Avrshire

NHS Ayrshire & Arran

Meeting: Ayrshire and Arran NHS Board

Meeting date: Monday 11 August 2025

Title: Healthcare Associated Infection Report

Responsible Director: Jennifer Wilson, Executive Nurse Director

Report Author: Jincy Jerry, Director, Infection Prevention and Control

1. Purpose

This is presented to the Board for:

Discussion

This paper relates to:

Annual Operational Plan

This aligns to the following NHS Scotland quality ambition(s):

Safe

2. Report summary

2.1 Situation

This paper provides Board members with the current position against the National Healthcare Associated Infection (HCAI) Standards and reflects national HAI performance data for Quarter 4 2024/25 for discussion and assurance.

2.2 Background

The Scottish Government has issued updated national healthcare associated (HCA) infection standards in <u>DL (2025) 05</u>. This set out infection reduction targets for the next year. To meet this standard, by March 2026, NHSAA should have no more than:

- 70 cases of HCA Clostridioides difficile infection (CDI)
- 209 cases of HCA Escherichia coli bacteraemia (ECBs)
- 87 cases of HCA Staphylococcus aureus bacteraemia

The following quarterly data covers the time-period January-March 2025, comparing the NHSAA rate to the previous HAI standard. As this paper provides the NHSAA validated Quarter 4 of 2024/25 HCA infection data the previous target, issued by The Scottish Government in <u>DL (2023)06</u>, will be used as the comparison.

2.3 Assessment

HCAI Standards

Aligns to Na	ntional IPC Standards (2022)
Standard 4	Assurance and Monitoring Systems

Clostridioides difficile (CDI) Standard

The CDI target is a reduction of 10% in the national rate of HCA CDI for the year ending March 2024, with 2018/19 used as the baseline.

Baseline Rate 2018/19	2023/24 Target	Annual Rate Year Ending March 2025	Quarterly Rate - Jan-Mar 25	Scottish Quarterly Rate - Jan-Mar 25
(per 100,000 Total Occupied Bed Days TOBDs))	(per 100,000 TOBDs)	(per 100,000 TOBDs)	(per 100,000 TOBDs)	(per 100,000 TOBDs)
14.5	13.0	19.4 (89 cases) Increase from 15.1 (70 cases) year-end March 2024	16.3 (19 cases) Decrease from 19.3 (22 cases) previous quarter	13.4 (208 cases)

Table 1 - NHSAA verified HCA CDI rate for January–March 2025

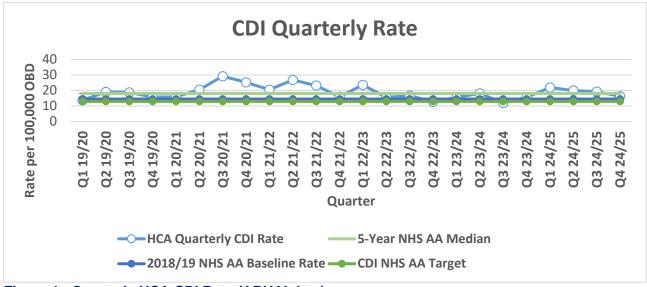


Figure 1 - Quarterly HCA CDI Rate (ARHAI data)

Figure 2 provides the Board's position in comparison to the rest of Scotland. NHS A&A's rate of 16.3 is within the 95% confidence interval upper limit and is above the Scottish rate of 13.4 (per 100,000 TOBDs) and the NHS A&A target rate of 13.0 (per 100,000 TOBDs).

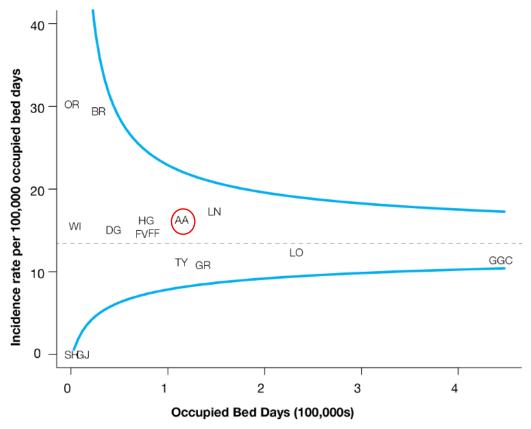


Figure 2 - Funnel plot of CDI incidence rates (per 100,000 TOCB) in healthcare associated infection cases for all NHS boards in Scotland January–March 2025

The verified rolling annual rate for year ending March 2025 was 19.4. This compares with a year ending rate of 15.1 for March 2024 (**Figure 3**).

