



Integration Joint Board  
Clinical and Care Governance Committee

7th February 2019

This Report relates to  
Item 11 on the Agenda

# Healthcare Associated Infection report

*Paper presented by Elaine Ross*

*For Noting*

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<b>List of Background Papers</b>	None
<b>Appendices</b>	None

## SECTION 1: REPORT CONTENT

**Title/Subject:** Healthcare Associated Infection report  
**Meeting:** IJB Clinical and Care Governance Committee  
**Date:** 7<sup>th</sup> February 2019  
**Submitted By:** Elaine Ross  
**Action:** For Noting

### 1. Introduction

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

### 2. Recommendations

The Integration Joint Board is asked to receive this Healthcare Associated Infection report and note in particular the position of NHS Dumfries and Galloway with regard to the *Staphylococcus aureus* bacteraemia (SAB) and *Clostridium difficile* infection (CDI) Local Delivery Plan targets in relation to other NHS Boards.

### 3. Background

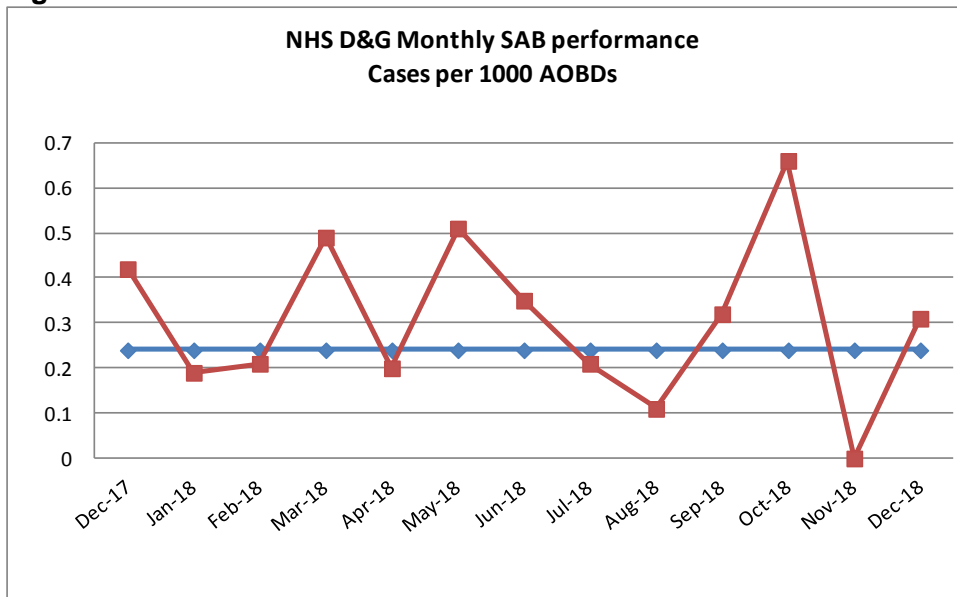
In November there were no cases of *Staphylococcus aureus* bacteraemia (SAB). This is the first occasion this has occurred since November 2012.

National data published by Health Protection Scotland illustrates comparative performance against other NHS boards from Quarter 3 to end of September 2018.

Hydrogen peroxide vapour has been utilised to provide an enhanced level of disinfection and assurance as a measure to reduce *C.diff* transmission. Over 300 rooms have been decontaminated using this method in DGRI.

