

NHS Ayrshire & Arran



Meeting:	Ayrshire and Arran NHS Board
Meeting Date:	Monday 12 October 2026
Title:	National Healthcare Associated Infection Standards
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

This supports the following Corporate Objectives:

Better Health

- Enabling individuals to live healthier lives
- Reducing health inequalities by supporting communities with the greatest need
- Strengthening prevention and early intervention approaches

Better Workplace

- Fostering a safe, positive, supportive working environment
- Promoting a culture of continuous learning, improvement, and staff development

Better Care

- Enhancing patient experience across care pathways
- Improving clinical outcomes through the delivery of safe, high-quality care

2. Report summary

2.1 Situation

This paper provides Board members with:

- The current position against the national Healthcare Associated Infection (HCAI) Standards for infection reductions in *Clostridioides difficile* infection (CDI), *Staphylococcus aureus* bacteraemia (SAB), and *Escherichia coli* bacteraemia (ECB).

- A summary of outbreaks and the key learning and improvement actions being taken in response to improving care for our patients

2.2 Background

In line with the Healthcare Improvement Scotland (HIS) *Infection Prevention and Control Standards for Health and Adult Social Care Settings 2022*, the Healthcare Governance Committee (HGC) had a priority in 2025-26 to focus on receiving evidence of organisational learning and demonstrable improvement, and to ensure national improvement priorities and programmes are delivered locally. The detail in this paper supports assurance in relation to HCAI and infection prevention learning and improvement across the Health Board.

The Scottish Government has issued updated national healthcare associated (HCA) infection standards in DL (2025) 05. The agreed standard states there should be no increase in the incidence (number of cases) of *Clostridioides difficile* infection (CDI), *Escherichia coli* bacteraemia (ECB), and *Staphylococcus aureus* bacteraemia (SAB) in the period between April 2025 and March 2026, from the 2023/2024 case numbers baseline.

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

2.3 Assessment

This paper examines the current rates of healthcare-associated and community-acquired infections within NHS Ayrshire & Arran (NHSAA), focusing on *Clostridioides difficile* infection, *Escherichia coli* bacteraemia and *Staphylococcus aureus* bacteraemia. It compares local data against national benchmarks and aligns with **National IPC Standards (2022), Standard 4: Assurance and Monitoring Systems**, highlighting key approaches to infection monitoring, reporting, and management across care settings

CDI Standard

Healthcare-associated *Clostridioides Difficile* Infection

The 2025-26 performance target for NHSAA is to limit healthcare-associated *Clostridioides difficile* Infection (CDI) cases to no more than 70, using the 2023–24 incidence as the baseline.

In Quarter 4 of 2025–26, NHS Ayrshire & Arran reported 9 healthcare-associated *Clostridioides difficile* infection (CDI) cases, equating to an incidence rate of 7.8 per 100,000 total occupied bed days (TOBDs). By year end (March 2026), a total of 79 cases had been recorded against the HAI Standard target of 70 cases, representing 113% of the annual target. Consequently, NHSAA did not achieve the HAI Standard set by the Scottish Government for 2025–26. Despite this, NHSAA achieved an 11% reduction in HCA CDI cases compared with the previous year, demonstrating continued improvement in CDI prevention and control measures. In comparison, Scotland recorded 214 cases during Quarter 4, with an incidence rate of 13.9 per 100,000 TOBDs (Table 1).

Financial year	CDI HCA Cases
2024-25	89
2025-26	79 (11.2% reduction)

NHSAA <i>Clostridioides difficile</i> Infection	Q1 2025-26 (Apr– Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Q4 2025-26 (Jan-Mar)	Scottish incidence Q4 2025-26 (Jan-Mar)
No of Cases	25	26	19	9	214
Change from Previous Quarter	↑ 6	↑ 1	↓ 7	↓ 10	↓ 7
Incidence rate (per 100,000 TOBDs)	21.7	22.9	16.7	7.8	13.9
2025-26 Target	≤ 70 cases		Recorded Cases vs Annual Target		79/70 cases (13% above standard)

Table 1: Healthcare-associated CDI Standard, Case Numbers and Rates

Figure 1 illustrates the quarterly trend of healthcare-associated CDI cases from 2021 to March 2025. The current data shows a decrease in CDI cases compared to the previous quarters, with the rate just below the long-term average, remaining within statistical warning and control limits.

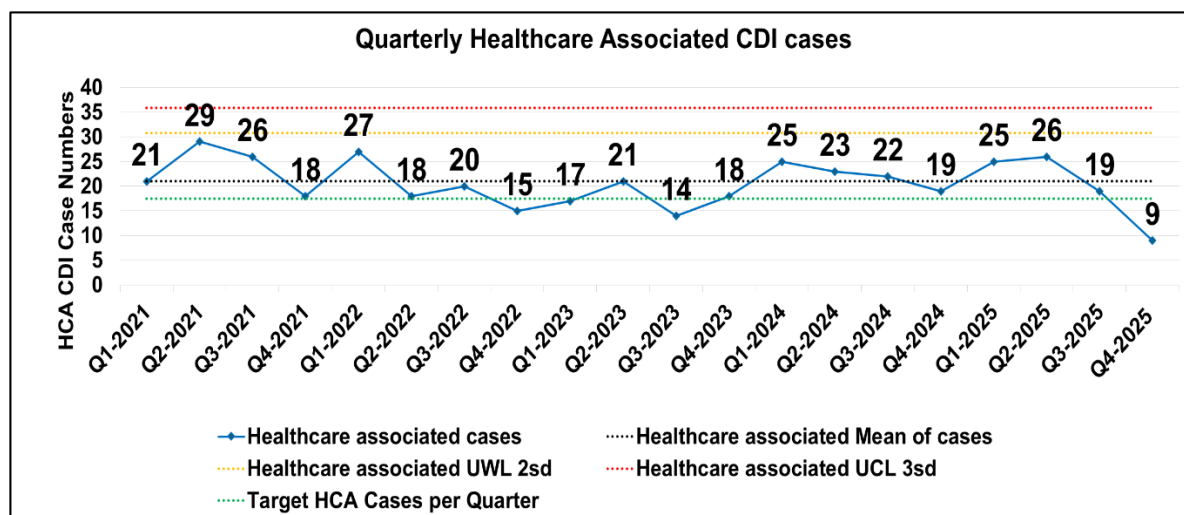


Figure 1: Quarterly HCA CDI cases.

Figure 2 provides the Board's position in comparison to the rest of Scotland. NHSAA's rate of 7.8 (9 cases) is below the 95% confidence interval lower limit and is below the Scottish rate of 13.9 (214 cases) (per 100,000 TOBDs).