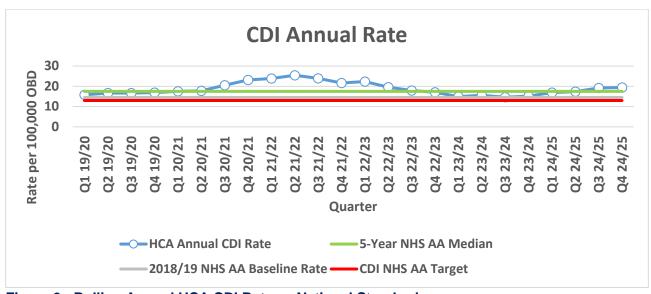


Figure 3 - Rolling Annual HCA CDI Rate vs National Standard

Staphylococcus aureus Bacteraemia (SAB) Standard

The SAB standard is a reduction of 10% in the national rate of HCA SABs by year end March 2024, with 2018/19 used as the baseline.

Baseline Rate 2018/19	2023/24 Target	Annual Rate Year Ending March 2025	Quarterly Rate - Jan-Mar 25	Scottish Quarterly Rate - Jan-Mar 25
(per 100,000 Total	(per	, , , , , , , , , , , ,	, , , , , , , , , , , ,	, ,,,,
Occupied Bed Days TOBDs))	100,000 TOBDs)	(per 100,000 TOBDs)	(per 100,000 TOBDs)	(per 100,000 TOBDs)
Days (ODD3))	10003)	26.4 (121 cases)	27.4 (32 cases)	10003)
13.8	12.4	increase from 18.8 (87 cases) previous year	Increase from 27.2 (31 cases) previous quarter	18.2 (283 cases)

Table 2 - The Board's verified HCA SAB rate for January–March 2025

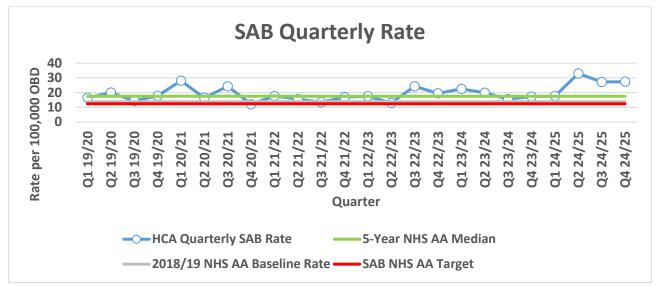


Figure 4 - SABs Quarterly HCA Rate

Figure 5 provides the Board's position in comparison to the rest of Scotland. NHS AA's rate of 27.4 (per 100,000 TOBDs) was within the 95% confidence interval upper limit and above the Scottish rate of 18.2 (per 100,000 TOBDs).

There were 32 HCA SAB cases this quarter (increase from 31 cases from the previous quarter. The SAB action plan approved by the Prevention and Control of Infection Committee (PCOIC) in January 2024 continued to progress through Q3 and Q4

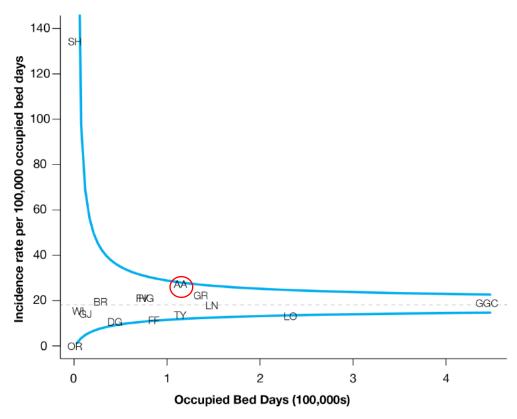


Figure 5 - Funnel plot of SAB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in January-March 2025

The Board's verified rolling annual rate was 26.4 (per 100,000 TOBDs) for year ending March 2025. This is in comparison to a year ending rate of 18.8 (per 100,000 TOBDs) March 2024 (**Figure 6**).

