HepLOGIC monthly practice report
Data Dictionary

Practices participating in the HepLOGIC study will receive a monthly report on measures that are relevant to use of the HepLOGIC WALRUs tool. This document describes each measure in detail. The criteria that are used by WALRUS for the HepLOGIC risk notifications are also described in this document.

Patient activity

Measure	Description
RACGP active patient population	Count of patients on last date of reporting period (i.e. end of the report month) who meet the RACGP active definition of 3 or more visits in past 2 years.
Total patient visits this month	Total number of patient visits that occurred this month – a patient will be counted multiple times if they visited multiple times.
Patients who visited this month	Total number of unique patients who visited this month – if a patient visited multiple times they will only be counted once.

Ethnicity data completeness

Measure	Description
RACGP active patients with ethnicity or Aboriginal or Torres Strait Islander status recorded	A measure of data completeness. For clinical information systems that record these in two separate fields (e.g. Medical Director software), only one needs to be completed to be counted in this measure. The denominator for this measure is the total RACGP active patient population.
Patients who visited where ethnicity or Aboriginal or Torres Strait Islander status was missing	Unique patients who visited where the data was missing. An individual patient will only be counted here once in the month, even if they visited multiple times. The denominator for this measure is the number of unique patients who visited.
Patients who visited where ethnicity or Aboriginal or Torres Strait Islander status was added	Unique patients who visited where missing data was added. For clinical information systems that record ethnicity and Aboriginal or Torres Strait Islander status in two separate fields (e.g. Medical Director software), only one field needs to be completed to be recorded here. The denominator for this measure is the number of unique patients who visited who had missing data.

Hepatitis B profile

Measure	Description
RACGP active patients indicated for hepatitis B testing	Count of RACGP-active patients on last date of reporting period (i.e. end of the report month) aged 18-75 who meet the criteria that would trigger the WALRUS hepatitis B testing notification.
RACGP active patients living with hepatitis B	Count of RACGP-active patients on last date of reporting period (i.e. end of the report month) aged 18+ who have either a recorded diagnosis of hepatitis B or pathology that indicates hepatitis B infection (such as a positive hepatitis B surface antigen result, hepatitis B DNA or hepatitis B management serology).
Patients who visited with an indication for hepatitis B testing	Unique patients who visited the practice who met the criteria that would trigger the WALRUS hepatitis B testing notification (aged 18-75 years). This is a count of all applicable patients, not just patients who saw a clinician that was using WALRUS at the time. The denominator for this measure is the number of unique patients who visited the practice (all ages). The percentage represents the proportion of all patients who visited who met the testing criteria.
Patients who visited where the hepatitis B testing indication was notified via WALRUS	Unique patients who visited a clinician who was logged into WALRUS during the visit and a hepatitis B testing notification was displayed. The denominator for this measure is all patients who visited the practice who had an indication for hepatitis B testing.

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Patients who visited with an indication for hepatitis B testing <u>and</u> hepatitis B testing was ordered	Unique patients who visited the practice with an indication for hepatitis B testing AND a hepatitis B test was ordered for the patient. The clinician did not need to be using WALRUS for patients to count in this measure. Hepatitis B tests include diagnostic tests (hepatitis serology or hepatitis B surface antigen) and management tests (hepatitis B e antigen/antibody, hepatitis B DNA, or hepatitis D) as further inquiry by the clinician may have revealed that the patient had been previously diagnosed with hepatitis B. The denominator for this measure is all patients who visited the practice who had an indication for hepatitis B testing.
Patients who visited where the WALRUS notification for hepatitis B testing was declined	Unique patients who visited a clinician where WALRUS displayed a hepatitis B testing notification, and this was declined by the clinician clicking the 'decline' button next to the notification in WALRUS. The denominator of this measure is all patients who visited the practice who had an indication for hepatitis B testing.
Patients who visited with an indication for hepatitis B management	Unique patients who visited the practice who met the criteria that would trigger the WALRUS hepatitis B management notification (i.e people aged 18+ with a hepatitis B diagnosis or indicative pathology and no evidence of hepatitis B DNA testing in the past 18 months). This is a count of <u>all</u> applicable patients, not just patients who saw a clinician that was using WALRUS at the time. The denominator for this measure is the number of unique patients who visited the practice.
Patients who visited where hepatitis B management was notified via WALRUS	Unique patients who visited a clinician who was logged into WALRUS during the visit and a hepatitis B management notification was displayed. The denominator for this measure is all patients who visited the practice who were indicated for hepatitis B management.
Patients who visited with hepatitis B viral load ordered or referred to a specialist	Unique patients who visited the practice with an indication for hepatitis B management AND a hepatitis B DNA test was ordered for the patient OR the patient was referred to a relevant specialist. The clinician did not need to be using WALRUS for patients to count in this measure. The denominator for this measure is all patients who visited the practice who were indicated for hepatitis B management.
Patients who visited where WALRUS notification for hepatitis B management was declined	Unique patients who visited a clinician where WALRUS displayed a hepatitis B management notification, and this was declined by the clinician clicking the 'decline' button next to the notification in WALRUS. The denominator for this measure is all patients who visited the practice who were indicated for hepatitis B management.

