

NHS GRAMPIAN

Healthcare Associated Infection (HAI) Bimonthly Report – September 2016

1. Actions Recommended

The Board is requested to note the content of this summary bimonthly HAI Report, as directed by the HAI Policy Unit, Scottish Government Health Directorates.

2. Strategic Context

- Local Delivery Plan Standards for 2016/17
 - *Staphylococcus aureus* bacteraemia (SAB) cases are 24 or less per 100,000 acute occupied bed days (AOCD)
 - *Clostridium difficile* infections (CDI) in patients aged 15 and over is 25 cases or less per 100,000 total occupied bed days (TOBD).
- National Key Performance Indicators for MRSA screening
- National Hand Hygiene Compliance Target
- National Health Facilities Scotland (HFS) Environmental Cleaning Target
- National Health Facilities Scotland (HFS) Estates Monitoring Target
- National Scottish Antimicrobial Prescribing Group (SAPG) *Clostridium difficile* Local Delivery Plan Standards

3. Key matters relevant to recommendation

Issue	Group	Target	Period & source	NHS Scot	NHS G	RAG
SABs	All ages	Local Delivery Plan Standards 24 cases per 100,000 AOBD	No new published national data			Amber (status as last report)
CDIs	Patients aged 15 and over	Local Delivery Plan Standards 32 cases per 100,000 TOBD	No new published national data			Red (status as last report)
MRSA (CRA) screening		HPS 90%	Jan-Mar 2016, HPS	82%	91%	Green
Hand Hygiene	All clinical areas	SGHD 90%	Jun-Jul 2016, NHSG	Not available	97%	Green
Cleaning		HFS 90%	Apr-Jun 2016, HFS	95%	94%	Green
Estates		HFS 90%	Apr-Jun 2016, HFS	97%	96%	Green

Issue	Group	Target	Period & source	NHS Scot	NHS G	RAG
Antimicrobial prescribing	Hospital downstream medical wards (ARI,110, 111,)	SAPG 95%- doses admin	Jul-Aug 2016, NHSG	NA	96%	Green
		SAPG 95%- Indication documented		NA	96%	Green
		SAPG 95%- duration/review documented		NA	84%	Amber
		SAPG 95%- policy compliant		NA	100%	Green
	Hospital downstream surgical wards (ARI 205)	SAPG 95%- doses admin	Jul-Aug 2016, NHSG	NA	100%	Green
		SAPG 95%- Indication documented		NA	80%	Amber
		SAPG 95%- duration/review documented		NA	60%	Red
		SAPG 95%- policy compliant		NA	75%	Amber
	Surgical Antibiotic prophylaxis (Neurosurgery)	SAPG 95% - single dose	May-Jun 2016 NHSG	NA	35%	Red
		SAPG 95% - policy compliant			72%	Amber
	Total antibiotic prescribing (primary care)	SAPG 50% GP practices at or moved towards target	Apr-May 2016, PRISMS	NA	92%	Green
	Surgical Site Infections (SSIs)	Caesarean Section	n/a	No new published national data		
Hip Arthroplasty		n/a	No new published national data			Green (status as last report)

4. Risk Mitigation

By noting the contents of this report, the Board will fulfil its requirement to seek assurance that appropriate surveillance of healthcare associated infection is taking place and that this surveillance is having a positive impact on reducing the risk of avoidable harm to the patients of NHS Grampian.

5. Responsible Executive Director and contact for further information

If you require any further information in advance of the Board meeting please contact:

Responsible Executive Director

Amanda Croft

Director of Nursing

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Contact for further information

Pamela Harrison

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***Staphylococcus aureus* (including MRSA) Bacteraemia**

Enhanced *Staphylococcus aureus* Bacteraemia (SAB) Surveillance

Enhanced SAB surveillance is carried out in all Health Boards using standardised data definitions. Each new case continues to be discussed at a weekly multidisciplinary team meeting involving Infection Prevention and Control Doctors, Infection Prevention and Control Nurses, Surveillance Nurse, Antimicrobial Pharmacist, Infection Unit Nurse and a microbiology registrar. The offer of attendance at speciality case review meetings from the IPCT is extended should further discussion be required.