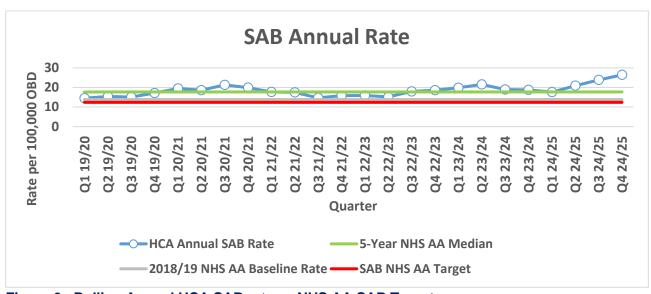


Figure 6 - Rolling Annual HCA SAB rate vs NHS AA SAB Target

Community Associated SAB

For the year ending March 2025, NHSA AA had a community SAB rate of 11.2 (per 100,000 population) compared to a rate of 16.9 (per 100,000 population) for the previous year.

Escherichia coli Bacteraemia (ECB) Standard

The ECB standard is a reduction of 25% in the national rate of HCA ECBs by year end March 2024, with 2018/19 used as the baseline.

Baseline Rate 2018/19	2023/24 Target	Annual Rate Year Ending March 2025	Quarterly Rate - Jan-Mar 25	Scottish Quarterly Rate - Jan-Mar 25
(per 100,000 Total Occupied Bed Days TOBDs))	(per 100,000 TOBDs)	(per 100,000 TOBDs)	(per 100,000 TOBDs)	(per 100,000 TOBDs)
45.7	34.3	43.1 (198 cases) compared to 45.2 (209 cases) year-end March 2024	42 (49 cases) Compared to 43.1 (49 cases) previous quarter	38.9 (604 cases)

Table 3 - The Board's verified HCA ECB rate for January-March 2025

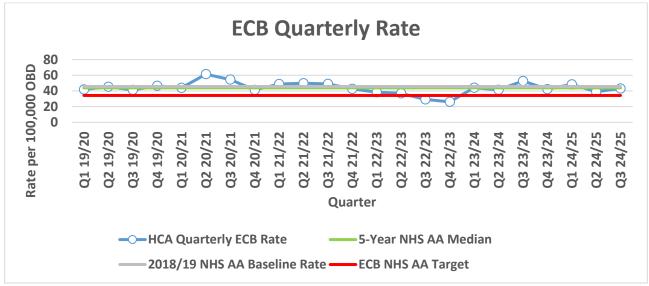


Figure 7 - Quarterly Healthcare Associated ECB Rate

Figure 8 provides the Board's position in comparison to the rest of Scotland. NHS A&A rate of 42 is within the 95% confidence interval upper limit but above the Scottish rate of 38.9 and the NHS A&A target rate of 34.3.

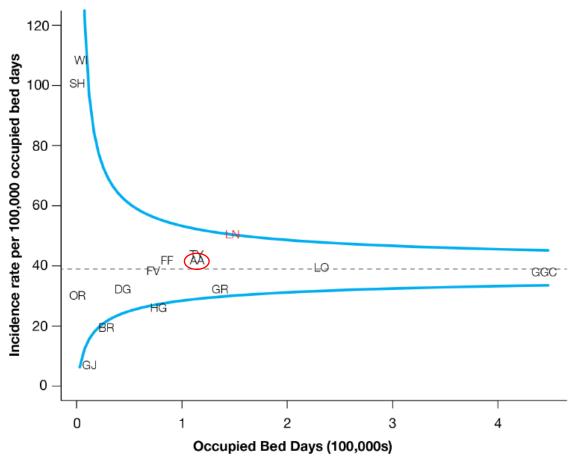


Figure 8 - Funnel plot of ECB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in January-March 2025

Community Associated ECB Rate

There are currently no targets for community associated ECB.

Quarter	Jan- Mar 23	Apr– Jun 23	Jul– Sep 23	Oct- Dec 23	Jan- Mar 24	Apr– Jun 24	Jul– Sept 24	Oct- Dec 24	Jan– Mar 25
No of ECB	46	48	53	42	44	61	53	54	54
Rate (per 100,000 population)	50.6	52.2	57.0	45.6	48.4	67.0	57.6	58.7	59.8

Table 4 - Number of ECBs per quarter for the years 2022/23, 2023/24 and 2024/25

Figure 9 provides the Board's position in comparison to the rest of Scotland. NHSAA's rate of 59.8 is above the 95% confidence interval upper limit and the Scotlish rate of 32.9.