Hepatitis C profile

Measure	Description
RACGP active patients indicated for hepatitis C testing	Count of RACGP-active patients on last date of reporting period (i.e. end of the report month) aged 18-75 who meet the criteria that would trigger the WALRUS hepatitis C testing notification.
RACGP active patients living with hepatitis C	Count of RACGP-active patients on last date of reporting period (i.e. end of the report month) aged 18+ who have either a recorded diagnosis of hepatitis C or pathology that indicates hepatitis C infection (such as a positive hepatitis C antibody result or Hepatitis C nucleic acid testing), and no evidence of treatment having been prescribed.
Patients who visited with an indication for hepatitis C testing	Unique patients who visited the practice who met the criteria that would trigger the WALRUS hepatitis C testing (aged 18-75 years). This is a count of <u>all</u> applicable patients, not just patients who saw a clinician that was using WALRUS at the time. The denominator for this measure is the number of unique patients who visited the practice (all ages). The percentage represents the proportion of all patients who visited who met the testing criteria.
Patients who visited where the hepatitis C testing indication was notified via WALRUS	Unique patients who visited a clinician who was logged into WALRUS during the visit and a hepatitis C testing notification was displayed. The denominator for this measure is all patients who visited the practice who had an indication for hepatitis C testing.

Patients who visited with an indication for hepatitis C testing <u>and</u> hepatitis C testing was ordered	Unique patients who visited the practice with an indication for hepatitis C testing AND a hepatitis C test was ordered for the patient. The clinician did not need to be using WALRUS for patients to count in this measure. Hepatitis C tests include diagnostic tests (hepatitis serology or hepatitis C antibody) and management tests (hepatitis C nucleic acid) as further inquiry by the clinician may have revealed that the patient had been previously diagnosed with hepatitis C. The denominator for this measure is all patients who visited the practice who had an indication for hepatitis C testing.
Patients who visited where the WALRUS notification for hepatitis C testing was declined	Unique patients who visited a clinician where WALRUS displayed a hepatitis C testing notification, and this was declined by the clinician clicking the 'decline' button next to the notification in WALRUS. The denominator for this measure is all patients who visited the practice who had an indication for hepatitis C testing.
Patients who visited with an indication for hepatitis C management	Unique patients who visited the practice who met the criteria that would trigger the WALRUS hepatitis C management notification (i.e. people aged 18+ with a hepatitis C diagnosis or indicative pathology and no evidence of treatment having been prescribed). This is a count of <u>all</u> patients, not just patients who saw a clinician that was using WALRUS at the time. The denominator for this measure is the number of unique patients who visited the practice.
Patients who visited where hepatitis C management was notified via WALRUS	Unique patients who visited a clinician who was logged into WALRUS during the visit and a hepatitis C management notification was displayed. The denominator for this measure is all patients who visited the practice who were indicated for hepatitis C management.
Patients who visited with hepatitis C treatment prescribed or referred to a specialist	Unique patients who visited the practice with an indication for hepatitis C management AND hepatitis C treatment was prescribed OR the patient was referred to a relevant specialist. The clinician did not need to be using WALRUS for patients to count in this measure. The denominator for this measure is all patients who visited the practice who were indicated for hepatitis C management.
Patients who visited where WALRUS notification for hepatitis C management was declined	Unique patients who visited a clinician where WALRUS displayed a hepatitis C management notification, and this was declined by the clinician clicking the 'decline' button next to the notification in WALRUS. The denominator for this measure is all patients who visited the practice who had an indication for hepatitis C testing.

WALRUS use

Measure	Description
Number of staff with WALRUS configured for HepLOGIC last month (by user type)	Total number of clinical staff, counted at the end of the reporting period, who have been set up to use the HepLOGIC notifications within WALRUS, reported by doctor or nurse. Non-clinical users are not reported as the HepLOGIC WALRUS notifications are not targeted to their role in the practice.
Number of staff, configured for HepLOGIC, who logged into WALRUS at least once per week last month	An indication of the frequency of WALRUS use by clinical staff, accounting for part time workers. If the numbers for this measure match the numbers for the measure above it may be inferred that people who are set up for the HepLOGIC notifications are accessing WALRUS regularly.
WALRUS logins by role (graph)	A display of the number of daily clinical users of HepLOGIC/WALRUS across the month.

