



Integration Joint Board  
Clinical and Care Governance Committee

16<sup>th</sup> July 2018

This Report relates to  
Item 6 on the Agenda

# Healthcare Associated Infection Report

*(Paper presented by Elaine Ross)*

*For Noting*

<b>Approved for Submission by</b>	Eddie Docherty, NMAHP, Executive Director, NHS Dumfries and Galloway
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<b>List of Background Papers</b>	
<b>Appendices</b>	

## SECTION 1: REPORT CONTENT

**Title/Subject:** Healthcare Associated Infection Report

**Meeting:** Clinical and Care Governance Committee

**Date:** 16<sup>th</sup> July 2018

**Submitted By:** Eddie Docherty, NMAHP, Executive Director, NHS Dumfries and Galloway

**Action:** For Noting

### 1. Introduction

- 1.1 The Healthcare Associated Infection surveillance and harm reduction activity report supports the implementation of the Healthcare Quality Strategy.

### 2. Recommendations

- 2.1 **The Clinical and Care Governance Committee is asked to:**
- **Note the position of NHS Dumfries and Galloway with regard to the Staphylococcus Aureus Bacteraemia (SAB) and Clostridium Difficile Infection (CDI) Local Delivery Plan targets.**

### 3. Background

#### **NHS Dumfries and Galloway Healthcare Associated Infection Reporting Template (HAIRT)**

##### **Section 1– Board Wide Issues**

This section of the HAIRT covers Board wide infection prevention and control activity and actions. For reports on individual hospitals, please refer to the 'Healthcare Associated Infection Report Cards' in Section 2.  
A report card summarising Board wide statistics can be found at the end of section 1

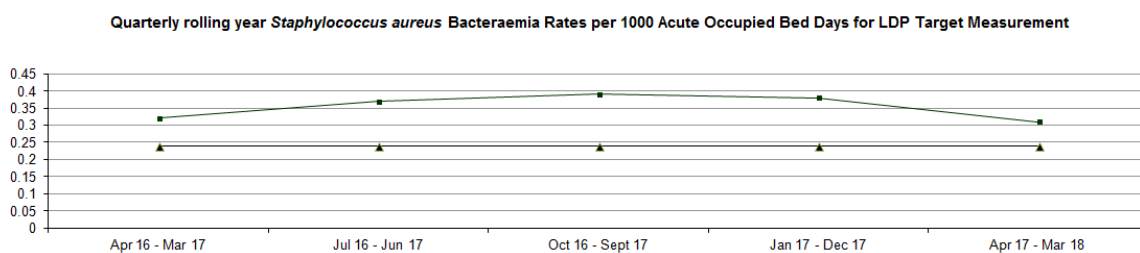
- 3.1 The two Healthcare Associated Infection LDP targets were not met for the year ended March 31 2018.
- 3.2 Whilst the Staphylococcus aureus bacteraemia (SAB) LDP target was missed we are one of the boards with the lowest rate of healthcare associated SAB

- 3.3 We are one of the health boards with higher rates of Clostridium difficile infection (CDI) though we remain within the acceptable parameters and not an outlier.
- 3.4 There are two incidents with potential for healthcare infection and one outbreak reported in this paper.
- 3.5 E. Coli Bacteraemia (ECB) is not yet a target but reporting is mandatory and is forming a baseline against which a target will be set. Again we are one of the boards with the lowest rate of healthcare associated ECB.
- 3.6 At the time of writing the Scottish Government Health and Social Care Department has not yet confirmed their expectations of health boards in terms of infection prevention targets or delivery.
- 3.7 In Dumfries and Galloway we will continue to work towards achieving best in class in the existing LDP targets and ECB.
- 3.8 Within our target areas the number of HAI is very low. Achieving further reductions will be challenging but we continue to strive for zero preventable infections.
- 3.9 The area for focus now needs to be the community and will require different strategies, interventions and an engaged population.

