

**TRUST BOARD ITEM: BRIEFING NOTE**

<b>Meeting Details:</b>	Thursday 2 <sup>nd</sup> May 2024, 10am, in Lecture Theatre, Trust HQs, Altnagelvin Hospital
<b>Director:</b>	Donna Keenan, Interim Executive Director of Nursing, Midwifery & AHPs
<b>Issue Title:</b>	Infection Prevention and Control Update
<b>Indicate the connection with the Trust's Mission and Vision</b> <i>(please tick)</i>	<input checked="" type="checkbox"/> People who need us feel cared for <input type="checkbox"/> People who work with us feel proud <input checked="" type="checkbox"/> People who live in our communities trust us
<b>Indicate the link to Trust's strategic priorities</b> <i>(please tick)</i>	<input checked="" type="checkbox"/> Quality and Safety <input type="checkbox"/> Workforce Stabilisation <input checked="" type="checkbox"/> Performance and Access to Services <input type="checkbox"/> Delivering Value <input type="checkbox"/> Culture
<b>Summary of issue to be discussed:</b>	<p>The attached report provides an update for Trust Board on a number of Infection Prevention and Control (IP&amp;C) related key performance indicators, including:</p> <ul style="list-style-type: none"> <li>• Performance against the healthcare-associated infection reduction targets</li> <li>• <i>Clostridium difficile</i> care bundle audit compliance</li> <li>• The number of COVID-19 outbreaks which have occurred since the previous report</li> <li>• Attendance/ completion rates for IP&amp;C Induction and Mandatory Training</li> <li>• Hand hygiene audit compliance</li> <li>• Caesarean Section and Orthopaedic surgical site infection surveillance performance</li> <li>• Compliance with water safety processes, in particular work to reduce the incidence of Legionella</li> </ul>
<b>Trust Board Response Required</b> <i>(please tick)</i>	<input type="checkbox"/> For approval <input checked="" type="checkbox"/> To note <input type="checkbox"/> Decision

## **Infection Prevention & Control Report to Trust Board**

**Meeting Date – 2<sup>nd</sup> May 2024**

### **1. Executive Summary**

#### **Healthcare-Associated Infection (HCAI) Reduction Targets**

##### Reduction Targets 2023/24

In 2023/24 the Department of Health for Northern Ireland (DoH NI) issued two HCAI reduction targets. These were the first since 2019/20, following a three-year hiatus due to the COVID-19 pandemic.

The Trust's reduction target for *Clostridium difficile* (*C. difficile*) associated disease was 71; a reduction of ten cases or 12.35% compared to the 2022/23 baseline (81 cases).

For Meticillin-Resistant *Staphylococcus aureus* (MRSA) bacteraemia, the Trust's target was six cases. That is a reduction of one case or 14.29% compared to the 2022/23 baseline (seven cases).

Given the challenges associated with reducing healthcare-associated gram-negative bacteraemias (GNBs) to date, specifically *Escherichia coli*, *Klebsiella species* and *Pseudomonas aeruginosa*, the DoH NI decided not to set a target for 2023/24. Rather Trusts were encouraged to minimise risk factors for GNB infections where possible.

##### *C. difficile* Performance 2023/24

A total of 36 cases of *C. difficile* were reported in 2023/24; 45 fewer than in 2022/23. The reduction target was, therefore, achieved. 26 of the cases were classified as healthcare-acquired or associated as they occurred more than 72 hours after admission to hospital (definition used by the Public Health Agency [PHA]). However, this is not always an accurate predictor of being healthcare-associated. The remainder (ten) were categorised as community-acquired as the patients presented with symptoms within a 72 hour period after admission.

##### MRSA Bacteraemia Performance 2023/24

A total of three MRSA bacteraemia cases were reported in 2023/24; four fewer than in 2022/23. All three were categorised as community-associated as they occurred less than 48 hours after admission to hospital (definition used by the PHA). As such, the reduction target was achieved.

##### GNB Performance 2023/24

A total of 46 healthcare-associated GNB cases were reported during 2023/24. That is four more cases than in the previous year (42); an increase of 9.52%.

##### Current GNB Performance

The DoH NI have not yet advised on whether a new reduction target will be set for 2024/25. As of 19<sup>th</sup> April 2024, no healthcare-associated GNB cases have been reported.

#### **Measles**

The Trust received communication from the PHA regarding a sharp increase in the number of

confirmed measles cases reported in England. This communication also provided information on the actions required to reduce the risk of a resurgence of measles in NI as there is now a significant risk of imported measles cases leading to outbreaks and serious illness in NI. Following this the Trust instigated a significant number of work-streams and a Planning Group, whilst also working closely with regional colleagues, to ensure that appropriate IP&C measures, testing, MMR vaccinations and public health actions are in place.

## **2. Coronavirus (COVID-19)**

### **Outbreak Management**

COVID-19 outbreaks continue to be declared in Trust wards, departments and facilities. Between January and mid-April 2024, a total of 14 outbreaks occurred. The Infection Prevention & Control (IP&C) Team are leading on the management of these incidents as applicable. Incident meetings are taking place and all IP&C measures have been instigated.

### **Updated Guidance**

The Trust has received updated COVID-19 Testing guidance from the Chief Medical Officer and PHA. This correspondence advised that all prior circulars relating to COVID-19 testing have been stood down. The updated recommendations for health and social care now focus on informing the clinical management of a patient, investigation of incidents/ outbreaks and the protection of extremely vulnerable settings. These recommendations and subsequent impact are currently being reviewed by the Trust's COVID-19 Testing Group who will advise accordingly on the implementation of the updated guidance.