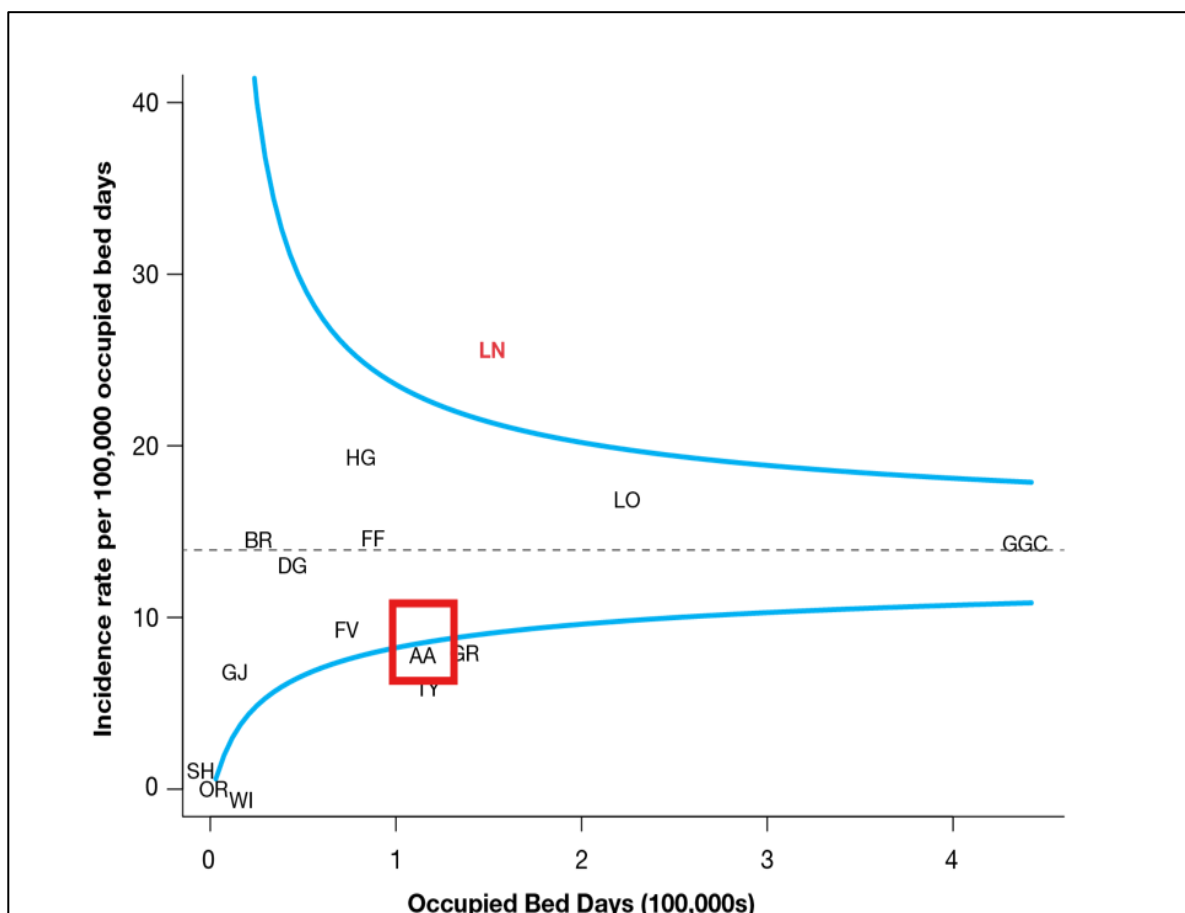


Figure 2: Funnel plot of HCA CDI incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in Q4 2025–26 (January – March 2026)

Nine healthcare-associated CDI cases identified locally during Q4 (January – March 2026). Of these, 56% were hospital-acquired, 22% healthcare-associated, and 22% unknown. The hospital-acquired cases occurred across four wards, with no wards showing increased incidence. Investigations confirmed that the cases were not linked by time or place; therefore, no trigger tool was required.

Community Associated *Clostridioides Difficile* Infection (CA-CDI)

During Q4 2025-26, 9 CDI cases were reported as community associated. This corresponds to an incidence rate of 9.9 cases per 100,000 population (**Table 2**). While there is no national target for community CDI, the Scottish incidence for the same period was lower, with 73 cases and a rate of 5.3 per 100,000 population.

NHSAA <i>Clostridioides difficile</i> Infection	Q1 2025-26 (Apr– Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Q4 2025-26 (Jan-Mar)	Scottish incidence Q4 2025-26 (Jan-Mar)
No of Cases	9	8	4	9	73
Change from Previous Quarter	↑ 4	↓ 1	↓ 4	↑ 5	↑ 3
Incidence rate (per 100,000 TOBDs)	9.8	8.6	4.3	9.9	5.3
2025-26 Target	No National Target				

Table 2: Community Associated CDI Standard Case Numbers and Rates

Figure 3 shows quarterly trends from April 2021 to March 2026, which remain broadly stable over the reporting period and all quarterly figures remain well below the upper control limit.

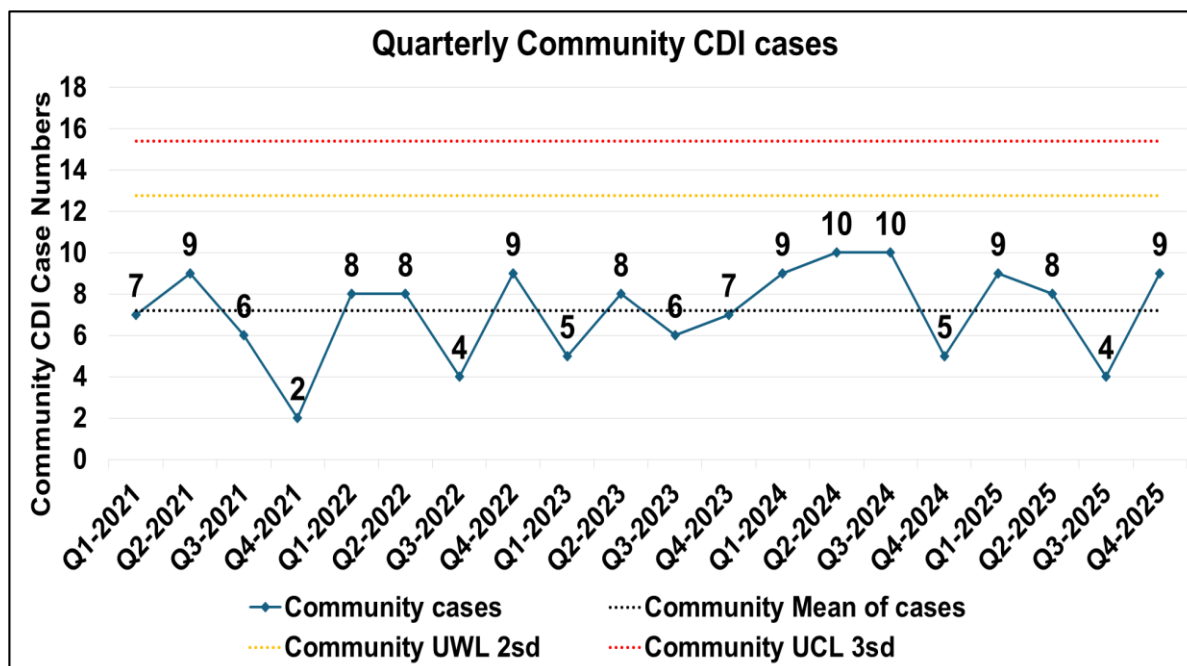


Figure 3: Quarterly Community CDI cases.