* The POLAR data system that supports the WALRUS tool only collects patient pathology and prescriptions data from the past 7 years. Many laboratories return hepatitis serology results in a manner that cannot be read by WALRUS. Results recorded in a pdf will not be recognised.

WALRUS/HepLOGIC – risk notification criteria

WALRUS notification: **Hepatitis B testing**

Logic: *Adults who are at risk of hepatitis B, based on ethnicity, indicative diagnoses or pathology, <u>excluding</u> those with an existing diagnosis of hepatitis B, demonstrated immunity to hepatitis B, or evidence of prior testing.*

Clinical reference: *National hepatitis B testing policy:* <u>https://testingportal.ashm.org.au/national-hbv-testing-policy/</u>

Limitations: *Not all risk factors for hepatitis B can be incorporated into the WALRUS algorithm, including sexual or household contacts and family members of people living with hepatitis B, men who have sex with men, sex workers, and people in custodial settings or undergoing dialysis. The POLAR data system that supports WALRUS only collects patient pathology and prescriptions data from the past 7 years.*

WALRUS criteria for Hepatitis B testing notification:

Data field	Value	Notes
Age	18 – 75 years	• Upper threshold of 75 years was not included in initial implementation. Will be in place from Aug 2023. • Upper age threshold is consistent with other cancer screening programs such as cervical & bowel cancer. • Doctors may offer testing to anyone at their discretion.
ANY of:		
Ethnicity	At risk ethnicity	• 170+ ethnicities indicated, including Aboriginal and Torres Strait Islander people.
Diagnosis	Hepatitis C	• Diagnosis must entered using coded drop-down lists within clinical software. Freetext/Doctor notes are not read by WALRUS.
	HIV	
	Current/past injecting drug use	
	Cirrhosis or liver disease	
Pathology request	HCV nucleic acid	• Indicates past or current hepatitis C infection.
Pathology result	Hepatitis C antibody positive	• Many laboratories return hepatitis C serology results in a manner that cannot be read by WALRUS. A positive result recorded in a pdf will not be recognised.
	ALT > 45 for males ALT > 30 for females	• Indicative of liver damage.
APRI	> 1	• AST to Platelet Ratio Index (APRI) is calculated if appropriate pathology results are available • https://www.mdcalc.com/calc/3094/ast-platelet-ratio-index-apri • APRI > 1 is indicative of cirrhosis.
Prescriptions	Hepatitis C treatment drugs	• Ever prescribed. • Indicates past infection with hepatitis C.
	Opiate substitution therapy	• Ever prescribed. • List of drugs initially implemented was too broad. Will be limited to methadone and suboxone from Aug 2023
Excluding ANY of:		
Diagnosis	Hepatitis B	• Diagnosis must entered using coded drop-down lists within clinical software. Freetext/Doctor notes are not read by WALRUS.
Pathology request	Hepatitis B serology	• Indicates testing has previously been offered.
	Hepatitis B DNA	• Indicates a prior hepatitis B diagnosis.
	Hepatitis B management serology (e.g Hepatitis B e antigen or antibody)	
	Hepatitis D	
Pathology result	Hepatitis B surface antibody >10 or = "immune"	• Indicates Hepatitis B immunity. • Many laboratories return hepatitis B results in a manner that cannot be read by WALRUS. A result recorded in a pdf will not be recognised.

WALRUS notification: **Hepatitis C testing**

Logic: *Adults who are at risk of hepatitis C, based on ethnicity, indicative diagnoses or pathology, excluding those who have an existing diagnosis of hepatitis C or evidence of prior testing.*

Clinical reference: *National hepatitis C testing policy: https://testingportal.ashm.org.au/national-hcv-testing-policy/*

Limitations: *Not all risk factors for hepatitis C can be incorporated into the WALRUS algorithm, including people who: are in custodial settings, have tattoos or body piercings, are sexual partners of a person with HCV infection, received an organ transplant or blood transfusion prior to 1990, were born to mothers with HCV infection, or have had a needle-stick injury. Hepatitis C is curable but reinfection can occur and the WALRUS tool will not suggest testing for people who have evidence of prior infection.*
The POLAR data system that supports WALRUS only collects patient pathology and prescriptions data from the past 7 years.