## **3. Infection Prevention & Control Induction and Mandatory Training**

IP&C Induction and Mandatory Training is delivered online via an e-learning programme. This was developed regionally for use by all health and social care organisations in NI.

The e-learning programme comprises two tiers – Tier 1 and Tier 2. Staff only need to complete one of the tiers. Clarification on which tier each staff member should complete is provided via a Tier Matrix. The e-learning includes a short assessment to test understanding and awareness, with a certificate available to be printed after successful completion.

Access to the e-learning is through the regional learning management system, LearnHSCNI (<https://learn.hscni.net/>), which is available to all Western Trust staff. The website can be accessed from any internet-enabled Trust or personal device (PC/ laptop/ mobile phone/ tablet).

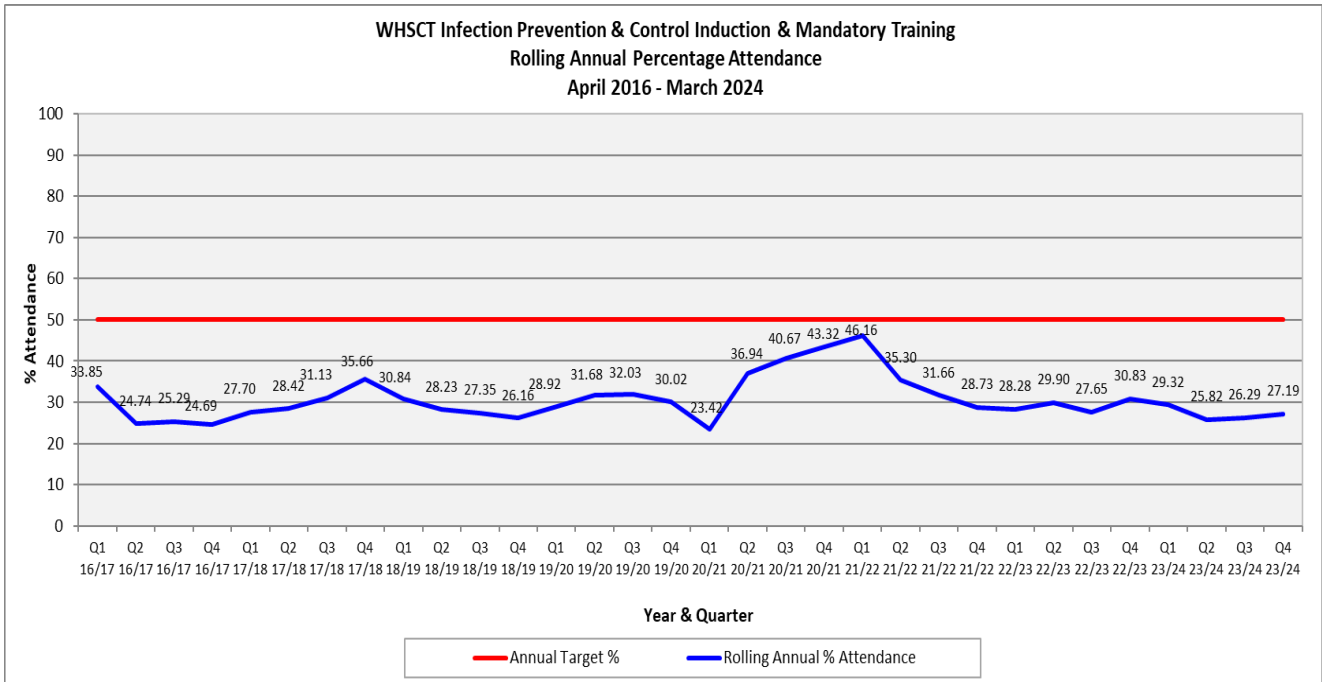
The IP&C Team also deliver a series of bespoke training sessions virtually via the Microsoft Teams app and face-to-face. These sessions are aimed at staff who come under Tier 1B of the Tier Matrix (i.e. "healthcare staff with minimal or no patient/ client contact or healthcare staff with patient contact who require role specific training"), such as Support Services, HSDU, Estates, Transport, Social Workers, Chaplains, etc. The Team also facilitate face-to-face Induction Training for large groups of new staff in departments, e.g. Support Services staff.

Training must be completed every two years.

