

National Healthcare Agreement: PI 39-Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals, 2012

Identifying and definitional attributes

Metadata item type:	Indicator
Indicator type:	Progress measure
Short name:	PI 39-Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals, 2012
METEOR identifier:	443699
Registration status:	<ul style="list-style-type: none">• Health, Superseded 25/06/2013
Description:	<i>Staphylococcus aureus</i> bacteraemia (SAB) associated with acute care public hospitals (excluding cases associated with private hospitals and non-hospital care).
Indicator set:	National Healthcare Agreement (2012) Health , Superseded 25/06/2013
Outcome area:	Hospital and Related Care National Health Performance Authority (retired) , Retired 01/07/2016 Health , Standard 07/07/2010
Quality statement:	National Healthcare Agreement: PI 39-Healthcare-associated Staphylococcus aureus (including MRSA) bacteraemia in acute care hospitals, 2012 QS Health, Superseded 14/01/2015

Collection and usage attributes

Computation description: Acute care public hospitals are defined as all public hospitals including those hospitals defined as public psychiatric hospitals in the Public Hospital Establishment National Minimum Data Set.

A patient-episode of SAB is defined as a positive blood culture for *Staphylococcus aureus*. For surveillance purposes, only the first isolate per patient is counted, unless at least 14 days has passed without a positive blood culture, after which an additional episode is recorded.

A *Staphylococcus aureus* bacteraemia will be considered to be healthcare-associated if: the first positive blood culture is collected more than 48 hours after hospital admission or less than 48 hours after discharge, OR, if the first positive blood culture is collected 48 hours or less after admission and one or more of the following key clinical criteria was met for the patient-episode of SAB:

1. SAB is a complication of the presence of an indwelling medical device (e.g. intravascular line, haemodialysis vascular access, CSF shunt, urinary catheter)
2. SAB occurs within 30 days of a surgical procedure where the SAB is related to the surgical site
3. An invasive instrumentation or incision related to the SAB was performed within 48 hours
4. SAB is associated with neutropenia ($<1 \times 10^9$) contributed to by cytotoxic therapy

Exclusions:

Cases where a known previous positive test has been obtained within the last 14 days are excluded. For example: If a patient has SAB in which 4 sets of blood cultures are positive over the initial 3 days of the patient's admission only one episode of SAB is recorded. If the same patient had a further set of positive blood cultures on day 6 of the same admission, these would not be counted again, but would be considered part of the initial patient-episode.

Note: If the same patient had a further positive blood culture 20 days after admission (i.e. greater than 14 days after their last positive on day 5), then this would be considered a second patient-episode of SAB.

Analysis by state and territory is based on location of the hospital.

Presented as:

- a number, and
- per 10,000 patient days.

Coverage: Denominator ÷ Number of patient days for all public hospitals in the state or territory.

Any variation from the specifications by jurisdictions will be footnoted and described in the data quality statement.

Computation: Numerator

10,000 x (Numerator ÷ Denominator).

Numerator: Number of SAB patient episodes (as defined above) associated with acute care public hospitals

Numerator data elements:

Data Element / Data Set

Data Element

Episode of admitted patient care—condition onset flag

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Episode of care—additional diagnosis

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Establishment—organisation identifier (Australian)

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Hospital service—care type

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Person—person identifier

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Denominator:

Number of patient days for public acute care hospitals (only for hospitals included in the surveillance arrangements)

Denominator data elements:

Data Element / Data Set

Data Element

Episode of admitted patient care—admission date

Data Source

[State/territory admitted patient data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Episode of admitted patient care—separation date

Data Source

[State/territory admitted patient data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Establishment—organisation identifier (Australian)

Data Source

[State/territory admitted patient data](#)

Guide for use

Data source type: Administrative by-product data

Disaggregation:

2010–11—State and territory, by:

- Methicillin-resistant Staphylococcus aureus (MRSA)/Methicillin-sensitive Staphylococcus aureus (MSSA)

Some disaggregation may result in numbers too small for publication.

