code 19774-9 must be sent with the text 'HPV' or 'PAP' depending on whether test is part of a HPV or if the LBC is done on its own.
Sequence Number	RE	OBR-1 OBX-1	<number>	If more than one OBR or OBX segment, must be numbered and be sequential.

Examples or clarifications of above

Test Type, Requestor, Collector, accession number, Approving Pathologist	OBR|x||1100002-1^GI^9999^AUSNATA|417036008^Liquid based cervical cytology screening^SCT|||20160714093000+1000|||4445758F^GLADMIN^BOB^^^Dr^^^AUSHICPR||||20160714113000+1000||4445758F^GLADMIN^BOB^^^Dr^^^AUSHICPR||||LN=1100002||20170717222327+1000||LAB|F||^^^20160714000000+1000^^R^^ROUTINE|||||0626518F&DOCTOR&PAUL&&&Dr&&&AUSHICPR
Coded Entries	OBX|x|CE|19771-5^Specimen type^LN||A2^Liquid Based specimen|||||F OBX|x|CE|19763-2^Specimen Site^LN||B1^Cervical|||||F OBX|x|CE|69907-4^Reason for test^LN||C1^Reflex LBC cytology after detection of oncogenic HPV in primary screening H|||||F Note not all coded entries required are shown above
Program Code	If the result contains an HPV test then the program code = “HPV”: OBX|x|CE|19774-9^Study^LN||HPV^HPV Renewal Program|||||F If result is a cytology alone (LBC or conventional PAP) then program code = “PAP”: OBX|x|CE|19774-9^NCSR program^LN||PAP
Formatted Text/Display field	OBX|x|FT|TXT^Display format in text^AUSPDI||\.br\ Specimen type \H\Liquid Based specimen\N\\.br\ Specimen Site \H\Conventional Cervical\N\\.br\ Reason for test \H\Reflex LBC cytology after detection of oncogenic HPV in primary screening|||||F NOTE: above is only showing part of the text

11. LOINC Codes for Renewal Cytology

A list of LOINC codes for reporting LBC results is provided here, all fields are required unless otherwise stated.

Table 9: List of LOINC codes for reporting LBC results

LOINC	Code	Item to be Coded
19771-5	**Specimen Type**	
	A0	Not stated
	A1	Conventional smear
	A2	Liquid based specimen
	A3	Conventional AND liquid based specimen
19763-2	**Specimen Site**	
	B0	Not stated
	B1	Cervical
	B2	Vaginal
	B3	Other gynaecological site
69907-4	**Reason for Test**	
	C1	Reflex LBC cytology after detection of oncogenic HPV in primary screening HPV test
	C2	Cytology after detection of oncogenic HPV in self-collected sample
	C3	Reflex LBC after detection of oncogenic HPV in Follow-up HPV test
	C4	Cytology at colposcopy
	Co-test	
	C5.1	Co-test - Test of cure
	C5.2	Co-test - Investigation of signs or symptoms
	C5.3	Co-test - Other, as recommended in guidelines
	C6	Other
	C7	Reflex LBC test after detection of oncogenic HPV in Test of Cure
	CP	Conventional Pap test to screen for cervical cancer precursors (RETIRED)*

LOINC	Code	Item to be Coded
19762-4	**Squamous Result Codes**	
	SU	Unsatisfactory for evaluation, for example, poor cellularity, poor preservation, cell detail obscured by inflammation / blood / degenerate cells
	S1	Cell numbers and preservation satisfactory. No abnormality or only reactive changes.
	S2	Possible low-grade squamous intraepithelial lesion (LSIL)
	S3	LSIL (HPV and/or CIN I)
	S4	Possible high-grade squamous intraepithelial lesion (pHSIL) (CIN I / CIN II)
	S5	HSIL (CIN II / CIN III)
	S6	HSIL with possible micro invasion / invasion
	S7	Squamous carcinoma
19765-7	**Endocervical Result Codes**	
	EU	Due to the unsatisfactory nature of the smear, no assessment has been made
	EN	Not applicable: vault smear / previous hysterectomy
	E0	No endocervical component
	E1	Endocervical component present. No abnormality or only reactive changes.
	E2	Atypical endocervical cells of uncertain significance
	E3	Possible high-grade endocervical glandular lesion
	E4	Adenocarcinoma – in- situ
	E5	Adenocarcinoma - in situ with possible micro invasion / invasion
	E6	Adenocarcinoma
19766-5	**Other Result Codes**	
	OU	Due to the unsatisfactory nature of the smear, no assessment has been made
	O1	No other abnormal cells
	O2	Atypical endometrial cells of uncertain significance
	O3	Atypical glandular cells of uncertain significance - site unknown
	O4	Possible endometrial adenocarcinoma
	O5	Possible high-grade lesion - non-cervical
	O6	Malignant cells - uterine body
	O7	Malignant cells - vagina
	O8	Malignant cells - ovary
	O9	Malignant cells - other