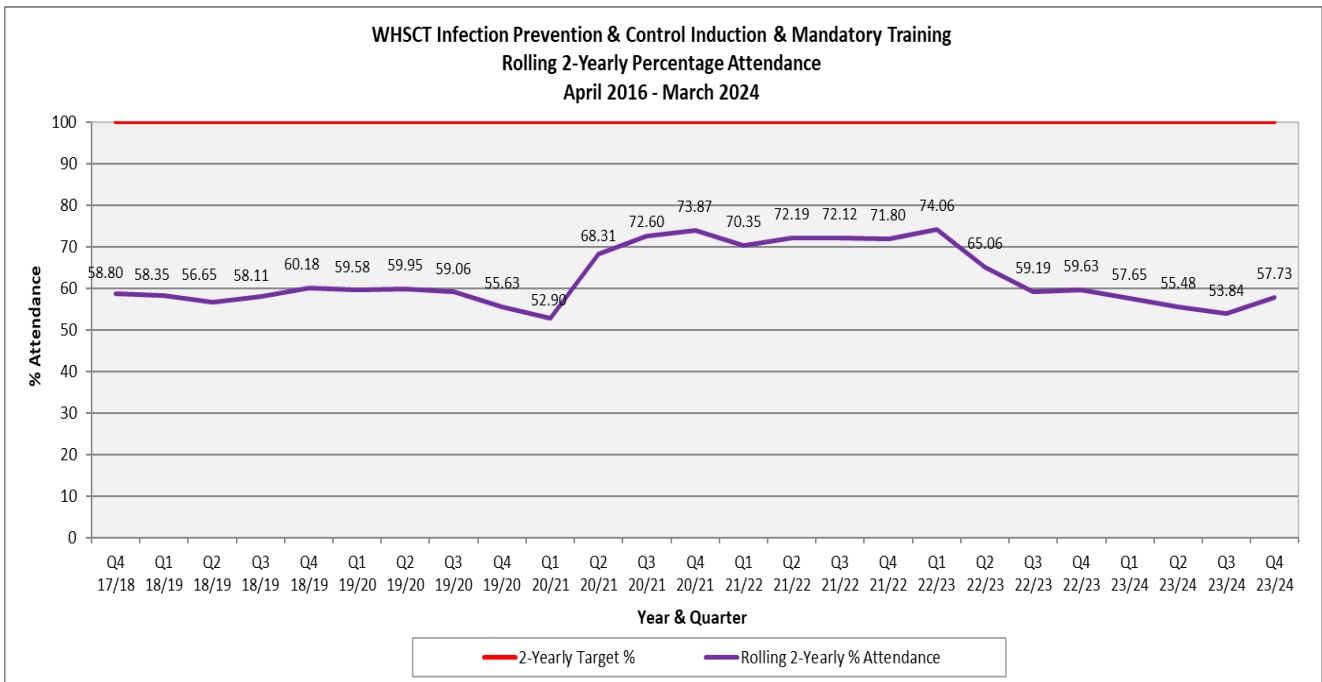
The content of the e-learning is currently being reviewed by the Regional IP&C Lead Nurses Forum. They are also looking at developing a shorter, more bespoke version for medical staff.

Between 1<sup>st</sup> April 2023 and 31<sup>st</sup> March 2024, a total of 3867 staff completed the training. The attendance target for each year is 50% of the total number of staff who require training (i.e. 7111

out of 14,222 applicable staff). For 2023/24 the percentage stands at 27.19%. That is 22.81% less than required.



As attendance at IP&C Training is required on a biennial basis, the attendance rate over a 24-month period has also been calculated. As of the end of March 2024, it is 57.73%.



The table below shows the rolling annual attendance rate broken down by staff group. This level of detail only became available from January 2023, so this is the first occasion that a full year's worth of information is able to be reported.

*NB: The attendance figures in this table relate to the IP&C Tiers 1 & 2 e-learning modules, Training Tracker Online e-learning module (used by trainee doctors) and Specialist Groups training sessions (where it is possible to determine an individual's staff group allocation). They do not include General training sessions, which are open to various/all staff groups, thus making it difficult to determine an individual's allocation. The number of General training sessions*

undertaken is limited so the discrepancies arising from their omission should be minimal.

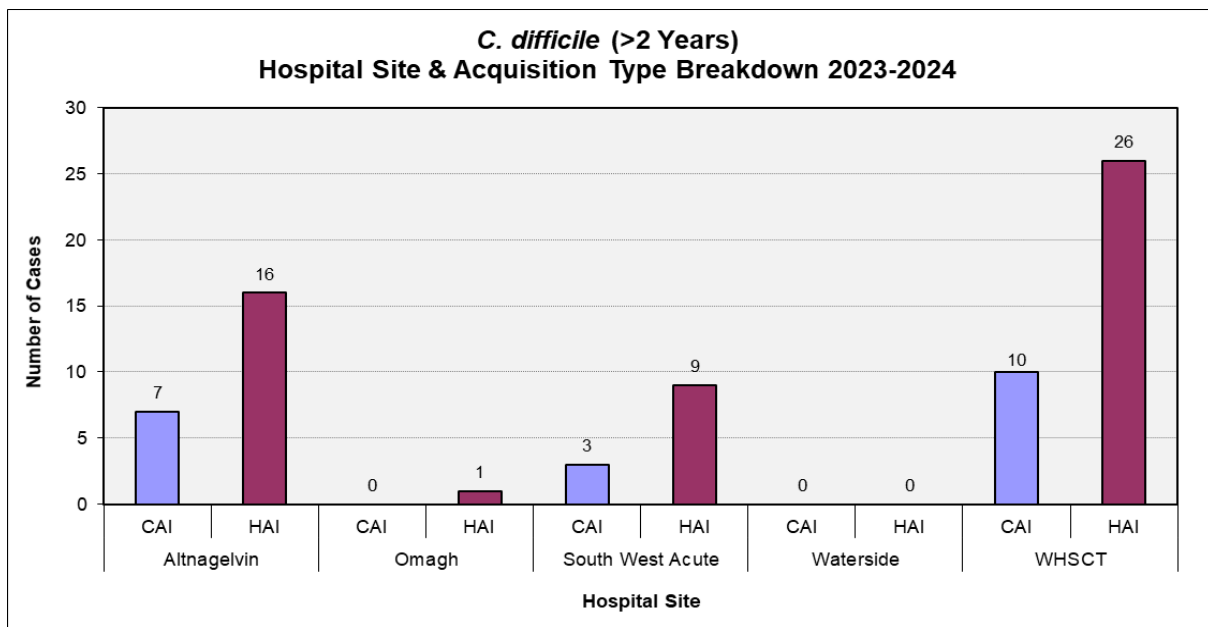
	Annual Target Percentage	Rolling Annual Percentage Attendance	
		Jan-Dec 2023	Apr 2023-Mar 2024
<b>Nursing &amp; Midwifery</b>	50%	31.33%	32.31%
<b>Medical &amp; Dental</b>	50%	36.23%	26.75%
<b>Professional &amp; Technical</b>	50%	32.35%	34.06%
<b>Social Services</b>	50%	13.97%	13.77%
<b>Support Services/ User Experience</b>	50%	15.82%	33.29%
<b>Admin &amp; Clerical</b>	50%	8.98%	9.27%