NHS Ayrshire & Arran has a very high rate of community associated E. coli Bacteraemia compared to others in Scotland. Although the number of ECB remain stable, a reduction in community ECB in larger NHS boards across Scotland led to this higher rate within NHSAA. After the third consecutive exception report the CNO evoked a national support framework.

NHS A&A have proactively approached ARHAI Scotland for epidemiology support with NHS A&A and National data. A multi-disciplinary and multi-agency Community ECB Improvement Group was established to address this challenge including developing an action plan. An action plan is developed and submitted to ARHAI for peer review.

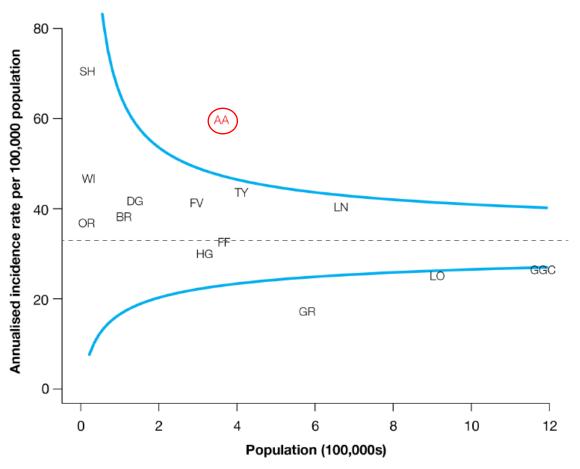


Figure 9 - Funnel plot of ECB incidence rates (per 100,000 TOBD) in community associated infection cases for all NHS boards in Scotland in January – March 2025

Standard Infection Control Precautions (SICPs)

Aligns to Na	Aligns to National IPC Standards (2022)				
Standard 2	Education and Training				
Standard 4	Assurance and monitoring systems				
Standard 6	Infection prevention and control policies, procedures and guidance				
Standard 8	The Built Environment				

The Infection Prevention and Control Team (IPCT) undertakes independent monitoring of Standard Infection Control Precautions (SICPs) in accordance with a planned audit programme, as part of an agreed monitoring framework. The framework sets out the roles and responsibilities of staff within acute and non-acute hospitals for audit, as well as the IPCT.

Hand Hygiene

For audits performed by the IPCT, compliance ranged from 50-100% across the different staff groups **(Table 5)** with an overall compliance of 83% in Quarter 4. This compares to an overall compliance of 98% for audits performed by ward staff. The national standard to be achieved is 95%.

Month	Jan – Mar 2024	Apr – Jun 2024	July – Sep 2024	Oct – Dec 2024	Jan – Mar 2025
IPCT Score	91%	93%	92%	93%	83%
Ward Score	94%	96%	90%	96%	98%

Table 5 - SICPs Monitoring Framework

These results are reviewed by the PCOIC, with actions agreed as needed to support clinical improvement. There is also an increased leadership focus in relation to hand hygiene, including focus on compliance with bare below the elbow.

Estates and Cleaning Compliance

Aligns to Na	ntional IPC Standards (2022)
Standard 6	Infection prevention and control policies, procedures and guidance
Standard 7	Clean and safe care of equipment
Standard 8	The built environment

Table 6 presents data on compliance with the requirements set out in the NHS Scotland National Cleaning Services Specification (NCSS).

The NCSS sets out the requirements for minimum frequency and methods of cleaning carried out by Domestic staff. It sets out the same requirements for Estates staff when cleaning the Estates fabric.

The minimum national standard of cleanliness to be achieved is 90%. The Health Board met the national standard for both Domestic Service and Estates.

	NHS Ayrshire & Arran	Scotland
Domestic Services	95.50%	95.2%
Estates Services	96.52%	96.4%

Table 6 - Estates and Cleaning Compliance January - March 2025

A robust audit programme structured in line with national requirements is in place: 426 domestic audits were carried out during the period January-March 2025. **(Table 7)**

At the end of an audit, if the area falls below 90%, a re-audit is carried out. This is undertaken within 21 days if the score is between 70-90% and within 7 days if the score is below 70%.