## 4. Main Body of the Report

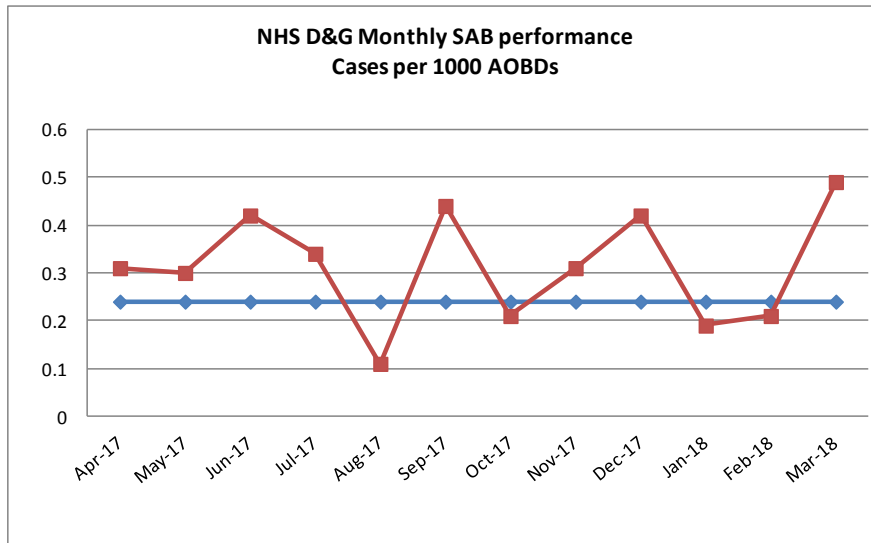
### 4.1 Staphylococcus aureus (including MRSA)

#### 4.2 Figure 1- Local data

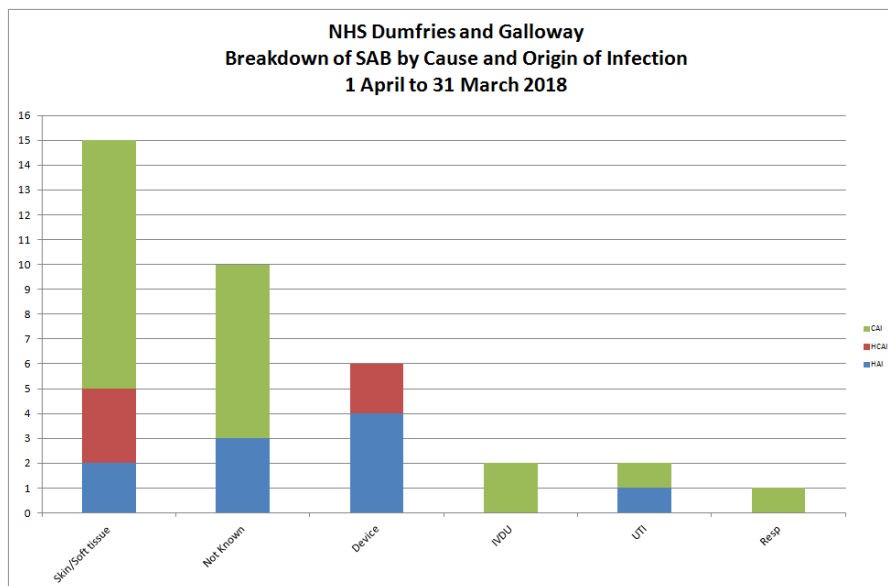


	Apr 16 - Mar 17	Jul 16 - Jun 17	Oct 16 - Sept 17	Jan 17 - Dec 17	Apr 17 - Mar 18
Actual Performance	0.32	0.37	0.39	0.38	0.31
Target	0.24	0.24	0.24	0.24	0.24

4.3 **Figure 2 – Local Data**



4.4 **Figure 3**



Of the device associated SAB 2 were Peripheral Inserted Central Catheter (PICC) lines, 1 was a fistula 2 were Peripheral vascular Cannula (PVC) and 1 a Central Vascular Catheter (CVC) line.