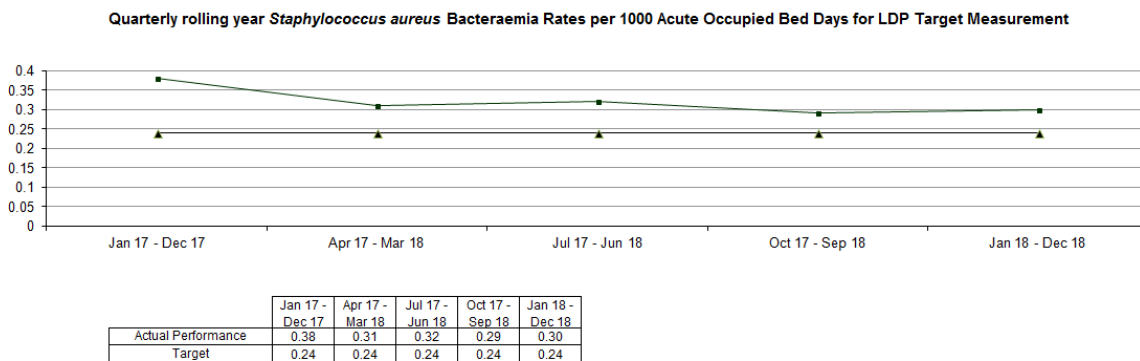
Galloway Community Hospital received an unannounced HAI visit from the Healthcare Environment Inspectorate 21&22 November. The report will be published 13 February.

**4. Staphylococcus aureus (including MRSA)**  
**Figure 1 - Local data**



In November there were no cases of SAB. This is the first occasion this has occurred since November 2012.