Cases are defined as:

- Hospital Acquired
- Healthcare Associated
- Community Associated
- Not Known

Since the last HAI report, no new collated results for NHS Scotland have been published.

National *Staphylococcus aureus* bacteraemia surveillance programme

Health Protection Scotland are due to publish their quarterly reports on the surveillance of *Staphylococcus aureus* bacteraemia (SAB) in Scotland, April to June 2016 in October 2016.

More information on the national surveillance programme for *Staphylococcus aureus* bacteraemias can be found at:

<http://www.hps.scot.nhs.uk/haic/sshaip/publicationsdetail.aspx?id=30248>

MRSA Screening

In early 2011, the Scottish Government announced new national minimum MRSA screening recommendations. Targeted MRSA screening by specialty (implemented in January 2010) has now been replaced by a Clinical Risk Assessment (CRA) followed by a nose and perineal swab (if the patient answers yes to any of the CRA questions). National Key Performance Indicators (KPIs) have now been implemented with Boards being required to achieve 90% compliance with CRA completion. CRA compliance for Quarter 1 (January-March 2016) within NHS Grampian was 91%. This is the first time NHS Grampian has achieved compliance with the KPI.

Health Board	2015_16 Q2	2015_16 Q3	2015_16 Q4	2016_17 Q1
Grampian	79%	88%	74%	91%
Scotland	78%	83%	80%	82%

***Clostridium difficile* Infection**

***Clostridium difficile* Infection Surveillance**

As with *S aureus* bacteraemias, each new case is discussed at a weekly multidisciplinary team meeting involving Infection Prevention and Control Doctor(s), Infection Prevention and Control Nurses, Surveillance Nurse, Antimicrobial Pharmacist, and a microbiology registrar – the Infection Unit Nurse is not present for the CDI case discussions. By close investigation of each case and typing of the organisms – when indicated – the Infection Prevention and Control Team is assured that the recent increase in infections is not due to any outbreaks.

Local enhanced surveillance data can be provided in a more timely fashion as this is not part of a national enhanced surveillance programme. During quarter 1 (January-March 2016):

46% cases were classified as “healthcare associated”

54% cases were classified as “out of hospital

National *Clostridium difficile* infection surveillance programme

Health Protection Scotland are also due to publish their quarterly reports on the surveillance of *Clostridium difficile* infections (CDIs) in Scotland, April to June 2016 in October.

Information on the national surveillance programme for *Clostridium difficile* infections can be found at:

<http://www.hps.scot.nhs.uk/haic/sshaip/ssdetail.aspx?id=277>

Cleaning and the Healthcare Environment

Health Facilities Scotland National Cleaning Specification Reports

NHS Grampian continues to achieve the required cleanliness standards across all locations as monitored by the Facilities Monitoring Tool. No new national data have been received.

Incidents and Outbreaks

Norovirus Prevalence

Monday Point Prevalence Surveillance figures are reported to Health Protection Scotland. These capture the significant outbreaks of Norovirus in NHS Grampian and the prevalence of norovirus activity in close to real time. They are not, and should not be interpreted as data for benchmarking or judgement. The data can be used for the assessment of risk and norovirus outbreak preparedness only.

During June and July 2016 the following wards or bays were closed due to Norovirus during Monday Point Prevalence:

On Monday 6 June, 1 hospital had 1 ward closed with 1 patient affected

On Monday 18 July, 1 hospital had 1 ward closed with 3 patients affected

Data on the numbers of wards closed due to confirmed or suspected norovirus are available from HPS on a weekly basis at:

<http://www.hps.scot.nhs.uk/haic/ic/noroviruspointprev.aspx>

Other HAI Related Activity

Antimicrobial Prescribing

Acute sector

Hospital downstream ward

All national Antimicrobial Prescribing Indicators to support the CDI HEAT target for acute hospitals have now been revised by the Scottish Antimicrobial Prescribing Group (SAPG) and aligned with the second Scottish Management of Antimicrobial Resistance Action plan (ScotMARAP 2; 2014-18) priority areas as well as the Healthcare Improvement Scotland Healthcare Associated Infection (HAI) Standards (Feb 2015).

Data is collected from 5 patients per week on antibiotics and the following measures are assessed: all prescribed doses have been administered, indication documented, duration/review documented, antibiotic choice in line with guidelines. The target is > 95% for each measure.