A Vascular access network is in place. This has reported variance in practice and knowledge levels across acute areas and a protocol for management of lines has been developed and will be implemented across the board.

***Clostridium difficile***

There were 8 cases of CDI in January, 4 cases in February and 7 in March.

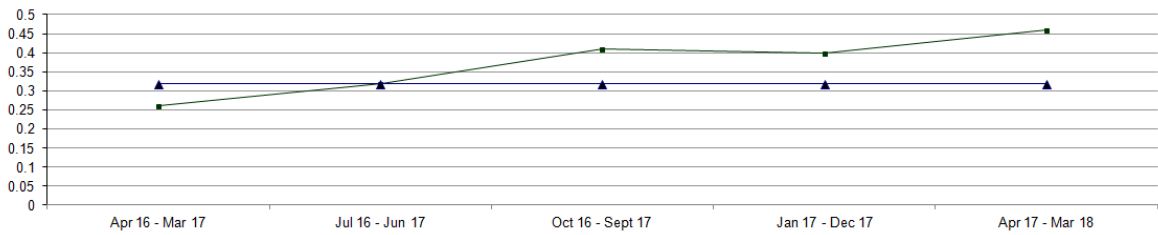
There were 70 reported cases of CDI, 10 of these cases are recurrence of infection.

The increase in the early part of the year we believe resulted from prescribing for respiratory infections, in the mid to later part of the year this was ascribed to a shortage of Tazocin internationally and NHS Dumfries and Galloway, being high users of this antibiotic previously, noted a greater difference when alternatives had to be used.

In the final quarter respiratory infections and prescriptions to treat these had part to play as did a number of patients who developed a recurrent C. Diff infection whilst in hospital.

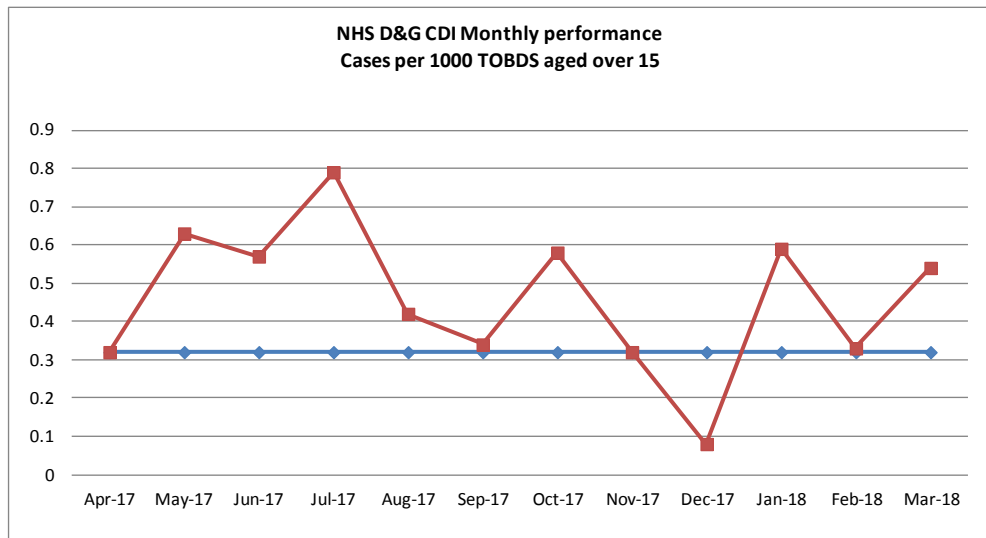
4.5 **Figure 4 – Local Data**

Quarterly rolling year *Clostridium difficile* Infection Cases Age 15 Years & Above per 1000 total occupied bed days for LDP Target Measurement