#### 4. C. difficile Performance

The 2023/24 reduction target for *C. difficile* ( $\geq$  two years) was 71 cases, which equates to a reduction of 12.35% on the baseline figure of 2022/23 (81 cases). In the year to the end of March 2024 the Trust actually reported 36 cases, with ten of those being categorised as community-associated. That is an overall decrease of 55.56% compared to the previous year and comprises a decrease in healthcare-associated infection cases of 46.94% versus a decrease in community-acquired infection cases of 68.75%. The reduction target was, therefore, achieved and bettered by a significant margin.

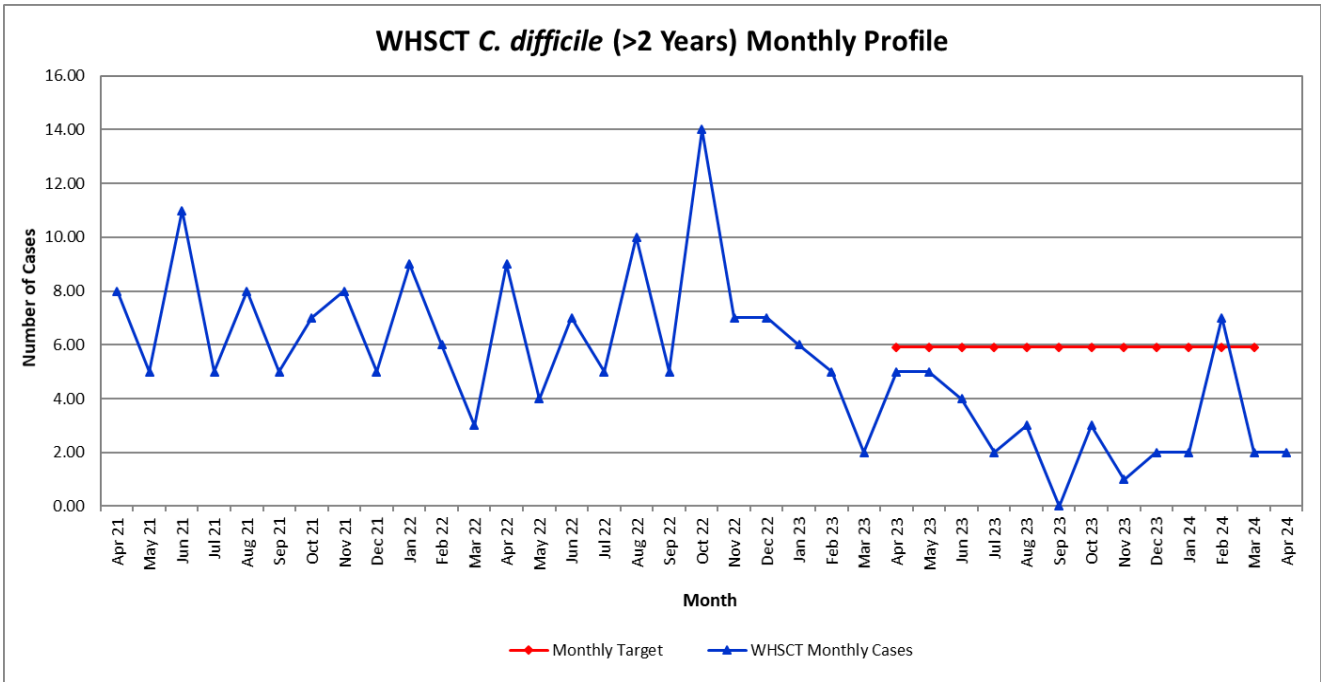
A breakdown of the cases by hospital site and acquisition type is given in the chart below.

**Key:**  
CAI Community-associated infection  
HAI Hospital-associated infection



The new reduction target for 2024/25 has not yet been issued.