Figure 4 provides the Board's position in comparison to the rest of Scotland for Community Associated CDI. NHS A&A's rate of 9.9 (9 cases) is within the 95% confidence interval upper limit and above the Scottish rate of 5.3 (73 cases) (per 100,000 population)

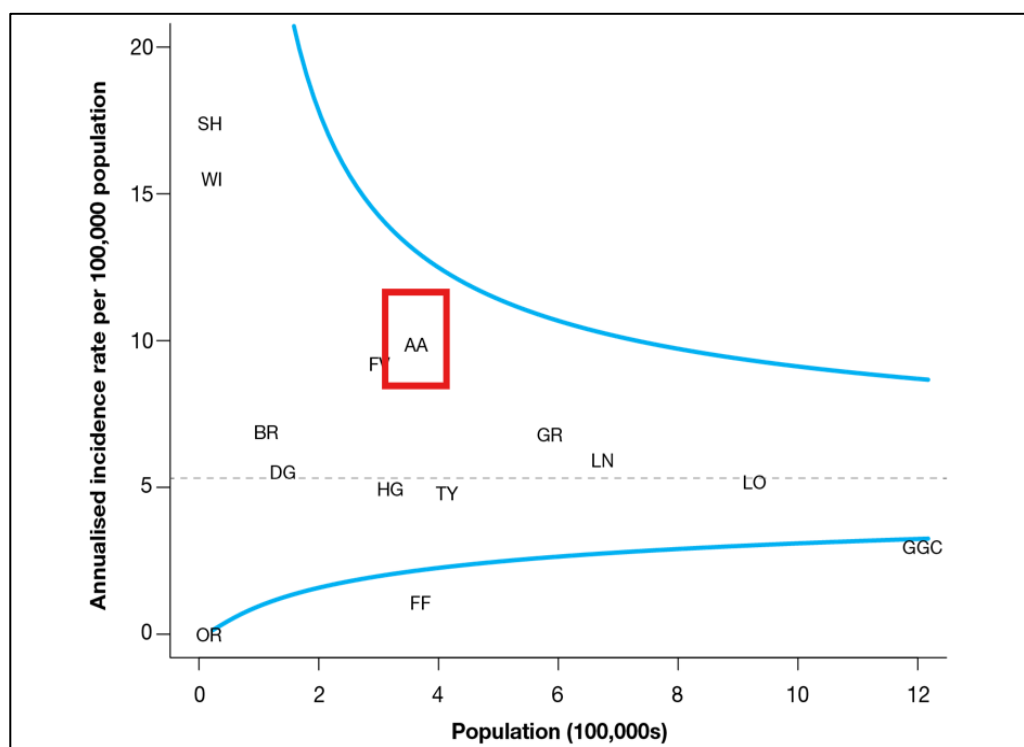


Figure 4: Funnel plot of community associated CDI incidence rates (per 100,000 population) for all NHS boards in Scotland in Q4 2025 -26 (January – March 2026)

ECB Standard

Healthcare-associated *E. coli* bacteraemia (ECB)

The ECB standard for NHSAA for the year ending March 2026 sets a target of no more than 209 healthcare-associated *E. coli* bacteraemia (ECB) cases, aligning with the incidence recorded in 2023–24. In Quarter 4 (Jan – March 2026), NHSAA reported 54 cases, equating to a rate of 46.6 per 100,000 TOBDs. This marks an increase from the previous quarter, with an increase of 4 cases (from 50 to 54).

Financial year	ECB HCA Cases
2024-25	198
2025-26	207 (4.5% Increase)

NHSAA E coli bacteraemia	Q1 2025-26 (Apr– Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Q4 2025-26 (Jan-Mar)	Scottish incidence Q4 2025-26 (Jan-Mar)
No of Cases	47	56	50	54	609
Change from Previous Quarter	↓ 2	↑ 9	↓ 6	↑ 4	↓ 16
Incidence rate (per 100,000 TOBDs)	40.7	49.2	44	46.6	39.5
2025-26 Target	≤ 209 cases		Recorded Cases vs Annual Target		207/209 cases (99% of the standard)

Table 3: Healthcare-associated ECB Standard, Case Numbers and Rates

NHSAA remained within the Scottish Government HAI standard for the year ending March 2026, achieving fewer than the maximum threshold of 209 HCA ECB cases. However, the Scottish national position for Quarter 4 was lower, with 609 cases, equating to a rate of 39.5 per 100,000 TOBDs. While NHSAA met the required standard, the year-end March 2026 HCA ECB rate was 4.5% higher than the previous year, highlighting the need for continued focus on improvement initiatives to reduce healthcare-associated infection risk and improve patient outcomes.

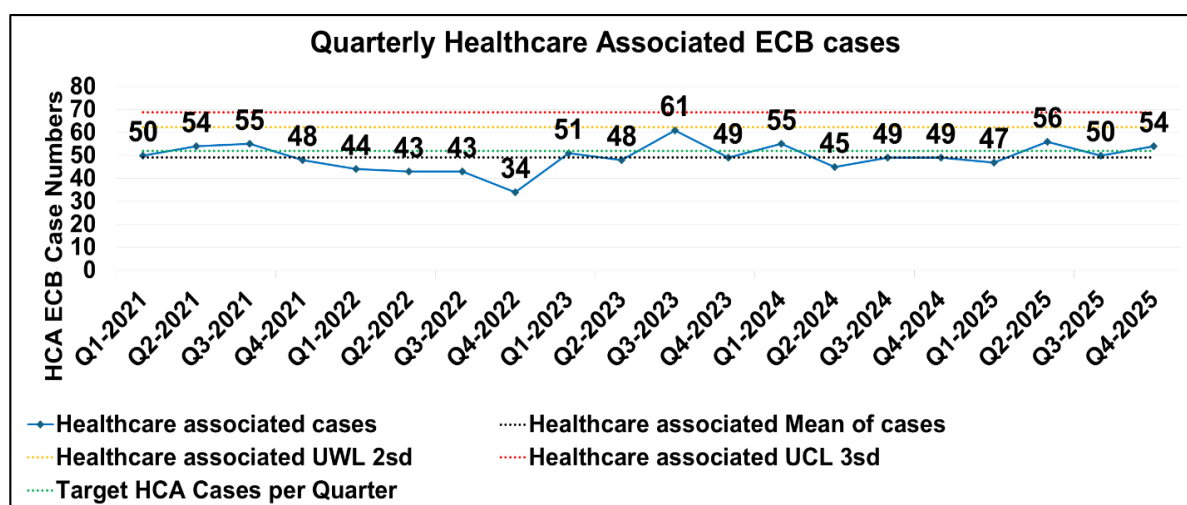


Figure 5: Quarterly Healthcare Associated ECB Cases

Figure 5 shows quarterly trends in Healthcare Associated ECB cases from April 2021 to March 2026. Case numbers remained stable, averaging around 50 per quarter and consistently stayed below established warning and control thresholds, indicating no