Data presented in this report reflects the average of local performance in July & Aug 2016. Data collection includes two medical wards and one surgical ward.

Surgical prophylaxis

Measures assessed are: duration of surgical antibiotic prophylaxis is less than 24 hours (single dose for most specialities) and antibiotic(s) compliance with policy is > 95% for each measure.

No new data has been collected since June 2016 pending changes to the neurosurgery prophylaxis guidelines (in progress).

Primary Care

Total antibiotic prescribing

Target is for total antibiotic prescribing rate to be 1.8 items per 1000 patients per day or less, with at least 50% of GP practices meeting the target or having made an acceptable shift towards the target.

The Q1 2016-17 data shows that 91.9% of GP practices in NHSG have either met or made an acceptable shift towards the Q4 target originally set in 2013. However, it should be noted that Q1 is always lower for antibiotic prescribing than Q4 due to seasonal trends.

Healthcare Associated Infection Reporting Template (HAIRT)

Section 2 – Healthcare Associated Infection Report Cards

The following section is a series of ‘Report Cards’ that provide information, for each acute hospital and key community hospitals in the Board, on the number of cases of *Staphylococcus aureus* blood stream infections (also broken down into MSSA and MRSA) and *Clostridium difficile* infections, as well as hand hygiene and cleaning compliance. In addition, there is a single report card which covers all community hospitals [which do not have individual cards], and a report which covers infections identified as having been contracted from outwith hospital. The information in the report cards is provisional local data, and may differ from the national surveillance reports carried out by Health Protection Scotland and Health Facilities Scotland. The national reports are official statistics which undergo rigorous validation, which means final national figures may differ from those reported here. However, these reports aim to provide more detailed and up to date information on HAI activities at local level than is possible to provide through the national statistics.

Understanding the Report Cards – Infection Case Numbers

Clostridium difficile infections (CDI) and *Staphylococcus aureus* bacteraemia (SAB) cases are presented for each hospital, broken down by month. *Staphylococcus aureus* bacteraemia (SAB) cases are further broken down into Meticillin Sensitive *Staphylococcus aureus* (MSSA) and Meticillin Resistant *Staphylococcus aureus* (MRSA). More information on these organisms can be found on the NHS24 website:

Clostridium difficile :

http://www.nhs24.com/content/default.asp?page=s5_4&articleID=2139§ionID=1

Staphylococcus aureus :

http://www.nhs24.com/content/default.asp?page=s5_4&articleID=346

MRSA: http://www.nhs24.com/content/default.asp?page=s5_4&articleID=252§ionID=1

For each hospital the total number of cases for each month are those which have been reported as positive from a laboratory report on samples taken more than 48 hours after admission. For the purposes of these reports, positive samples taken from patients within 48 hours of admission will be considered to be confirmation that the infection was contracted prior to hospital admission and will be shown in the “out of hospital” report card.

Targets

There are national targets associated with reductions in C.diff and SABs. More information on these can be found on the Scotland Performs website:

<http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotland/performance>

Understanding the Report Cards – Hand Hygiene Compliance

Hospitals carry out regular audits of how well their staff are complying with hand hygiene. Each hospital report card presents the combined percentage of hand hygiene compliance with both opportunity taken and technique used broken down by staff group.

Understanding the Report Cards – Cleaning Compliance

Hospitals strive to keep the care environment as clean as possible. This is monitored through cleaning and estates compliance audits. More information on how hospitals carry out these audits can be found on the Health Facilities Scotland website:

<http://www.hfs.scot.nhs.uk/online-services/publications/hai/>

Understanding the Report Cards – ‘Out of Hospital Infections’

Clostridium difficile infections and *Staphylococcus aureus* (including MRSA) bacteraemia cases are all associated with being treated in hospitals. However, this is not the only place a patient may contract an infection. This total will also include infection from community sources such as GP surgeries and care homes and. The final Report Card report in this section covers ‘Out of Hospital Infections’ and reports on SAB and CDI cases reported to a Health Board which are not attributable to a hospital.