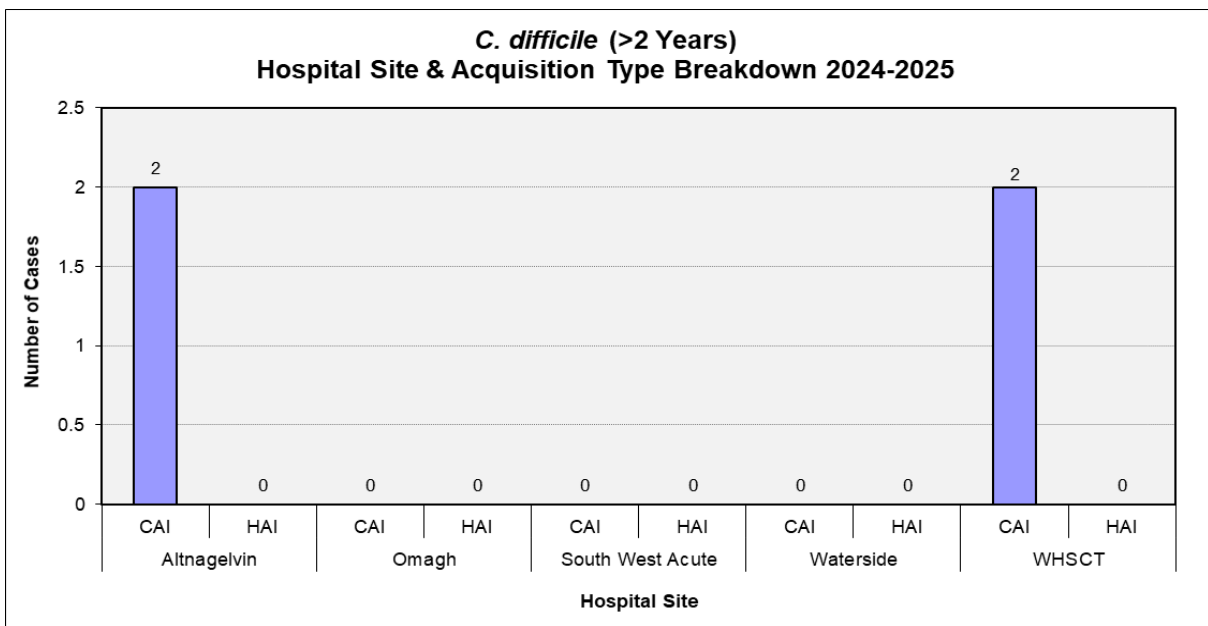
Since the beginning of April 2024 two new cases have been reported, with both of those being categorised as community-associated.



\* The value for Apr 24 is subject to change as the report was compiled prior to the end of the month.

A breakdown of the cases by hospital site and acquisition type is given in the chart below.

**Key:**  
 CAI Community-associated infection  
 HAI Hospital-associated infection



Comparison with Other Trusts

The PHA releases regional comparator information on a quarterly basis. The most recent data available covers up to the end of December 2023. The table below summarises the number of *C. difficile* cases and the rate per 1000 bed days for each Trust, plus NI averages, for each of the last four quarters.

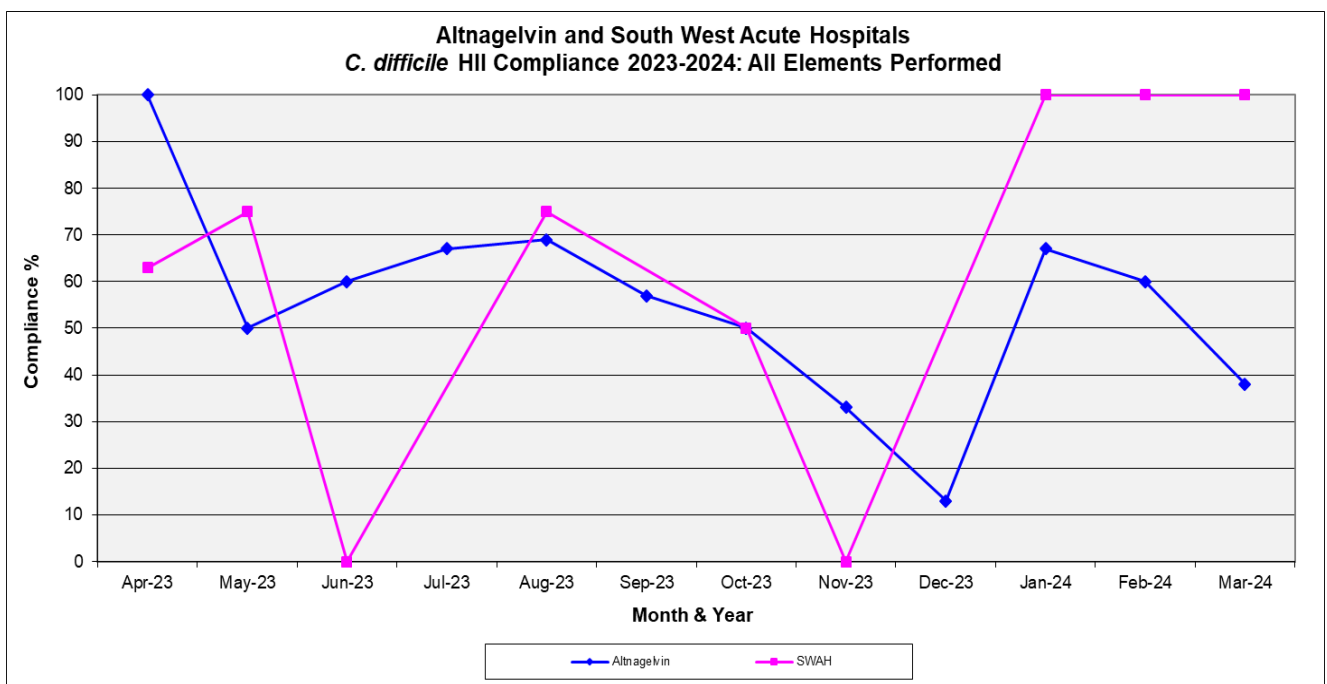
During 2023 the number of *C. difficile* cases in the Western Trust decreased quite significantly and the Trust has reported the lowest rate in NI for the last two quarters.