significant deviations or outbreaks during the reporting period. This indicates sustained performance within expected limits, with no evidence of significant outbreaks during the reporting period.

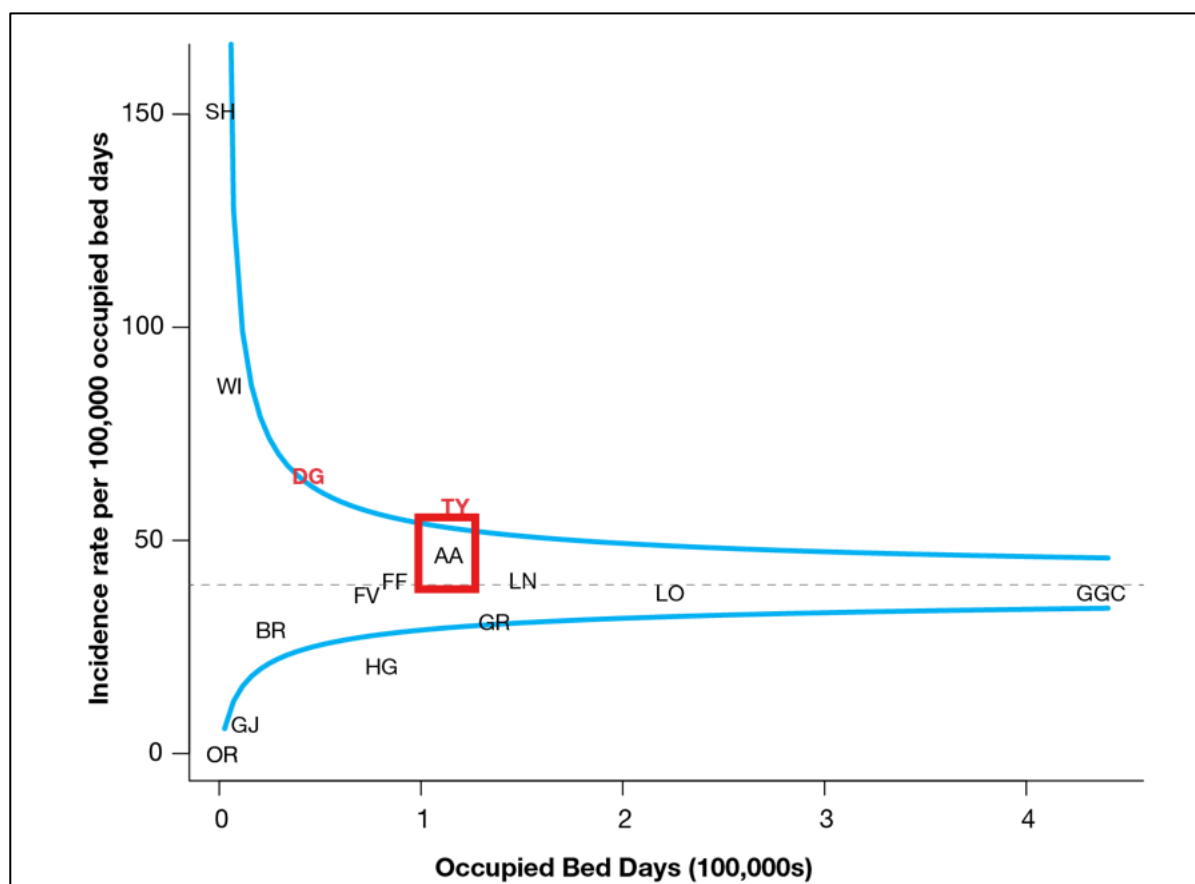


Figure 6: Funnel plot of HCA ECB incidence rates (per 100,000 TOBD) for all NHS Boards in Scotland in January – March 2026

Figure 6 provides the Board's position in comparison to the rest of Scotland. NHS A&A's rate of 46.6 (54 Cases) is within the 95% confidence interval upper limit and above the Scottish national average rate of 39.5 (609 Cases) per 100,000 TOBDs.

Community Associated *E. coli* bacteraemia (ECB)

NHSA <i>E coli</i> bacteraemia	Q1 2025-26 (Apr– Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Q4 2025-26 (Jan-Mar)	Scottish incidence Q4 2025-26 (Jan-Mar)
No of Cases	56	65	55	35	462
Change from Previous Quarter	↑ 2	↑ 9	↓ 10	↓ 20	↑ 15
Incidence rate (per 100,000 TOBDs)	61.1	70.1	59.3	38.6	33.8
2025-26 Target	No National Target				

Table 4 : Community Associated ECB Case Numbers and Rates

During Q4 2025-26, 35 ECB cases were reported as community associated. This corresponds to an incidence rate of 38.6 cases per 100,000 population (**Table 4**). While there is no national target for Community-ECB, the Scottish incidence for the same period was notably lower, with 462 cases and a rate of 33.8 per 100,000 population.

Figure 7 illustrates quarterly performance from January 2021 to March 2026. The most recent data demonstrate a downward trajectory, with values remaining within expected statistical variation and below the upper warning and control limits. This is encouraging and indicates that the quality improvement initiatives led by the Community-ECB Improvement Group are contributing to sustained improvements in performance.