NHS BOARD REPORT CARD – NHS Grampian

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
MRSA	0	0	0	0	0	0	1	0	0	0	2	2
MSSA	13	16	16	11	16	11	12	11	9	11		
Total SABS	13	16	16	11	16	11	13	11	9	11		

Clostridium difficile infection monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Ages 15-64	9	6	7	7	9	6	2	8	2	2		
Ages 65+	12	8	11	14	7	7	6	4	7	11		
Ages 15+	21	14	18	21	16	13	8	12	9	13		

Hand Hygiene Monitoring Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
AHP	98	99	98	96	98	99	98	99	97	99		
Ancillary	97	94	93	96	92	91	95	92	97	95		
Medical	94	95	95	94	95	97	94	95	95	95		
Nurse	98	98	97	97	97	97	97	98	98	98		
Total	97	97	96	97	96	97	96	97	97	98		

Cleaning Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Board Total	94	94	95	95	94	94	94	94	95	94		

Estates Monitoring Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Board Total	96	96	97	97	96	96	96	96	96	96		

NHS HOSPITAL A REPORT CARD – Aberdeen Royal Infirmary

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
MRSA	0	0	0	0	0	0	0	0	0	0		
MSSA	1	4	6	4	6	5	5	3	3	4		
Total SABS	1	4	6	4	6	5	5	3	3	4		

Clostridium difficile infection monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Ages 15-64	3	1	3	1	2	2	1	3	0	0		
Ages 65+	4	2	2	5	2	4	3	1	1	5		
Ages 15+	7	3	5	6	4	6	4	4	1	5		

Cleaning Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
ARI Total	94	95	95	94	94	94	94	94	94	97		

Estates Monitoring Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
ARI Total	98	98	97	98	98	97	96	97	98	96		

NHS HOSPITAL B REPORT CARD – Dr Gray’s Hospital

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
MRSA	0	0	0	0	0	0	0	0	0	0		
MSSA	1	0	0	0	0	0	3	0	0	0		
Total SABS	1	0	0	0	0	0	3	0	0	0		

Clostridium difficile infection monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Ages 15-64	0	0	0	1	0	0	1	0	0	0		
Ages 65+	1	1	0	1	0	0	0	0	0	0		
Ages 15+	1	1	0	2	0	0	1	0	0	0		

Cleaning Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
ARI Total	94	94	94	94	94	94	95	94	94	94		

Estates Monitoring Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
ARI Total	94	96	96	96	95	95	95	94	95	94		

NHS HOSPITAL B REPORT CARD – Woodend Hospital

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
MRSA	0	0	0	0	0	0	0	0	0	0		
MSSA	0	1	0	0	1	0	0	0	0	0		
Total SABS	0	1	0	0	1	0	0	0	0	0		

Clostridium difficile infection monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Ages 15-64	0	0	0	0	0	0	0	0	0	0		
Ages 65+	1	0	2	0	0	0	0	0	0	0		
Ages 15+	1	0	2	0	0	0	0	0	0	0		

Cleaning Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
ARI Total	94	95	95	94	95	95	95	94	95	94		

Estates Monitoring Compliance (%)

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
ARI Total	93	96	95	99	96	95	96	94	93	94		

OTHER NHS HOSPITALS REPORT CARD

The other hospitals covered in this report card include:

Aberdeen Maternity Hospital
 Royal Cornhill Hospital
 Royal Aberdeen Children's Hospital
 Roxburgh House
 All Community Hospitals

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
MRSA	0	0	0	0	0	0	0	0	0	0		
MSSA	0	2	0	0	0	0	0	0	1	0		
Total SABS	0	2	0	0	0	0	0	0	1	0		

Clostridium difficile infection monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Ages 15-64	0	1	0	0	0	0	0	0	0	0		
Ages 65+	0	0	1	1	0	0	0	0	0	1		
Ages 15+	0	1	1	1	0	0	0	0	0	1		

NHS OUT OF HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
MRSA	0	0	0	0	0	0	1	0	0	0		
MSSA	11	11	10	7	9	6	4	8	5	7		
Total SABS	11	11	10	7	9	6	5	8	5	7		

Clostridium difficile infection monthly case numbers

	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Ages 15-64	6	4	3	5	7	4	0	5	2	1		
Ages 65+	6	5	4	5	5	3	3	2	4	6		
Ages 15+	12	9	7	10	12	7	3	7	6	7		