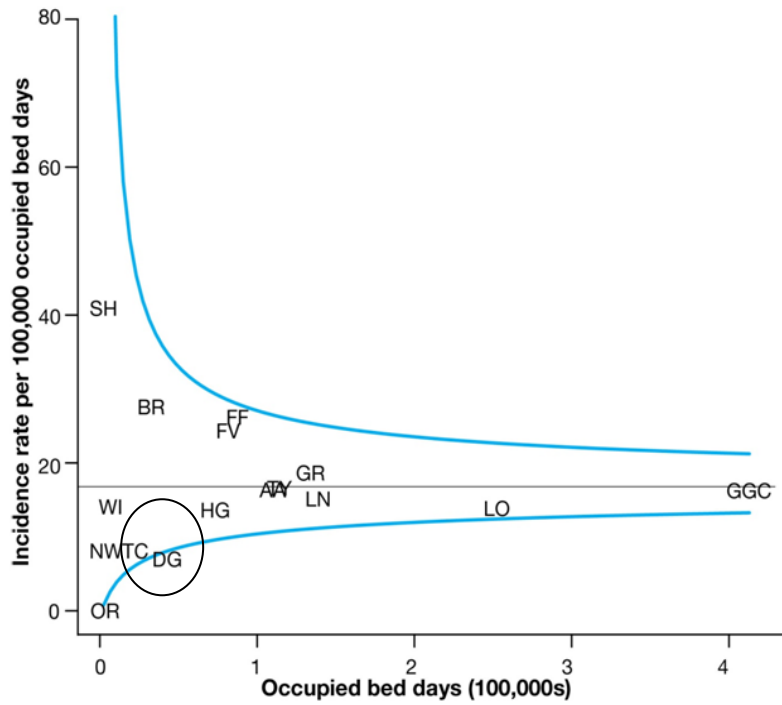
**Figure 2- Local data**



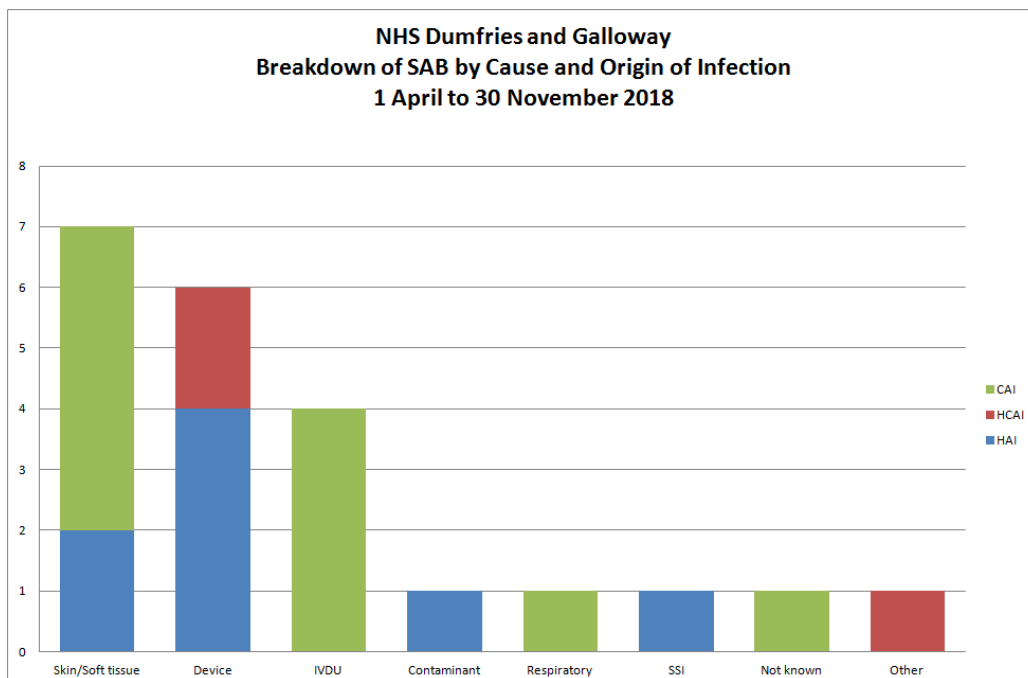
Whilst we remain above the local LDP target the national reporting, figure 3 overleaf, shows NHS Dumfries & Galloway performing well when measured against other Scottish health boards for HAI SAB.

**Figure 3-National data**

Funnel plot of SAB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2018. (HPS 2019)