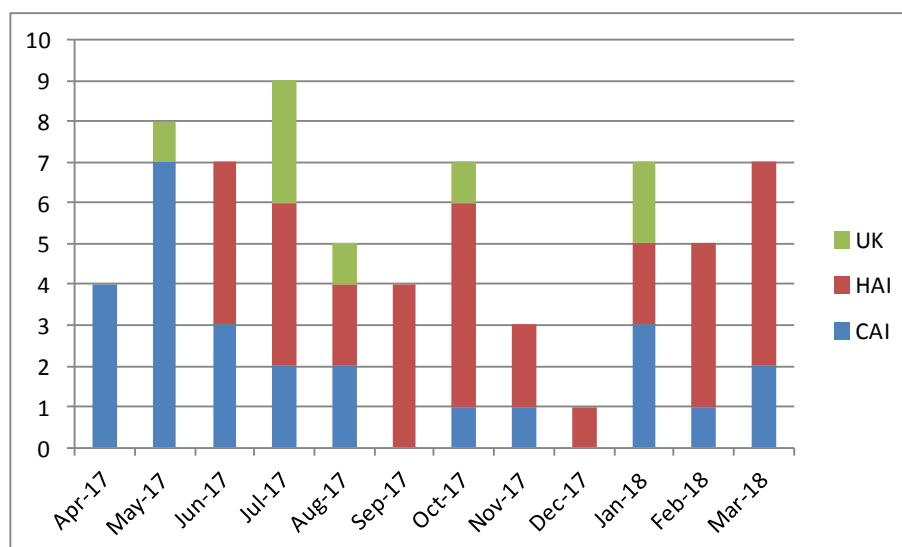


	Apr 16 - Mar 17	Jul 16 - Jun 17	Oct 16 - Sept 17	Jan 17 - Dec 17	Apr 17 - Mar 18
Actual Performance	0.26	0.32	0.41	0.40	0.46
Target	0.32	0.32	0.32	0.32	0.32

4.6 **Figure 5 – Local Data**



4.7 **Figure 6  
CDI Cases per month by origin**



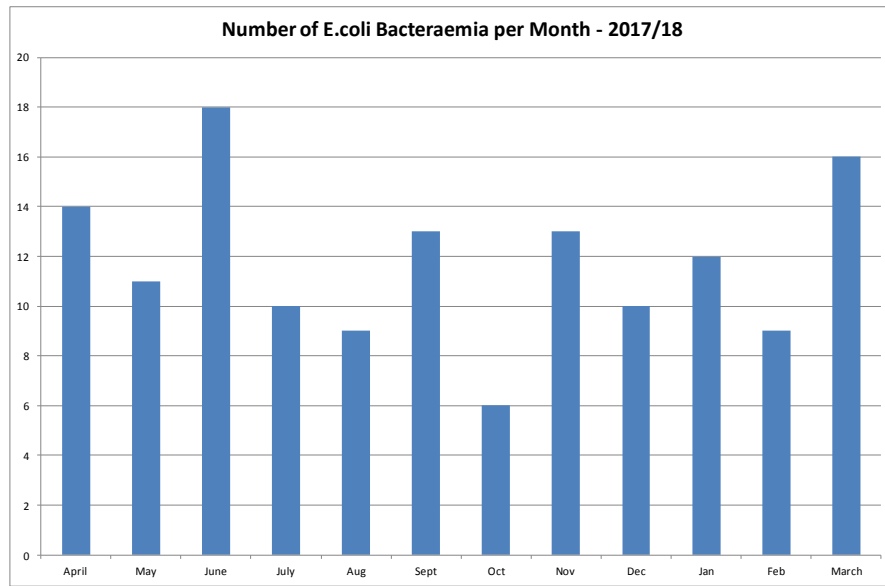
HAI- cases occurring after 48 hours or within 4 weeks of hospital admission  
 CAI - cases occurring within 48 hours of hospital admission or more than 12 weeks post hospital admission  
 Unknown – between 4 & 12 weeks since hospital admission