Disaggregation data elements:

Data Element / Data Set

Data Element

Establishment—Australian state/territory identifier

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Data Element

Methicillin-resistant Staphylococcus aureus (MRSA)/ Methicillin-sensitive Staphylococcus aureus (MSSA) indicator

Data Source

[State/territory infection surveillance data](#)

Guide for use

Data source type: Administrative by-product data

Comments:

Most recent data available for 2012 CRC report: 2010–11

For some states and territories there is less than 100 percent coverage of hospitals. This may impact on the reported rate. For those jurisdictions with incomplete coverage of acute care public hospitals (in the numerator), only patient days for those hospitals that contribute data are included (in the denominator). Specifically, if a hospital was not included in the SAB surveillance arrangements for part of the year, then the patient days for that part of the year are excluded. If part of the hospital was not included in the SAB surveillance arrangements (e.g. children's wards, psychiatric wards), then patient days for that part of the hospital are excluded. Patient days for 'non-acute' hospitals (such as rehabilitation and psychiatric hospitals) are included if the hospital was included in the SAB surveillance arrangements, but not otherwise.

Only episodes associated with acute public hospital care in each jurisdiction should be counted. If a case is associated with care provided in another jurisdiction (cross border flows) then it is reported (where known) by the jurisdiction where the care associated with the SAB occurred.

Patient episodes associated with care provided by private hospitals and non-hospital health care are excluded.

Almost all patient episodes of SAB will be diagnosed when the patient is an admitted patient. However, the intention is that cases are reported whether they were associated with admitted patient care or non-admitted patient care in public acute care hospitals.

Where there is significant variation, for example non-coverage of cases diagnosed less than 48 hours after admission, in the data collection arrangements it will affect the calculation of values across states and territories.

Variation in admission practices across jurisdictions will influence the denominator for this indicator impacting on comparability of rates.

Jurisdictional manuals should be referred to for full details of definitions used in infection control surveillance.

Representational attributes

Representation class: Rate
Data type: Real
Unit of measure: Episode
Format: NN[N]

Indicator conceptual framework

Framework and dimensions: [Safety](#)

Data source attributes

Data sources:

Data Source
State/territory admitted patient data
Frequency
Annual
Data custodian
State/territory health authorities
Data Source
State/territory infection surveillance data
Frequency
Annual
Data custodian
State/territory health authorities

Accountability attributes

Reporting requirements: National Healthcare Agreement
Organisation responsible for providing data: Australian Institute of Health and Welfare
Benchmark: [National Healthcare Agreement: PB 06-The rate of Staphylococcus aureus \(including MRSA\) bacteraemia is no more than 2.0 per 10,000 occupied bed days for acute care public hospitals by 2011–12 in each state and territory, 2012](#)
Further data development / collection required: Specification: Interim

Source and reference attributes

Relational attributes

Related metadata references:

See also [National Healthcare Agreement: PB 06-The rate of Staphylococcus aureus \(including MRSA\) bacteraemia is no more than 2.0 per 10,000 occupied bed days for acute care public hospitals by 2011–12 in each state and territory, 2012](#)

- [Health](#), Superseded 25/06/2013

Has been superseded by [National Healthcare Agreement: PI 22-Healthcare associated infections, 2013](#)

- [Health](#), Superseded 25/11/2013

See also [National Healthcare Agreement: PI 38-Adverse drug events in hospitals, 2012](#)

- [Health](#), Retired 25/06/2013

Supersedes [National Healthcare Agreement: PI 39-Healthcare-associated Staphylococcus aureus \(including MRSA\) bacteraemia in acute care hospitals, 2011](#)

- [Health](#), Superseded 31/10/2011

See also [National Healthcare Agreement: PI 40-Pressure ulcers in hospitals, 2012](#)

- [Health](#), Retired 25/06/2013

See also [National Healthcare Agreement: PI 41-Falls resulting in patient harm in hospitals, 2012](#)

- [Health](#), Retired 25/06/2013

See also [National Healthcare Agreement: PI 42-Intentional self-harm in hospitals, 2012](#)

- [Health](#), Retired 25/06/2013

See also [National Healthcare Agreement: PI 43-Unplanned/unexpected readmissions within 28 days of selected surgical episodes of care, 2012](#)

- [Health](#), Superseded 25/06/2013

See also [National Healthcare Agreement: PI 50-Staphylococcus aureus \(including MRSA\) bacteraemia in residential aged care, 2012](#)

- [Health](#), Retired 25/06/2013