**Figure 4**

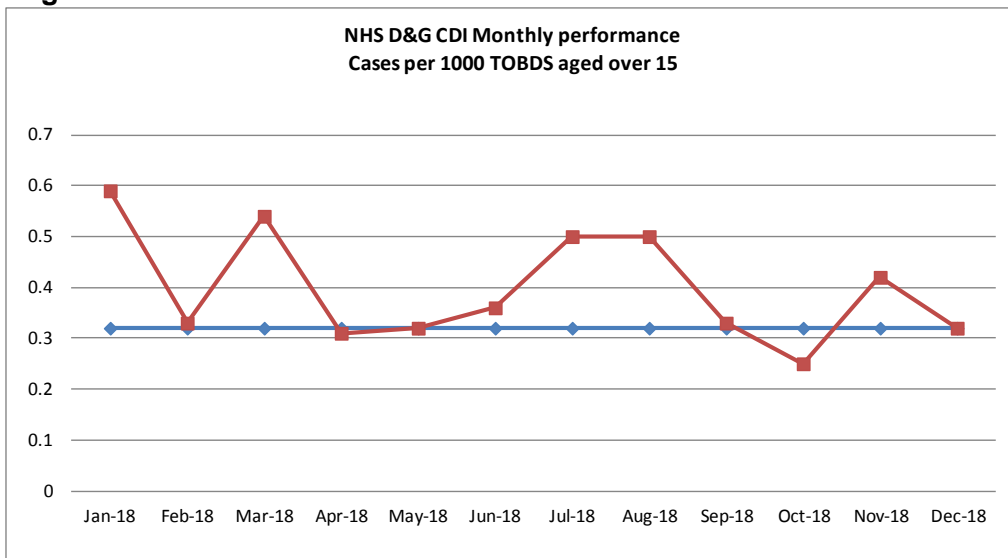


## 5. Clostridium difficile Infection (CDI)

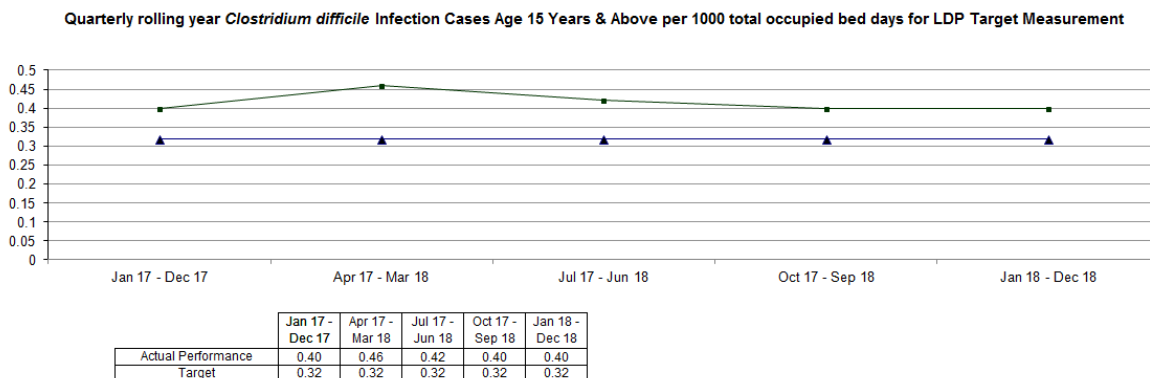
As the Board are aware, the IPCT have been treating HAI CDI very seriously in 2018. Considerable efforts have been made to understand the reason for this increase and the variation in the data having previously reached our lowest rates since surveillance commenced.

Whilst these results do not cause concern nationally, there is a local desire to reduce rates and meet the LDP target of 0.32 cases per 1000 total occupied bed days as illustrated below.

**Figure 5- Local data**



**Figure 6- Local data**



The quarterly rolling average shows a reduction in overall CDI.

## Figure 7- National data

Funnel plot of CDI incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2018. (HPS 2019)

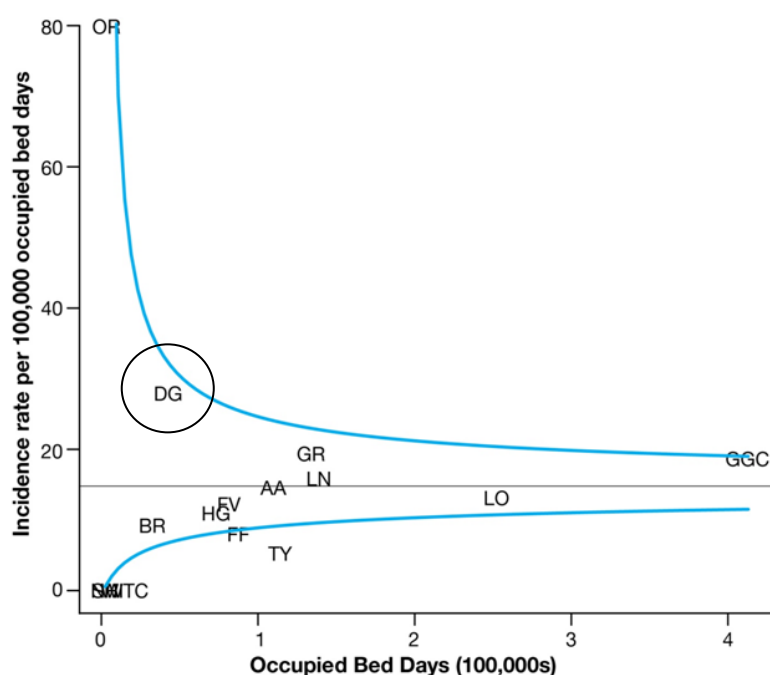


Figure 7 shows NHS D&G as the Board who in Quarter 3 experienced the highest rate of HAI CDI. However, this is well within the control limits.

### 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

	HAI	CAI	Unknown
August 2018	5	1	0
September 2018	3	1	0
October 2018	2	1	0
November 2018	5	0	0
December 2018	3	0	1

### Actions taken to address CDI

In addition to the actions already reported to the Board there has been a concerted campaign to eradicate any potential environmental source within DGRI.