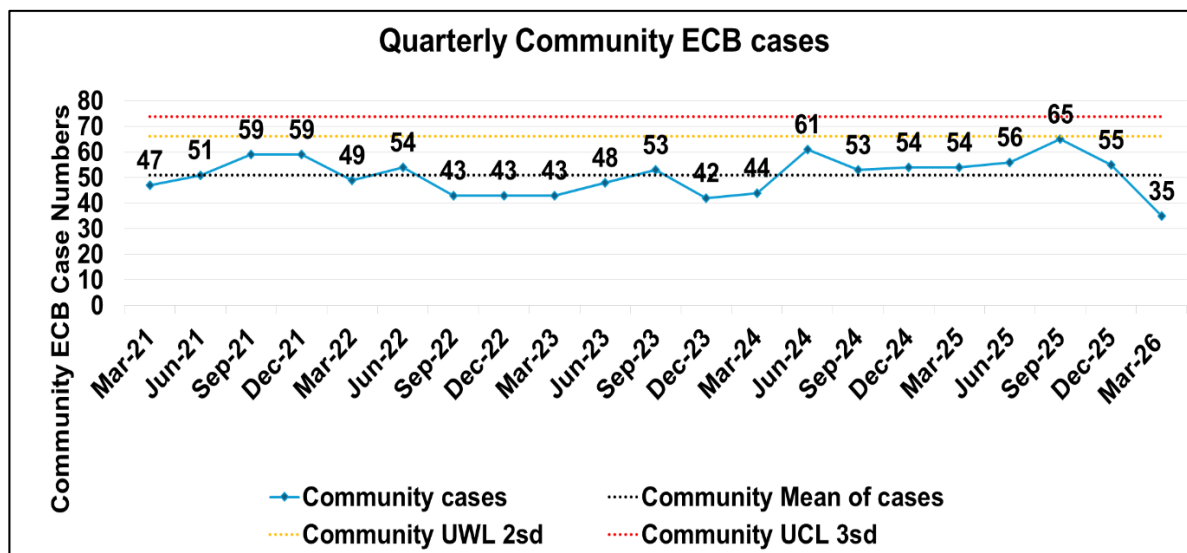


Figure 7: Quarterly Community Associated ECB Cases

Figure 8 provides the Board's position in comparison to the rest of Scotland. NHSAA's rate of 38.6 (35 Cases) is within the 95% confidence interval upper limit for the first time in almost two years and above the Scottish rate of 33.8 (462 Cases).

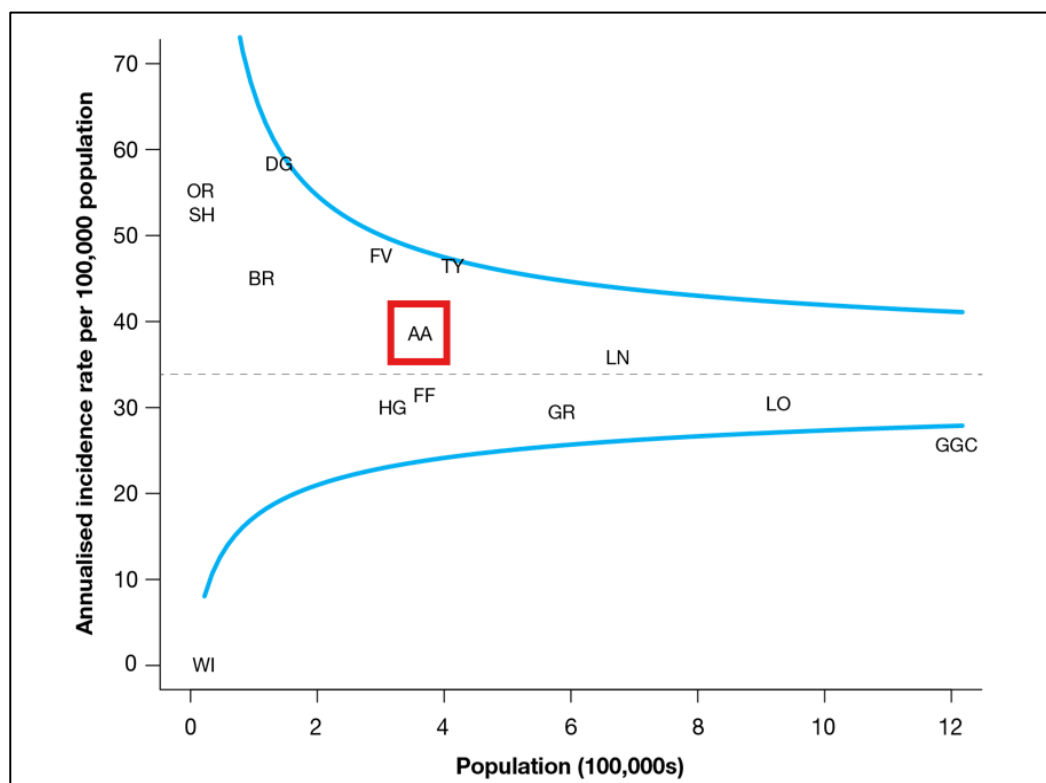


Figure 8: Funnel plot of community associated ECB incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in January – March 2026

Although NHSAA has demonstrated an overall reduction in Community-ECB compared with the previous year, incidence remains high, with 211 cases reported year end March 2026 compared to 222 cases in the previous year, demonstrating a modest improvement. Although NHSAA had been identified as a high outlier for seven consecutive quarters, performance improved in Quarter 4 (January to March 2026), resulting in NHSAA no longer being classified as an outlier

The Community ECB Improvement Group implemented a range of targeted interventions, including prescribing audits and antimicrobial stewardship initiatives within primary care, particularly relating to proton pump inhibitor (PPI) prescribing.

Responsibility for this programme has now transferred to the Public Health team to support a broader whole-system approach to community infection prevention. To sustain the improvement achieved in Quarter 4 and deliver further reductions in ECB incidence, continued surveillance, prescribing reviews, quality improvement activity, and public health messaging will be required. Ongoing collaboration across Public Health, Primary Care, and community services will be essential to maintain progress and prevent a return to outlier status.

SAB Standard

Healthcare-associated *Staphylococcus aureus* bacteraemia

NHSAA's performance objective for 2025–26 is to limit healthcare-associated *Staphylococcus aureus* bacteraemia (SAB) cases to no more than 87, using the 2023–24 incidence as the baseline (**Table 5**).

In Quarter 4 (January – March 2026), NHSAA reported 31 SAB cases. This equates to a rate of 26.8 per 100,000 total occupied bed days (TOBDs), reflecting an increase of 5 cases from the previous quarter.

Financial year	SAB HCA Cases
2024-25	121
2025-26	109 (9.9 % reduction)

NHSAA <i>Staphylococcus aureus</i> bacteraemia	Q1 2025-26 (Apr– Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Q4 2025-26 (Jan-Mar)	Scottish incidence Q4 2025-26 (Jan-Mar)
No of Cases	28	24	26	31	291
Change from Previous Quarter	↓ 4	↓ 4	↑ 2	↑ 5	↑ 9
Incidence rate (per 100,000 TOBDs)	24.3	21.1	22.9	26.8	18.9
2025-26 Target	≤ 87 cases		Recorded Cases vs Annual Target		109/87 cases (25% more cases than the standard)

Table 5: Healthcare-associated SAB Standard, Case Numbers and Rates

NHSAA did not achieve the Scottish Government healthcare-associated SAB standard of no more than 87 cases by March 2026. A total of 109 cases were recorded, equating to a rate of 23.8 cases per 100,000 total occupied bed days

(TOBDs), which remained above the Scottish rate of 18.9 per 100,000 TOBDs (1,172 cases in 2025-26 nationally).