	January-March 2023		April-June 2023		July-September 2023		October-December 2023	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
<b>Western Trust</b>	13	0.205	14	0.221	5	0.079	6	0.091
<b>Southern Trust</b>	22	0.305	23	0.341	24	0.345	30	0.423
<b>South Eastern Trust</b>	17	0.240	19	0.265	26	0.358	15	0.238
<b>Northern Trust</b>	7	0.097	10	0.144	14	0.194	15	0.202
<b>Belfast Trust</b>	34	0.251	28	0.206	33	0.248	31	0.220
<b>Northern Ireland</b>	93	0.225	94	0.230	102	0.248	97	0.234

**C. difficile Care Bundle and Care Pathway Audits**

Evidence based care bundles are effective when all elements of care are performed consistently. Therefore, scores are represented as either Pass (100%) or Fail (anything less than 100%). Consistent compliance with the *C. difficile* care bundle remains a challenge, although there has been an improvement in the South West Acute Hospital (SWAH) over the last three months. The findings indicate issues around prudent antibiotic prescribing, environmental decontamination and isolation/ cohort nursing.

The graph below illustrates the overall compliance with all of the elements of the *C. difficile* high impact intervention (HII) care bundle for Altnagelvin Hospital and the SWAH.



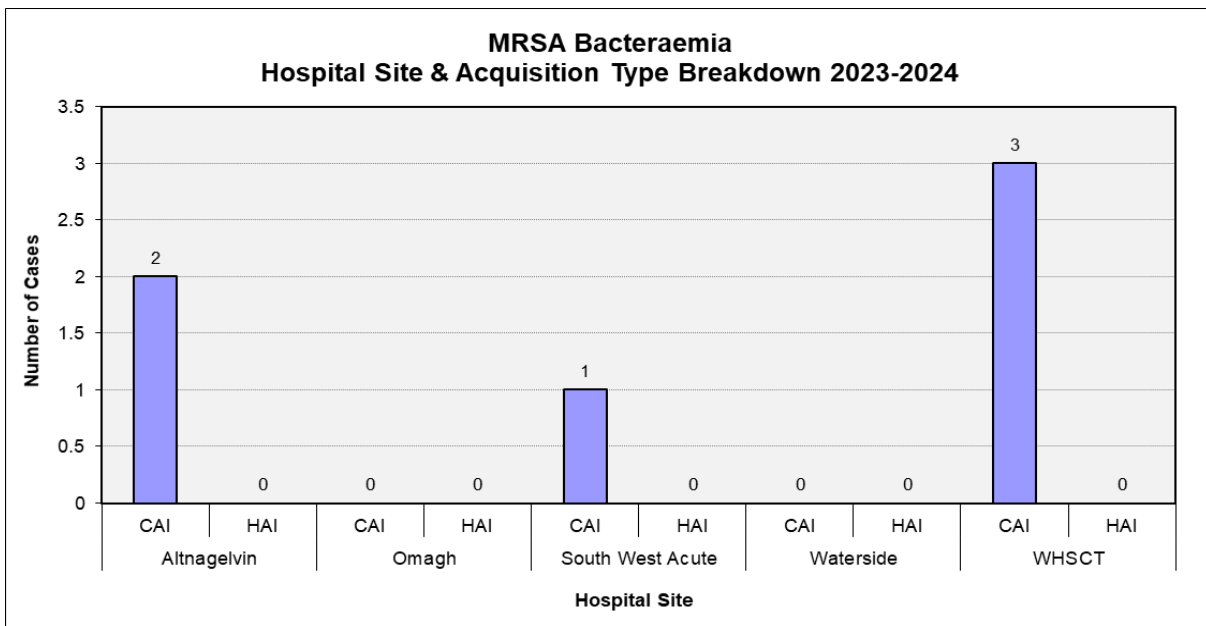
**5. S. aureus Bacteraemia Performance**

**MRSA Bacteraemia**

The 2023/24 reduction target for MRSA bacteraemia was six cases, which equates to a reduction of 14.29% on the baseline figure of 2022/23 (seven cases). In the year to the end of March 2024 the Trust actually reported three cases. As such, the reduction target was met and a decrease of 57.14% compared to the previous year was achieved. It should also be noted that the proportion of those cases which can be attributed to the Trust was zero, as all three cases were categorised as community-associated.

A breakdown of the cases by hospital site and acquisition type is given in the chart below.