Chlorine releasing agents have been in use since June and are effective against *C. diff* spores. However, this is a manual process dependant on the method of application and the contact time achieved.

Hydrogen peroxide vapour (HPV) has been established as a highly effective method of environmental decontamination. It eradicates microorganisms by direct contact but has no residual effect. The method we have chosen is applied using a spray gun which

delivers HPV that is electro statically charged. This reduces the time taken as the charge encourages the gas to attach to surfaces rather than simply circulate and settle.

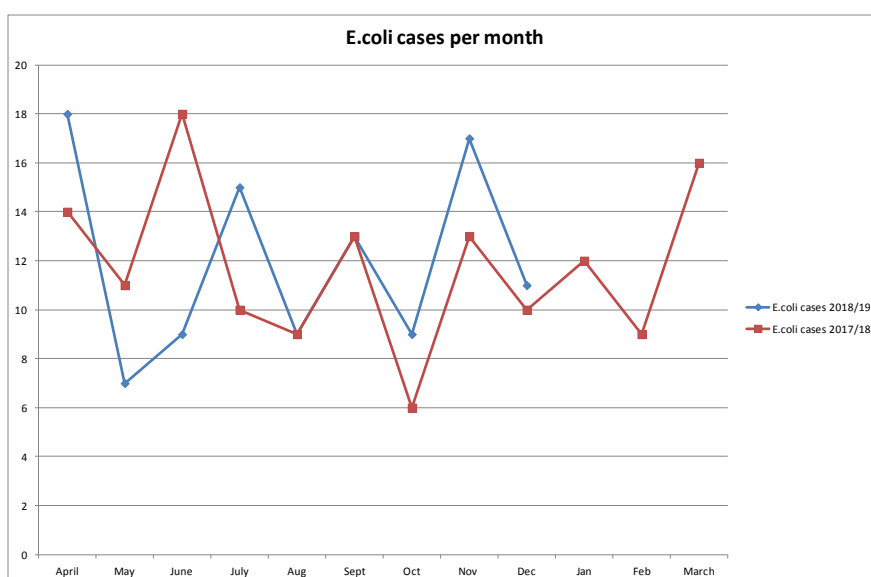
In the 6 weeks prior to Christmas it was possible to decontaminate over 300 bedrooms, bathrooms, core toilets and support rooms using hydrogen peroxide vapour. This is a magnificent achievement in a working hospital. It has been a logistical challenge and one which has been well supported by support services, nursing management and coordinated by an Infection Prevention and Control Nurse.

Due to bed pressures and staffing challenges it was not possible to complete the entire programme before Christmas and there is one ward remaining with around 20 rooms still to decontaminate. This will be completed in the New Year.

## 6. E. coli bacteraemia (ECB)

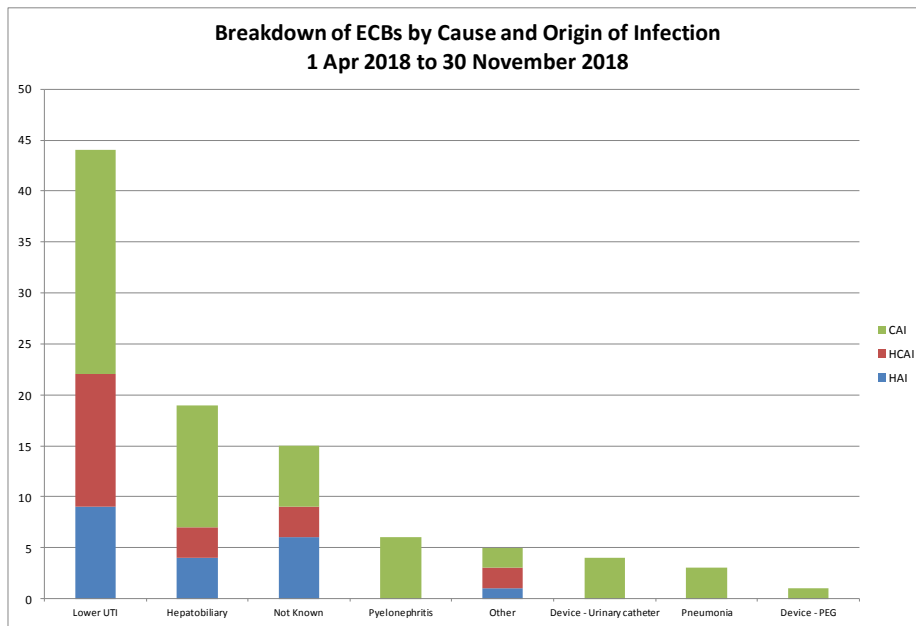
There has been no significant change since the last report to board. The majority of infections continue to be community in origin.