Sector	Audits Scheduled	Audits Undertaken	Re-audit of areas below 90%	Domestic score	Estates score
East	284	284	0	95.91%	95.58%
North	94	58	1	94.33%	97.07%
South	193	134	2	95.31%	97.90%
Total	571	426	3	95.50%	96.52%

Table 7 - Domestic Audits January - March 2025

Infection Outbreaks and Incidents

Aligns to Na	Aligns to National IPC Standards (2022)				
Standard 2	Education and training				
Standard 4	Assurance and monitoring systems				
Standard 6	Infection prevention and control policies, procedures and guidance				
Standard 7	Clean and safe care equipment				

Healthcare Infection Incident Assessment Tool (HIIAT)

The ARHAI Healthcare Infection Incident Assessment Tool (HIIAT) is a tool used by NHS Boards to assess the impact of an outbreak or incident. The tool is a risk assessment allowing Boards to rate each outbreak/incident as **RED**, **AMBER** or **GREEN**.

In the event of an outbreak or incident, a Problem Assessment Group (PAG) or Incident Management Team (IMT) meeting is convened, and actions are implemented to control further transmission of infection. All outbreaks/incidents are reported to ARHAI who then report to the Scottish Government Health and Social Care Directorate (SGHSCD).

Between April and June, there were 9 green HIIAT assessments for respiratory outbreaks, with no non-respiratory outbreaks reported.

Highest assessed HIIAT						
HIIAT Red HIIAT Amber HIIAT Green						
0	0	9				

Table 8 - Number of incidents reported to ARHAI (includes COVID19) from April - June 2025

Outbreaks of COVID continue to occur across Scotland, and within NHSAA. In quarter 1 2025/26, the Board dealt with 9 COVID outbreaks. Each has been dealt with in line with guidance in place at the time and reported as required to ARHAI via the national outbreak reporting system. **Table 9** provides information on the number of COVID and other respiratory outbreaks from January – March 2025.

Month	Jul - Sep 2024	Oct – Dec 2024	Jan – Mar 2025	Apr – Jun 2025
COVID	22	15	7	9
Influenza	0	11	7	1
RSV	0	6	3	0
Mixed	0	1	0	1
Other	0	0	0	0
Total	22	33	17	11

Table 9 - Respiratory Outbreak Activity – April 2024 to March 2025

Table 10 provides information on the number of non-respiratory outbreaks and incidents which have occurred during Quarter 4, 2024/25 along with examples of key learning.

Outbreak / Incident	Key Learning & Actions
Aspergillus – Closed	 Air sampling processes to monitor fungal levels within the ward Enhanced cleaning within the ward using sporicidal agent Review of ventilation system and programmed maintenance Implementation of portable HEPA filter units throughout ward De-cant 3A to 4A for the duration of remedial works - await confirmation of transfer date.
Clostridioides difficile infection (CDI) Trigger now closed	 Enhanced cleaning already in place due to above incident. Cases isolated with transmission based precautions in place. Ribotyping confirmed this was not an outbreak and the cases were not due to cross-transmission. Gaps in completion of the CDI trigger tool by the clinical team were identified, highlighting the need for improved communication to ensure consistent implementation of control measures; IPC will now provide the full trigger tool than the daily check list, at the outset.
Clostridioides difficile infection (CDI) Trigger now closed	 Enhanced cleaning was implemented for the duration of the trigger tool. Trigger tool checklist completed daily by the clinical team.

Table 10 - Non-respiratory outbreaks and incidents

PCOIC has reviewed a summary of learning from each outbreak and it should be noted that a number of the actions arising have been rolled out Board-wide to all relevant areas, in order to ensure shared learning and maximum improvement in patient safety.

2.3.7 Communication, involvement, engagement and consultation

This is a standing report to the Board.

2.3.8 Route to the meeting

This has been previously considered by the following groups as part of its development. The groups have either supported the content, or their feedback has informed the development of the content presented in this report.

- Prevention and Control of Infection Committee, 9 July 2025
- Healthcare Governance Committee, 4 August 2025

2.4 Recommendation

For discussion. Board members are asked to:

- 1. Scrutinise the current Board position in relation to national HCAI Standards, note the exception reports received, and the work in progress to further reduce infections.
- 2. Note the HIIAT reports made to ARHAI Scotland, the summary of learning in relation to outbreaks of infection, and the continuing challenge to patient safety posed by COVID-19.
- 3. Confirm the report provides suitable assurance in relation to the HCAI Standards and request further assurance if necessary.