### **E. coli bacteraemia (ECB)**

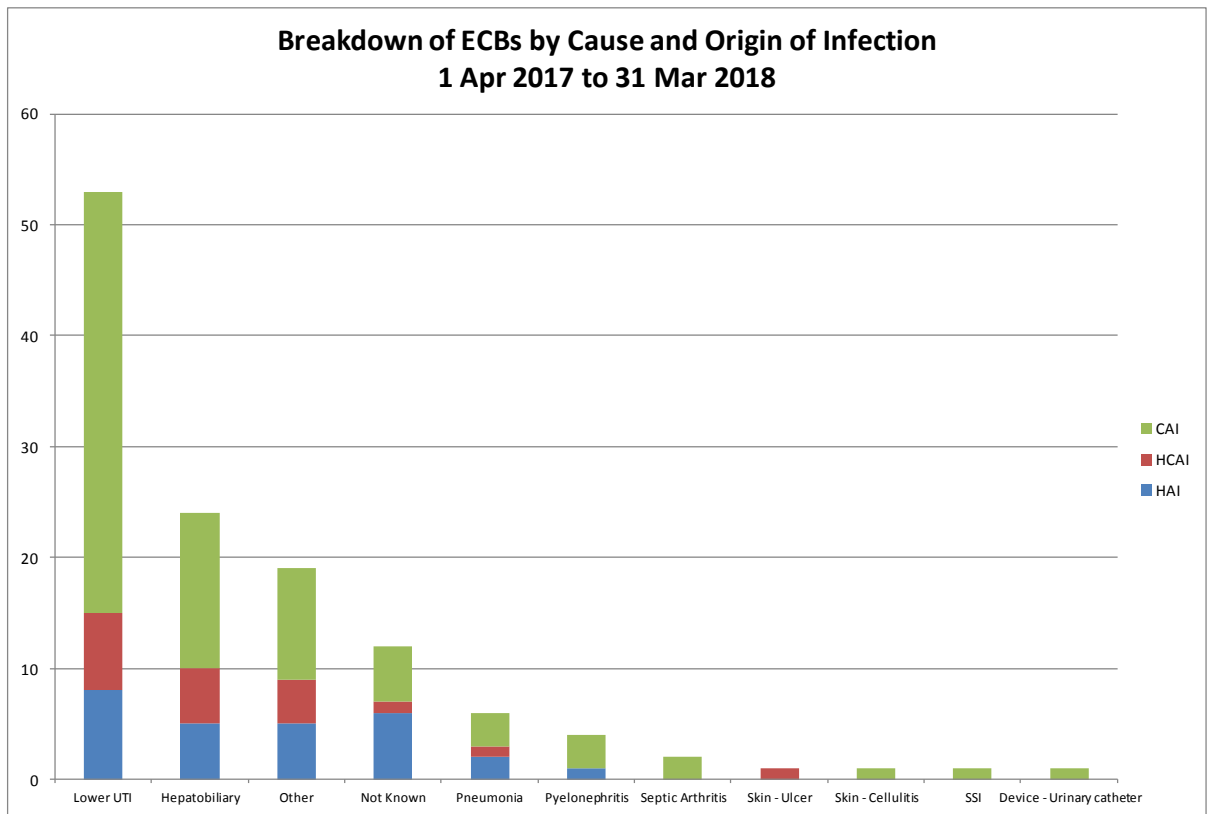
Whilst E. coli bacteraemia is not currently an LDP or national target as yet, monitoring of E. coli bloodstream infections is mandatory. A national improvement target is anticipated at the time of writing. This is likely to be focused on healthcare associated ECB. This will be a significant challenge as improvements have already been made so the obvious actions have been taken and gains have been made. Clarity on the criteria for 'Healthcare associated' has been requested.

There have been 124 cases of E. coli Bacteraemia to date this reporting year.  
 78 = Community Acquired Infection  
 19 = Healthcare Associated Infection  
 27 = Hospital Acquired Infection

4.8 **Figure 7**



4.9 **Figure 8**



**Incidents and Outbreaks**

**Pseudomonas identified in water samples in Maternity and Neonatal unit.**

During commissioning sampling of the new water supply, outlets in neonatal and maternity were found to have levels of pseudomonas bacteria. No clinical infections have resulted from this.