**Figure 8- Local data**



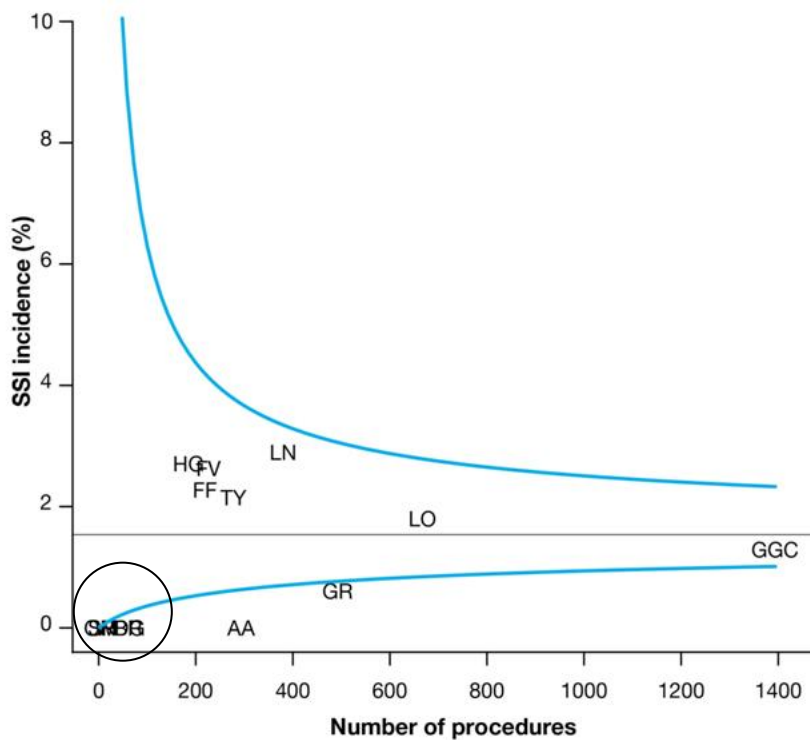
Urinary tract infections continue to feature as the most common cause. There have been 4 community acquired infections attributed to urinary catheters and there may be scope for improvement in this area going forwards.