**Key:**  
CAI Community-associated infection  
HAI Hospital-associated infection



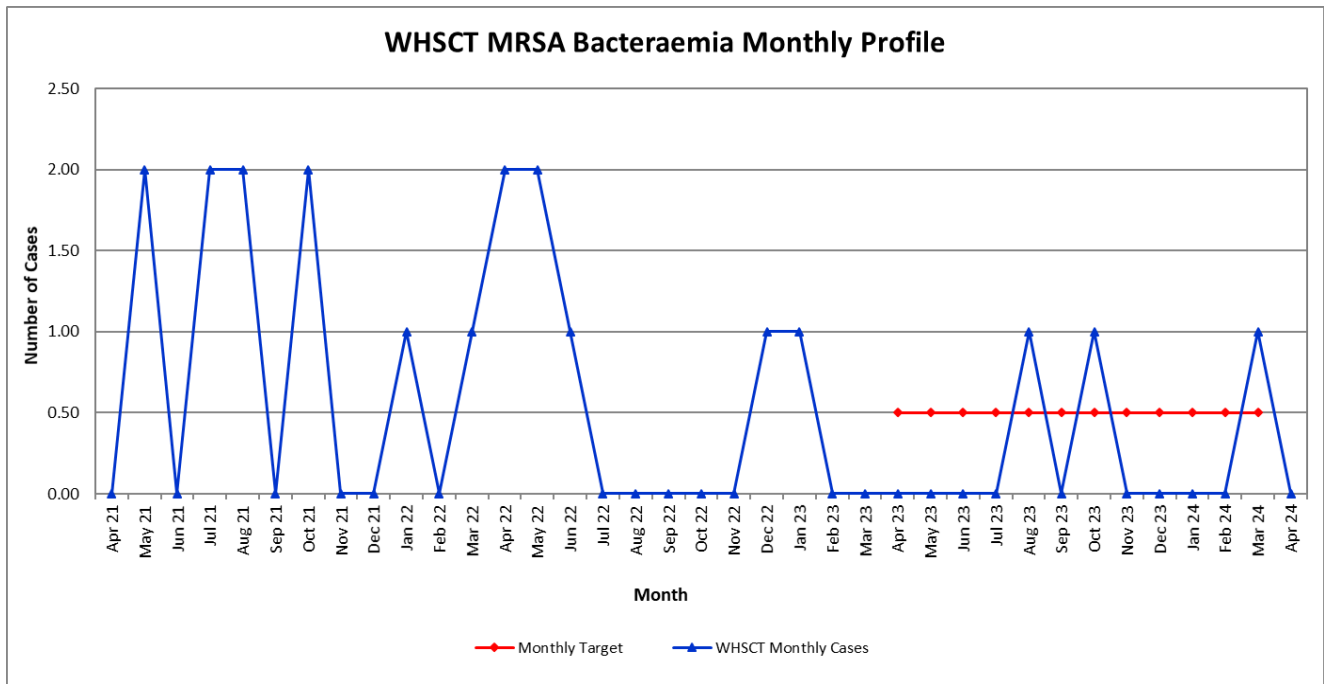
The new reduction target for 2024/25 has not yet been issued.

Since the beginning of April 2024 no new cases have been reported.

As of 19<sup>th</sup> April 2024, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin – 460 days	(Last recorded case was in Ward 50 Sperrin)
SWAH – 1404 days	(Last recorded case was in Ward 8)
Tyrone County Hospital/ Omagh Hospital & Primary Care Complex (OHPCC) – 3376 days	(Last recorded case was in the Rehab Unit)





\* The value for Apr 24 is subject to change as the report was compiled prior to the end of the month.

### Comparison with Other Trusts

The PHA releases regional comparator information on a quarterly basis. The most recent data available covers up to the end of December 2023. The table below summarises the number of MRSA bacteraemia cases and the rate per 1000 bed days for each Trust, plus NI averages, for each of the last four quarters.

During 2023 the Western Trust’s rate remained very low and stable. As of October-December 2023, the Trust was reporting the second lowest rate in NI.

	January-March 2023		April-June 2023		July-September 2023		October-December 2023	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
<b>Western Trust</b>	1	0.016	0	0.000	1	0.016	1	0.015
<b>Southern Trust</b>	2	0.028	2	0.030	1	0.014	0	0.000
<b>South Eastern Trust</b>	4	0.056	1	0.014	3	0.041	1	0.016
<b>Northern Trust</b>	1	0.014	3	0.043	5	0.069	3	0.040
<b>Belfast Trust</b>	2	0.015	7	0.051	6	0.045	5	0.035
<b>Northern Ireland</b>	10	0.024	13	0.032	16	0.039	10	0.024

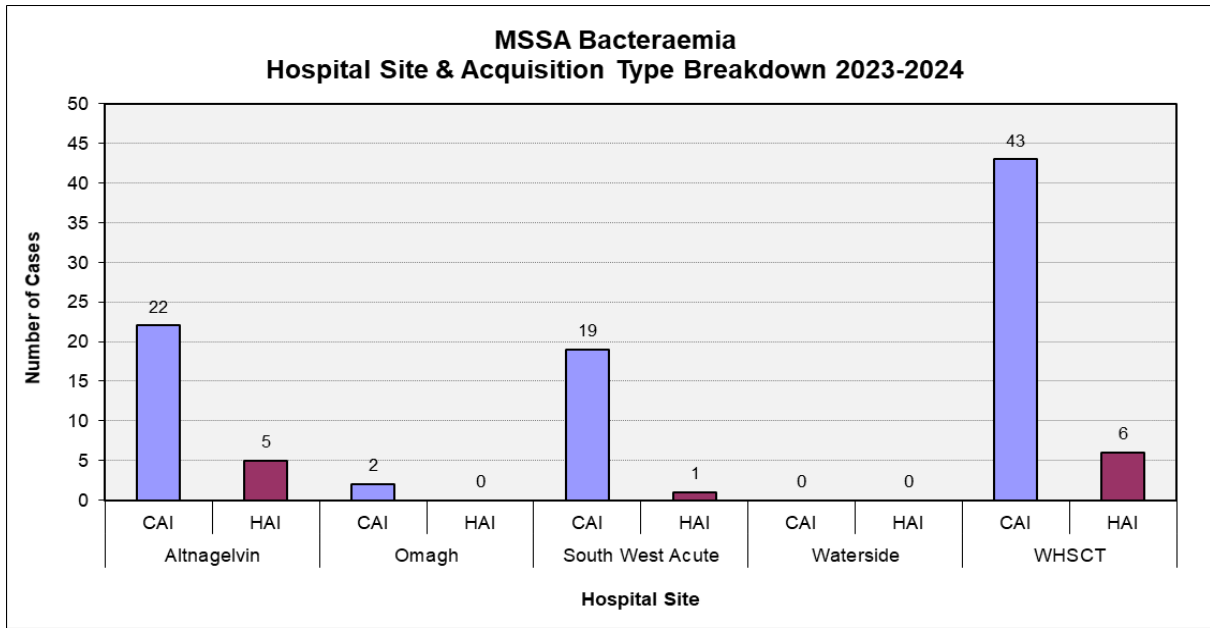
### **Meticillin-Sensitive Staphylococcus aureus (MSSA) Bacteraemia**

