

Objective for MRSA bacteraemia: Reports and rates of MRSA bacteraemia (October, 2008 to September, 2009)

Overview

From April 2010, all NHS organisations in England will be set an objective for reducing meticillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections.

The MRSA Objective will be applied to:

- Primary care organisations (PCOs) as a population based rate, with all MRSA bacteraemia in members of their population counted towards their total.
- Acute trusts as a bed-day rate, with all MRSA bacteraemia identified after two days of admission counted towards their total.

These tables set out the numbers and rates of MRSA bloodstream infections for the period October 2008 to September 2009, broken down by acute Trust and PCO. The MRSA Objective for 2010-11 will be set by the Department of Health according to these data. These two tables comprise:

1. Number and rate of all MRSA bacteraemia, by PCO;
2. Number and rate of trust-apportioned MRSA bacteraemia, by acute Trust.

For further information on the MRSA Objective please see the Department of Health's website at:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_109951

Or email: MRSA_Objective_Queries@dh.gsi.gov.uk

Definitions, data sources, and methods:

Definition of 'trust-apportioned' cases

Trust-apportioned cases are a subset of all mandatory MRSA bacteraemia data reported to the HPA. Only cases fulfilling **all** the following three criteria are apportioned to an acute Trust:

- Patient's specimen location has been reported as an 'acute Trust' (or is *null*);
- Patient's location at time of specimen has been reported as 'In-patient', 'Day patient', 'Emergency assessment' (or is *null*);
- Patient's specimen date is on, or after, the third day of the admission (or admission date is *null*). For example, if admission day is 01/Dec/2008, then the third day of admission would be 03/Dec/2008.

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Definition of 'PCO-attributed' cases

Each case of MRSA bacteraemia reported for NHS trust-commissioned patients is attributed to a PCO in England. The PCO for each case is attributed, in decreasing order of priority, as follows:

- If patient's GP practice code is available (and is based in England), the patient case will be attributed to the PCO at which the patient's GP is listed.
- If the patient's GP practice code is unavailable but the patient is known to reside in England, the case is attributed to the PCO catchment area in which the patient resides.
- If both patient's GP practice code and patient postcode are unavailable, or if patient has been identified as residing outside England, then the case is attributed to the main commissioning PCO for the trust that reported the case.

Data sources

MRSA bacteraemia

Data for MRSA bacteraemia are reported to the HPA via a web-enabled mandatory surveillance system. This surveillance is operated by the HPA on behalf of the Department of Health. Further information if available at:

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1191942169773>

Patient bed day denominators

Patient bed day denominators are calculated using the average daily 'Total (occupied)' bed data from the KH03 dataset collected by Department of Health. The latest available denominator data are for the financial year 2008/09 (April to March) and are available at:

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/@sta/@perf/documents/digitalasset/dh_107422.xls

PCO population denominators

Estimated populations for each PCO in England are derived from the interim Mid-2008 estimated resident population for Primary Care Organisations (version: 01/Oct/2009), available from Office for National Statistics:

<http://www.statistics.gov.uk/statbase/Product.asp?vlnk=15106>

Methods

Rate of MRSA bacteraemia, by acute trust:

The MRSA bacteraemia infection rate per 100,000 bed days for each Trust was calculated as follows:

$$\text{Trust Rate} = \left[\frac{\text{Number of trust - apportioned MRSA bacteraemia reports for the time period}}{\text{Average daily total (occupied) beds} \times 365 \text{ days}} \right] \times 100,000$$

Rate of MRSA bacteraemia, by PCO:

The MRSA bacteraemia infection rate per 100,000 population for each PCO was calculated as follows:

$$\text{PCO Rate} = \left[\frac{\text{Number of MRSA bacteraemia reports for the PCO for the time period}}{\text{Mid - 2008 PCO population estimate}} \right] \times 100,000$$

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Caveats and Health Warnings

- Data were extracted from the HPA's data capture system on November 23, 2009.
- These data should not be used as the basis for decisions on the clinical effectiveness of interventions in individual NHS organisations without further investigations.