12. Recommendation Codes for Renewal Cytology

Note: The following recommendations refer to the whole episode not just the LBC. This may be placed in either segment if part of a positive HPV doctor-collected test result.

The recommendation is required in the LBC section but need not be in the second segment. Where a recommendation code is provided in both segments, these must be identical for the combined episode otherwise it will be rejected.

Table 10: List of recommendation codes for renewal cytology results

19773-1	Recommendation	
	M0	No recommendation
	M1	Re-screen in 5 years
	M2	Re-screen in 3 years
	M3	Repeat HPV in 12 months
	M4	Co-test in 12 months
	M5	Retest in 6 weeks (RETIRED)*
	M5a	Collect LBC at 6 weeks
	M5b	Repeat HPV test within 6 weeks
	M6	Refer for colposcopic assessment
	M7	Test taken at time of colposcopy, no recommendation
	M8	Discharge from program
	M9	Other management recommendation
	M10	Co-test in 3 years (NEW)
	MS	Symptomatic –clinical management required
	MP	Rescreen in 2 years (RETIRED)*
19774-9	Program	
	HPV	If completed as with a HPV test
	PAP	If cytology only completed

* Advice is to not delete these codes from your Laboratory Information System as may be required for historical result transmission

13. APPENDIX: Abbreviations

TERM	DEFINITION
ATSI	Aboriginal and Torres Strait Islander
DVA	Department of Veteran Affairs
Health Level 7 (HL7)	The HL7 standards are the dominant health-messaging standards Australia for inter-system and inter-organization messaging.
Healthcare Provider (HCP)	A person associated with either a health specialty or a health discipline and who is qualified and certified by regulatory bodies to provide a healthcare service to a participant, for example, General Practitioner (GP), specialist, nurse.
HPV	Human papillomavirus
IHI	Individual Healthcare Identifier issued by Medicare Australia
LBC tests	Liquid-based cytology (LBC)
LOINC	Logical Observation Identifiers Names and Codes (LOINC) is a database and a common language (set of identifiers, names, and codes) for clinical and laboratory observations.
MBS	Medicare Benefits Schedule
METeOR	Metadata Online Registry. METeOR is Australia's repository for national metadata standards for health, housing and community services statistics and information.
National Bowel Cancer Screening Program (NBCSP)	The National Bowel Cancer Screening Program currently invites eligible Australians aged 50, 55, 60, 65, 70 and 74 to undertake Bowel screening using a FOBT in the privacy of their home.
National Cancer Screening Program	National Bowel Cancer Screening Program and/or National Cervical Screening Program.
National Cervical Screening Program (NCSP)	National Cervical Screening Programs is a joint program of the Australian and State and Territory Governments. Major policy decisions about the program are determined through the Australian health Ministers' Advisory Council (AHMAC).
NCSR	The National Cancer Screening Register
NPAAC	National Pathology Accreditation Advisory Council
Participant (PPT)	Participants are those persons who are in the process of being screened, or those persons that have been screened in the past and have not Opted off.
PID	Participant identifiers
Provider	Pathology or other healthcare provider
RIN	Register Identification Number
SNOMED CT	SNOMED CT is the most comprehensive and precise clinical health terminology product in the world, providing codes, terms, synonyms and definitions used in clinical documentation and reporting.