Repeat samples also identified the presence of pseudomonas bacteria.

Pseudomonas is a common environmental organism found in many water supplies. There have been 5 outbreaks of pseudomonas in neonatal units across the country over the last 5 years.

A total of 3 incident management team meetings have been held and number of actions taken to address possible causes of persistent pseudomonas in the water outlets. These have included disinfection of the taps, checking of the engineering works and increased flushing of the outlets.

Due to the media interest in Glasgow's Queen Elizabeth hospital our findings have been shared with Health Protection Scotland who are satisfied that our response has been correct and proportionate.

### **Bacillus Sp.**

Bacillus Sp. isolated within 2 weeks from metal work and bone removed in orthopaedic procedures in theatre and grown in enrichment culture. There have been no wound infections and no patients giving clinical cause for concern.

The presence of bacillus is often related to environmental issues and dust. This is of concern as deep joint infections may take some months to become evident.

A full examination of all processes was undertaken by the IPCT and laboratory staff. Two Incident Management Meetings have been held to date and Health Protection Scotland was informed using the Healthcare Infection Incident Assessment Template (HIAT) reporting process. This is classed as a HIAT GREEN.

A number of actions were identified and have been taken. The situation remains under review.

### **Norovirus- Thomas Hope Hospital, Langholm**

Thomas Hope hospital was closed for 8 days. 8 patients and 10 members of staff reported symptoms consistent with Norovirus.

The staff were very alert to the possibility of an outbreak and contacted the IPCT promptly allowing the hospital to be closed as precautionary measure on Friday 31st March and control measure to be implemented. The virus was subsequently confirmed by PCR over the weekend. As a consequence of the design of the hospital the attack rate was high but the IPCT were confident all control measures were being used well by staff.



## NHS Dumfries and Galloway Board report card

### *Staphylococcus aureus* bacteraemia monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>MRSA</b>	0	0	0	0	0	0	0	0	1	0	0	0
<b>MSSA</b>	3	4	3	1	4	2	3	4	1	2	5	2
<b>Total SABS</b>	3	4	3	1	4	2	3	4	2	2	5	2

### *Clostridium difficile* infection monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Ages 15-64</b>	5	2	3	2	1	1	0	0	1	1	1	0
<b>Ages 65 plus</b>	3	6	6	4	3	6	4	1	7	3	6	4
<b>Ages 15 plus</b>	8	8	9	6	4	7	4	1	8	4	7	4

### Cleaning Compliance (%)

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Board Total</b>	96.3	96.9	96.5	96.9	96.7	97.0	96.3	-	96.4	96.9	97.7	97.0

### Estates Monitoring Compliance (%)

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Board Total</b>	99.7	99.7	99.7	99.7	99.8	99.6	99.7	-	99.0	99.2	99.4	99.0

## NHS HOSPITAL REPORT CARD - DGRI

### *Staphylococcus aureus* bacteraemia monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>MRSA</b>	0	0	0	0	0	0	0	0	1	0	0	0
<b>MSSA</b>	3	4	3	1	4	2	2	4	1	2	5	1
<b>Total SABS</b>	3	4	3	1	4	2	2	4	2	2	5	1

### *Clostridium difficile* infection monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Ages 15-64</b>	2	1	1	0	1	0	0	0	0	1	0	0
<b>Ages 65 plus</b>	2	2	1	1	3	5	3	1	4	2	4	0
<b>Ages 15 plus</b>	4	3	2	1	4	5	3	1	4	3	4	0

### Cleaning Compliance (%)

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Board Total</b>	95.8	95.9	95.2	95.5	95.3	94.1	95.8	-	92.2	92.2	94.2	95.3

### Estates Monitoring Compliance (%)

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Board Total</b>	99.2	98.9	98.2	98.6	98.9	97.8	98.9	-	99.2	99.2	98.4	99.7