However, despite not meeting the national reduction target, NHSAA achieved a 10% reduction in SAB incidence compared with the previous year, decreasing from 121 cases (26.4 per 100,000 TOBDs) to 109 cases (23.8 per 100,000 TOBDs), demonstrating continued progress in reducing healthcare-associated SAB.

Figure 9 presents quarterly healthcare-associated SAB cases from January 2020 to March 2026. The latest data point (Q4 2025-26) indicates an increase in cases compared to the previous quarter.

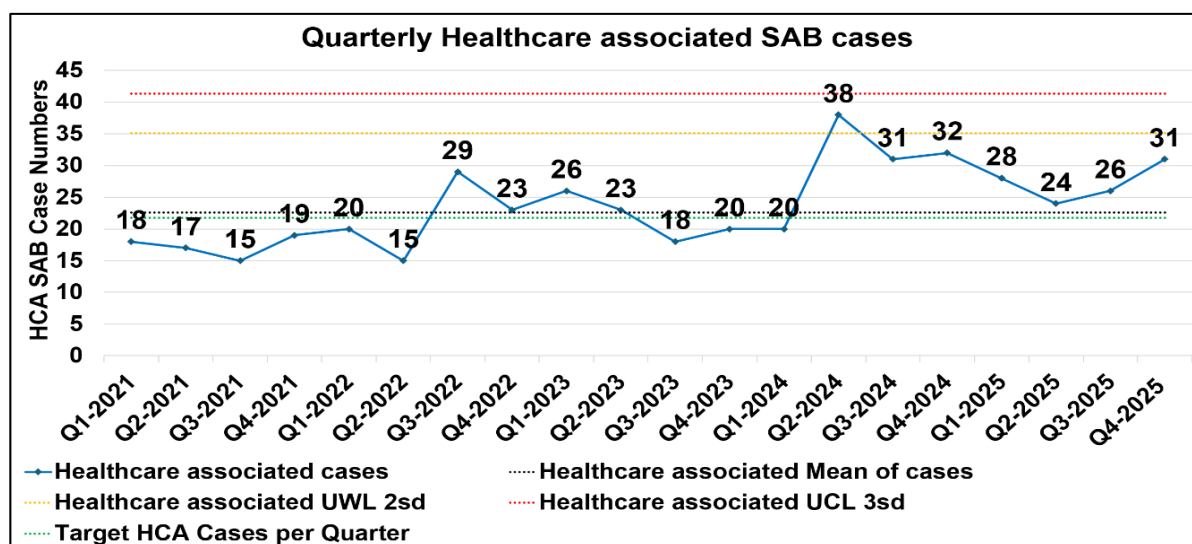


Figure 9: Quarterly HCA SAB Cases

Although the current rate exceeds the Scottish average of 18.9 per 100,000 TOBDs, it remains within control limits, suggesting no special cause variation.

Figure 10 provides the Board's position in comparison to the rest of Scotland. NHS AA's rate of 26.8 per 100,000 TOBDs (31 Cases) was within the 95% confidence interval upper limit and above the Scottish rate of 18.9 per 100,000 TOBDs (291 Cases).

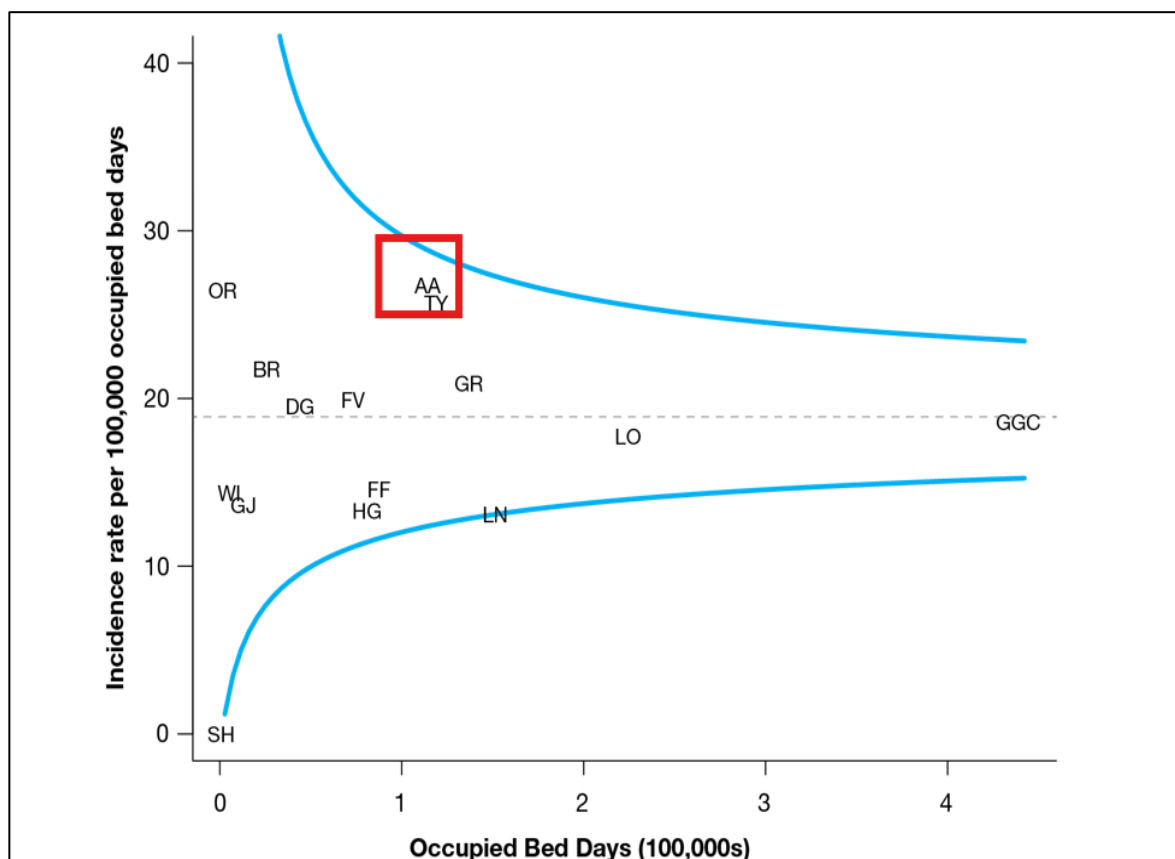


Figure 10: Funnel plot of HCA SAB incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in January – March 2026

Community Associated *Staphylococcus aureus* bacteraemia

NHSAA <i>Staphylococcus aureus</i> bacteraemia	Q1 2025-26 (Apr– Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Q4 2025-26 (Jan-Mar)	Scottish incidence Q4 2025-26 (Jan-Mar)
No of Cases	8	14	15	9	137
Change from Previous Quarter	↓ 2	↑ 6	↑ 1	↓ 6	↑ 5
Incidence rate (per 100,000 TOBDs)	8.7	15.1	16.2	9.9	10
2025-26 Target	No National Target				

Table 6: Number of Community Associated SAB Case Numbers and Rates

Figure 11 illustrates the quarterly trend in community associated SAB cases from December 2020 to March 2026. While the Scottish Government has not issued specific targets for community associated infections, the data shows a slight increase in NHSAA's annual community SAB rate; from 11.1 per 100,000 population in the year ending March 2025 to 12.5 in the year ending March 2026.