WALRUS criteria for Hepatitis C testing notification:

Data field	Value	Notes
Age	18 – 75 years	• Upper threshold of 75 years was not included in initial implementation. Will be in place from Aug 2023. • Upper age threshold is consistent with other cancer screening programs such as cervical & bowel cancer. • Doctors may offer testing to anyone at their discretion.
ANY of:		
Ethnicity	At risk ethnicity	• 45+ ethnicities indicated, including Aboriginal and Torres Strait Islander people.
Diagnosis	Hepatitis B	• Diagnosis must entered using coded drop-down lists within clinical software. Freetext/Doctor notes are not read by WALRUS.
	HIV	
	Current/past injecting drug use	
	Cirrhosis or liver disease	
Pathology request	Hepatitis B DNA	• Indicates hepatitis B infection.
	Hepatitis B management serology	
	Hepatitis D	
Pathology result	Hepatitis B surface antibody positive	• Many laboratories return hepatitis B serology results in a manner that cannot be read by WALRUS. A positive result recorded in a pdf will not be recognised.
	ALT > 45 for males ALT > 30 for females	• Indicative of liver damage.
APRI	> 1	• AST to Platelet Ratio Index (APRI) is calculated if appropriate pathology results are available • https://www.mdcalc.com/calc/3094/ast-platelet-ratio-index-apri • APRI > 1 is indicative of cirrhosis.
Prescriptions	Opiate substitution therapy	• Ever prescribed. • List of drugs initially implemented was too broad. Will be limited to methadone and suboxone from Aug 2023
Excluding ANY of:		
Diagnosis	Hepatitis C	• Diagnosis must entered using coded drop-down lists within clinical software. Freetext/Doctor notes are not read by WALRUS
Pathology request	Hepatitis C serology	• Indicates testing has previously been offered.
	Hepatitis C nucleic acid	• Indicates a prior hepatitis C diagnosis.
Prescriptions	Hepatitis C treatment drugs	• Ever prescribed. • Indicates a prior hepatitis C diagnosis.

WALRUS notification: **Hepatitis B management**

Logic: *Adults who are living with hepatitis B but have no evidence of monitoring within the past 18 months*

Clinical reference: *ashm Decision making in hepatitis B:* *https://www.ashm.org.au/resources/decision-making-in-hepatitis-b/*

Limitations: *The HBV viral load test (DNA test) is used here as the basic indicator that hepatitis B monitoring is being undertaken, noting that other monitoring is recommended depending on the infection phase the person is currently in. HBV viral load testing is only rebatable through Medicare once every 12 months. A period of 18 months has been used as the trigger for the HepLOGIC tool to ensure that patients due not inadvertently incur a fee for testing. The POLAR data system that supports WALRUS only collects patient pathology and prescriptions data from the past 7 years.*

WALRUS criteria for Hepatitis B management notification:

Data field	Value	Notes
Age	≥ 18 years	
ANY of:		
Diagnosis	Hepatitis B	• Diagnosis must entered using coded drop-down lists within clinical software. Freetext/Doctor notes are not read by WALRUS.
Pathology request	Hepatitis B DNA	• Indicates hepatitis B infection.
	Hepatitis B management serology	
	Hepatitis D	
Pathology result	Hepatitis B surface antibody positive	• Many laboratories return hepatitis B serology results in a manner that cannot be read by WALRUS. A positive result recorded in a pdf will not be recognised.
Excluding:		
Pathology request	Hepatitis B DNA ordered within past 18 months	• Indicates hepatitis B management testing has been offered

WALRUS notification: **Hepatitis C management**

Logic: *Adults who have a hepatitis C diagnosis indicated but have no evidence of treatment.*

Clinical reference: *ashm Decision making in hepatitis C:* *https://www.ashm.org.au/resources/decision-making-in-hepatitis-c/*

Limitations: *The WALRUS tool does not identify people who may have been previously cured of hepatitis C but have been reinfected and therefore require re-treatment. The POLAR data system that supports WALRUS only collects patient pathology and prescriptions data from the past 7 years.*

WALRUS criteria for Hepatitis C management notification:

Data field	Value	Notes
Age	≥ 18 years	
ANY of:		
Diagnosis	Hepatitis C	• Diagnosis must entered using coded drop-down lists within clinical software. Freetext/Doctor notes are not read by WALRUS.
Pathology request	Hepatitis C nucleic acid	• Indicates hepatitis C infection.
Pathology result	Hepatitis C antibody positive	• Many laboratories return hepatitis C serology results in a manner that cannot be read by WALRUS. A positive result recorded in a pdf will not be recognised.
Excluding:		
Prescriptions	Hepatitis C treatment drugs	• Ever prescribed. • Indicates treatment has previously been offered.