## NHS HOSPITAL REPORT CARD – Galloway Community Hospital

### *Staphylococcus aureus* bacteraemia monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>MRSA</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>MSSA</b>	0	0	0	0	0	0	1	0	0	0	0	1
<b>Total SABS</b>	0	0	0	0	0	0	1	0	0	0	0	1

### *Clostridium difficile* infection monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Ages 15-64</b>	0	0	0	1	0	0	0	0	0	0	0	0
<b>Ages 65 plus</b>	0	1	0	0	0	0	0	0	0	0	0	0
<b>Ages 15 plus</b>	0	1	0	1	0	0	0	0	0	0	0	0

### Cleaning Compliance (%)

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Board Total</b>	95.5	96.6	95.1	96.9	97.2	98.1	97.2	-	95.7	96.6	95.9	95.4

### Estates Monitoring Compliance (%)

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Board Total</b>	98.9	98.8	99.4	98.9	99.2	98.8	98.6	-	97.5	98.0	99.3	99.0

## NHS COMMUNITY HOSPITALS REPORT CARD

The community hospitals covered in this report card include:

- Annan Hospital
- Castle Douglas
- Kirkcudbright
- Lochmaben
- Moffat
- Newton Stewart
- Thomas Hope
- Thornhill
- 

### *Staphylococcus aureus* bacteraemia monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>MRSA</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>MSSA</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total SABS</b>	0	0	0	0	0	0	0	0	0	0	0	0

### *Clostridium difficile* infection monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Ages 15-64</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ages 65 plus</b>	0	1	2	0	0	0	0	0	0	0	0	0
<b>Ages 15 plus</b>	0	1	2	0	0	0	0	0	0	0	0	0

## NHS OUT OF HOSPITAL REPORT CARD

### *Staphylococcus aureus* bacteraemia monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>MRSA</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>MSSA</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total SABS</b>	0	0	0	0	0	0	0	0	0	0	0	0

### *Clostridium difficile* infection monthly case numbers

	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
<b>Ages 15-64</b>	3	1	2	1	0	1	0	0	1	0	1	0
<b>Ages 65 plus</b>	1	2	3	3	0	1	1	0	3	1	2	4
<b>Ages 15 plus</b>	4	3	5	4	0	2	1	0	4	1	3	4

## 5. Conclusions

5.1 N/A

## **SECTION 2: COMPLIANCE WITH GOVERNANCE STANDARDS**

### **6. Resource Implications**

6.1. There are no resource implications within this paper.

### **7. Impact on Health and Social Care Senior Management Team Board Outcomes, Priorities and Policy**

7.1. Provide evidence towards delivery of local integration outcomes:

- Outcome 7 - People using health and social care services are safe from harm
- Outcome 8 - People who work in health and social care services feel engaged with the work they do and are supported to continuously improve the information, support, care and treatment they provide

7.2. The paper links to national policy direction as below:

- Healthcare Quality Strategy : reduction of harm (2010)

### **8. Legal & Risk Implications**

8.1. N/A

### **9. Consultation**

9.1. Consultation not requirement – update paper.

### **10. Equality and Human Rights Impact Assessment**

10.1. N/A

### **11. Glossary**

11.1.	CVC	Central Vascular Cannula
	CDI	Clostridium difficile Infection
	CAI	Community Associated Infection
	ECB	E.coli Bacteraemia
	HAI	Healthcare Associated Infection
	HIIAT	Healthcare Infection Incident Assessment Template
	HPS	Health Protection Scotland
	HPT	Health Protection Team
	IMT	Incident Management Team

IPCT	Infection Prevention and Control Team
IVDU	Intravenous Drug Users
LDP	Local Delivery Plan
PVC	Peripheral Vascular Cannula
PICC	Peripheral Inserted Central Catheter
RSV	Respiratory Syncytial Virus
SAB	Staphylococcus aureus bacteraemia
SSI	Surgical Site Infection