The graph presents quarterly fluctuations in case numbers. Despite variability, NHSAA remains within the upper control limit and upper warning limit for Community acquired SAB.

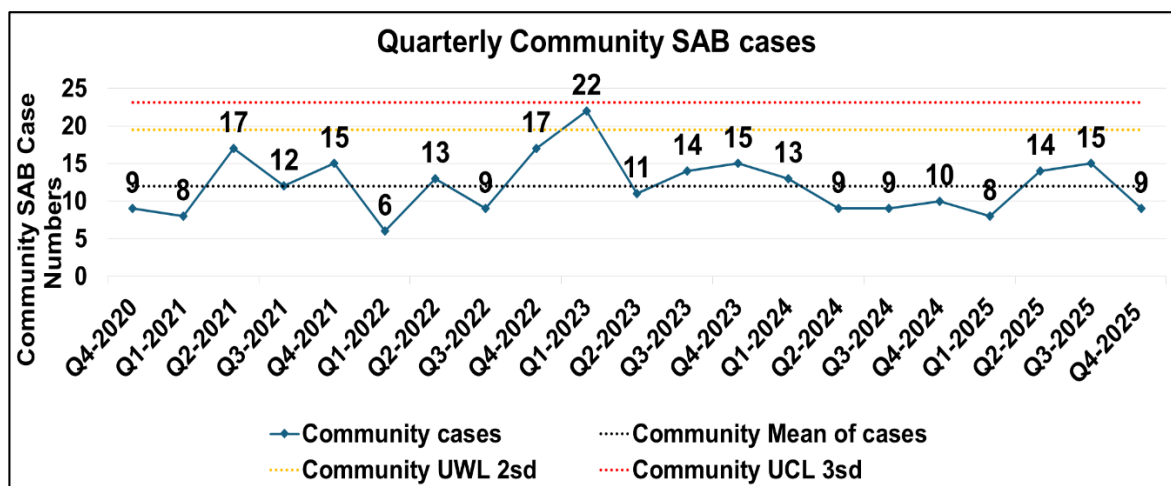


Figure 11: Quarterly Community acquired SAB Cases

Figure 12 provides the Board's position in comparison to the rest of Scotland for Community Associated SAB. NHSAA's rate of 9.9 (9 cases) is within the 95% confidence interval upper limit and is below the Scottish rate of 10.0 (137 cases) (per 100,000 TOBDs).

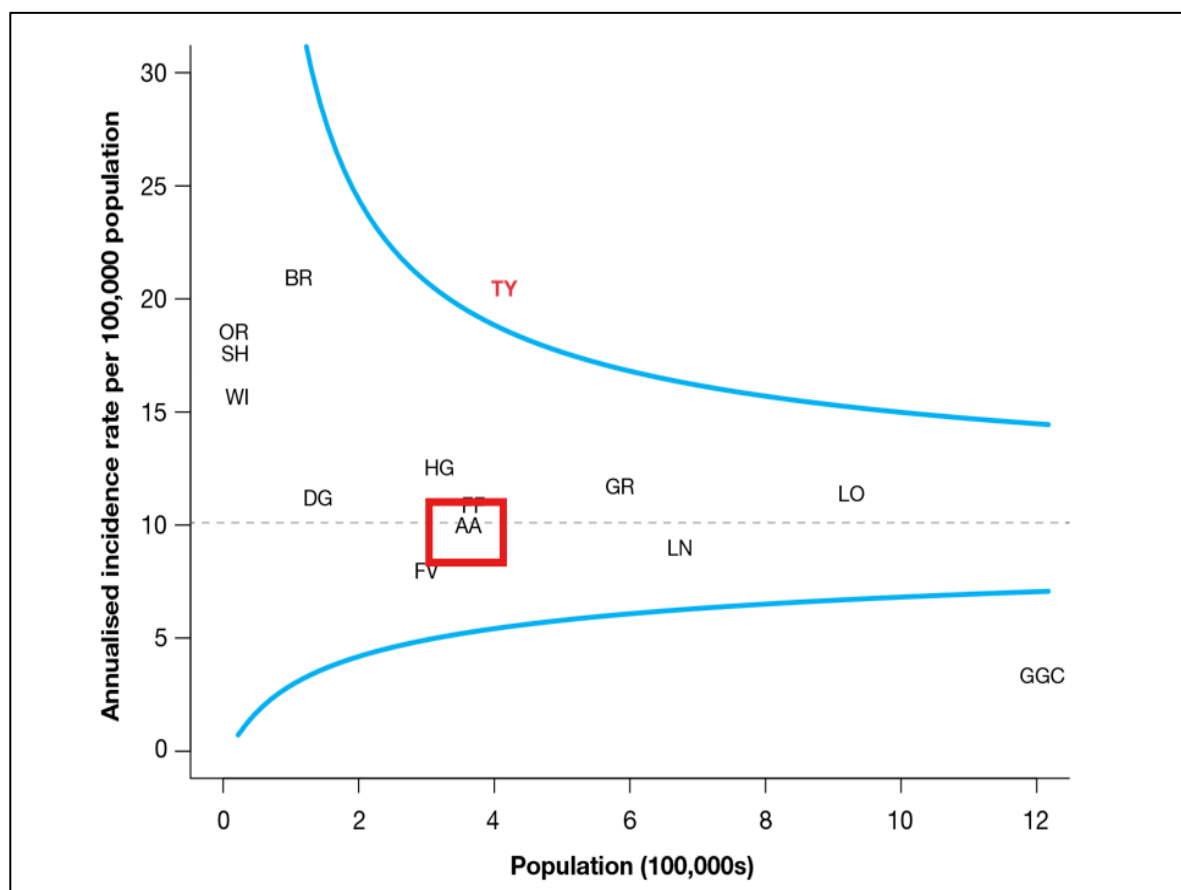


Figure 12: Funnel plot of community associated SAB incidence rates (per 100,000 population) for all NHS boards in Scotland in January – March 2026

Infection Outbreaks and Incidents

Outbreaks of infection, and infection-related incidents, occur in all healthcare settings. When outbreaks or incidents are detected the Infection Prevention & Control Team (IPCT) provide advice, and work in collaboration with clinical and management teams to support work to reduce the risk of further infection transmission, identify areas for improvement, and put in place actions to reduce risks to patients, staff and visitors.