Figure 9- Local data



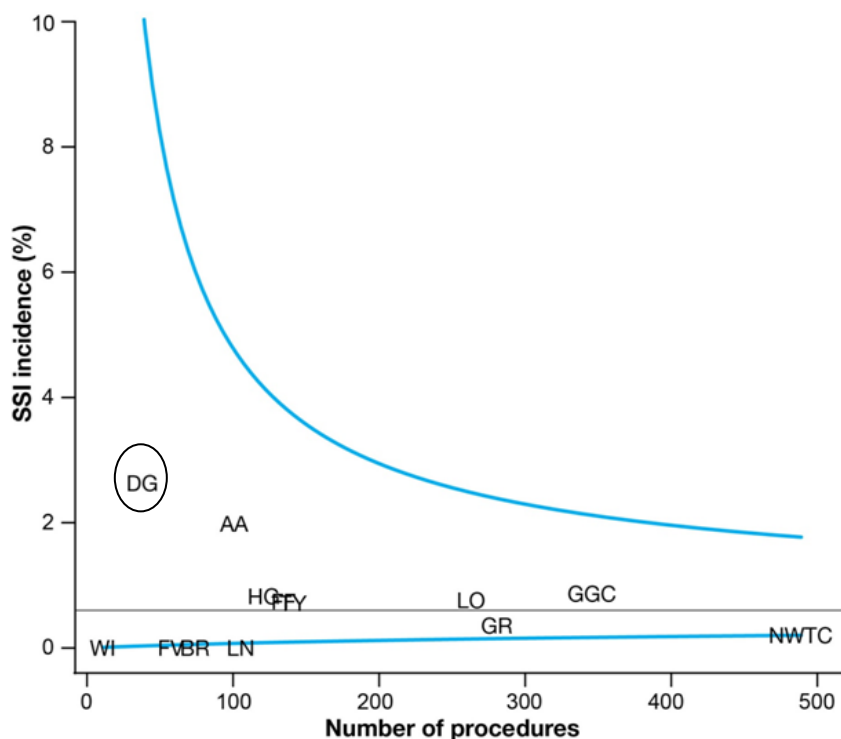
### 7. Surgical site infection (SSI)

Figure 10 - Funnel plot of caesarean section SSI incidence (per 100 procedures) in inpatients and PDS to day 10 for all NHS Boards in Scotland in Q3 2018. (HPS 2019)





**Figure 11 - Funnel plot of hip arthroplasty SSI incidence (per 100 procedures) in inpatients and on readmission to day 30 for all NHS Boards in Scotland in Q3 2018.**



It should be noted that whilst this incidence looks higher than other Boards the information is based on 4 infections in a quarter.

### 8. HEI inspection- Galloway Community Hospital

A two day unannounced inspection of Galloway Community Hospital was undertaken by the Healthcare Environment Inspectorate 21& 22 November.

Inspectors commented positively on the welcome they received and were impressed by the range of service provided at the hospital.

The standards inspected against were

- Standard 1: Leadership
- Standard 2: Education
- Standard 6: Policies and procedures
- Standard 8: Decontamination

The report will be published 13<sup>th</sup> February.

## SECTION 2: COMPLIANCE WITH GOVERNANCE STANDARDS

### 5. Resource Implications

No additional resource required

### 6. Impact on Integration Joint Board Outcomes, Priorities and Policy

This paper describes HAI harm reduction activity and supports implementation of the Healthcare Quality Strategy.

The Scottish Healthcare Associated Infection (HAI) standards are requirements expected to be met by NHS Boards and subject to inspection by the Healthcare Environment Inspectorate. This includes scrutiny not only of performance against local delivery plan targets and key performance indicators but systems and processes in place to escalate concerns and address poor performance at ward level.

### 7. Legal & Risk Implications

There is a risk to public perception and confidence in the service if local delivery plan targets are not met.

### 8. Consultation

No formal consultation has taken place as this is regular update paper which is made publicly available on the NHS D&G website and is discussed with our local Infection Control Public Involvement Group.

### 9. Equality and Human Rights Impact Assessment

None required

### 10. Glossary

Acute Occupied Bed Days (AOBD)
Catheter Associated Urinary tract infection (CAUTI)
<i>Clostridium difficile</i> Infection (CDI)
Community Acquired Infection (CAI)
<i>Escherichia coli</i> Bacteraemia (ECB)
Healthcare Associated Infection (HAI)
Health Protection Scotland (HPS)
Healthcare Environment Inspectorate (HEI)
Meticillin Sensitive Staphylococcus Aureus (MSSA)
Meticillin Resistant Staphylococcus Aureus (MRSA)
Infection Prevention and Control team (IPCT)
Intravenous Drug User (IVDU)
Local Delivery Plan (LDP)
<i>Staphylococcus aureus</i> bacteraemia (SAB)
Urinary Tract Infection (UTI)

Total Occupied Bed Days (TOBD)