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

Table 7: National IPC Standards (2022)

Outbreaks of COVID continue to occur across Scotland, and within NHSAA. Each has been dealt with in line with guidance and reported as required to ARHAI via the national outbreak reporting tool. **Table 8** provides information on the number of COVID and other respiratory outbreaks from July 2025 to June 2026. (Note: some outbreaks were due to multiple respiratory viruses, and were reported to ARHAI as a multi-cause, mixed organism, outbreak).

Organism	Jul – Sep 2025	Oct – Dec 2025	Jan – Mar 2026	Apr – June 2026
COVID	21	9	8	2
Influenza	0	13	5	1
RSV	0	6	3	0
Mixed	0	0	0	0
Total	21	28	16	3

Table 8: Respiratory Outbreak Activity (July 2025 – June 2026)

All outbreaks have been managed in line with the National Infection Prevention and Control Manual and reported to ARHAI via the national outbreak reporting tool.

The following non-respiratory outbreaks and incidents have occurred or continued within the acute setting from Quarter 1 2026–27 to date. This reflects activity up to the point of reporting.

University Hospital Crosshouse, Open. HIIAT Green
An incident involving healthcare-associated <i>Stenotrophomonas maltophilia</i> remained under investigation during the reporting period.
Control measures were maintained, with a focus on water safety practices, staff awareness, and antimicrobial stewardship. Learning highlighted the importance of adherence to water safety principles and prudent use of broad-spectrum antimicrobials to minimise the risk of environmental organism transmission
University Hospital Crosshouse, Closed. HIIAT Green
Aspergillosis incident associated with an oncology inpatient area remains subject to ongoing environmental investigation and control measures.
Enhanced environmental monitoring, cleaning, ventilation review and air filtration measures have been implemented. The incident has highlighted the impact of environmental estate issues on patient safety and service capacity. A decant of the clinical area is currently being progressed to enable Estates to undertake further investigation into the source of contamination and complete necessary remedial works.

Klebsiella pneumoniae outbreak Closed Highest HIIAT Green
A <i>Klebsiella pneumoniae</i> outbreak involving 8 patients was declared and subsequently closed following implementation of outbreak control measures. Key findings identified opportunities to improve hand hygiene compliance, personal protective equipment use, environmental cleanliness, reusable equipment decontamination, and management of environmental and estate-related risks. Lessons learned are being incorporated into ongoing quality improvement programmes.
Candida Auris Case Closed Incident - HIIAT Green
NHSAA managed its first <i>Candida auris</i> incident following identification through admission screening. Appropriate isolation, screening and infection control measures were implemented, with no evidence of onward transmission identified. The incident provided assurance regarding existing screening arrangements while highlighting the need for continued vigilance in the management of emerging multidrug-resistant organisms.
Key Themes and Learning
Common themes identified across incidents included the importance of: • Compliance with hand hygiene and standard infection control precautions. • Effective management and cleaning of reusable care equipment. • Adherence to water safety measures and environmental controls. • Robust antimicrobial stewardship. • Maintaining healthcare environments in good repair. • Strong multidisciplinary working and effective incident management arrangements. All incidents have been subject to review through established governance processes, with learning informing ongoing improvement and assurance activity across NHSAA.

Table 9: Non-Respiratory Outbreaks and Incidents

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).

Highest assessed HIIAT		
HIIAT RED	HIIAT AMBER	HIIAT GREEN
0	0	3

Table 10: Number of incidents reported to ARHAI (including COVID19) (April and May 2026)

Outbreaks of infection and infection-related incidents occur in all healthcare settings. When outbreaks or incidents are detected, the IPCT provide advice and work in collaboration with clinical and management teams to support work to prevent the risk of further infection, identify areas for improvement, and put in place actions to reduce risks to patients, staff, and visitors.

High Consequence Infectious Disease (HCID) PPE

The DL (2025) 20 High Consequence Infectious Disease (HCID) PPE Addendum sets out a strengthened national standard for PPE, aimed at ensuring a consistent, high level of protection for staff managing suspected or confirmed HCID cases and reducing the risk of exposure and onward transmission.

While the Infection Prevention and Control Team has made progress in preparation for implementation, including delivery of training and simulation-based testing, this has been impacted by a combination of national and local challenges such as equipment supply issues, evolving procurement arrangements, and variable engagement with training.

Recognising these pressures, the Chief Nursing Officer has approved an extension to the implementation deadline from 25 August 2026 to 31 March 2027. This provides additional time for Boards to embed training, secure appropriate equipment, and strengthen systems and processes

2.3.1 Quality/patient care

Attainment of the national HCAI standards will result in fewer infections in patients and improve patient outcomes and experience.

2.3.2 Workforce

Reductions in HCAI will reduce the exposure risk to staff from harmful infections.

2.3.3 Financial

Reductions in HCAI will lead to reduced inpatient lengths of stay and associated treatment costs.

2.3.4 Risk assessment/management

The IPCT provide clinical teams and managers with risk assessed advice and guidance based on national policy and best practice. Failure to achieve national HAI standards may result in increased patient harm, extended hospital stays, reputational risk, and increased scrutiny from external regulators. Improvement activity continues to mitigate these risks.

2.3.5 Equality and diversity, including health inequalities

An impact assessment has not been completed because this is an update report to Committee members.

2.3.6 Best value

This paper supports Best Value across the following themes.

- Effective Partnerships - Collaboration with Health Protection Scotland and estates teams strengthens system-wide responses.
- Governance and accountability - Transparent reporting to ARHAI and Scottish Government ensures compliance with national standards.
- Performance management - Continuous monitoring and feedback loops drive improvement and assurance.

2.3.7 Other impacts

Actions align with NHS Scotland's ambitions for safe, effective, and person-centred care.

2.3.8 Communication, involvement, engagement and consultation

This is standing report to the Board.

2.3.9 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.

- Infection Prevention and Control Committee, 04 Aug 2026
- Healthcare Governance Committee, 08 Sep 2026

2.4 Recommendation

For discussion. Board Members are asked to:

- Note NHSAA's performance against the national HAI standards for CDI, ECB and SAB.
- Receive assurance that improvement programmes remain in place to address CDI, SAB and ECB performance.
- Note the outbreaks and incidents reported and the learning actions implemented.
- Receive assurance regarding progress towards implementation of the HCID PPE Addendum by March 2027.