There was no reduction target associated with MSSA bacteraemia for 2023/24, however surveillance remained mandatory. MSSA is part of the skin normal flora of approximately 25-30% of the well population. It is, therefore, more difficult to control endogenous (self) exposure, which is

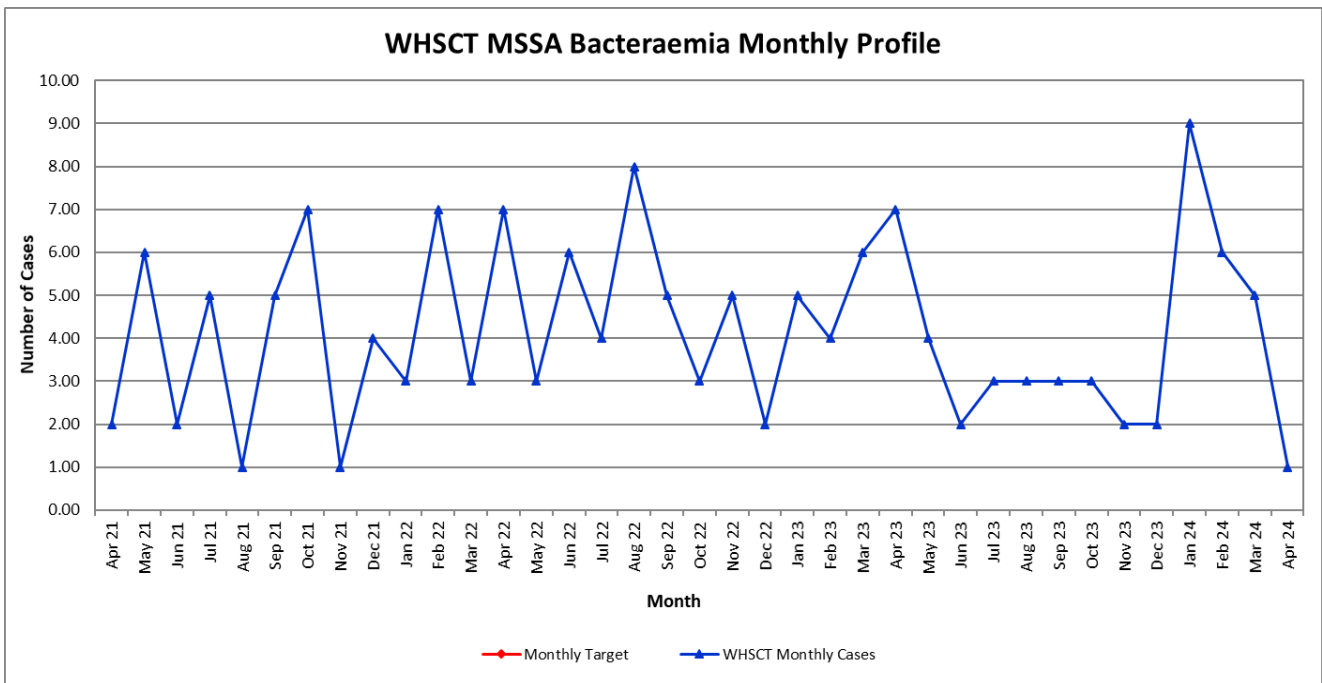
the reason for removing the target associated with this organism. The controls in place for MRSA will go some way to protect patients, but do not provide the same level of safeguard because of the ubiquitous nature of the organism.

In the year to the end of March 2024 a total of 49 MSSA bacteraemias were reported. A breakdown of the cases by hospital site and acquisition type is given in the chart below.

**Key:**  
CAI Community-associated infection  
HAI Hospital-associated infection



Since the beginning of April 2024 one new case has been reported. It is categorised as community-associated.



\* The value for Apr 24 is subject to change as the report was compiled prior to the end of the month.

As of 19<sup>th</sup> April 2024, the total number of days since the last Trust hospital-associated MSSA bacteraemia is as follows:

Altnagelvin – 54 days	(Last recorded case was in Ward 23 TOU)
SWAH – 72 days	(Last recorded case was in Ward 2)
OHPCC – 2377 days	(Last recorded case was in the Rehab Unit)

### Comparison with Other Trusts

The PHA releases regional comparator information on a quarterly basis. The most recent data available covers up to the end of December 2023. The table below summarises the number of MSSA bacteraemia cases and the rate per 1000 bed days for each Trust, plus NI averages, for each of the last four quarters.

The Western Trust's rate has reduced quarter-on-quarter during 2023 and was the lowest in NI for the last two quarters.

	January-March 2023		April-June 2023		July-September 2023		October-December 2023	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
<b>Western Trust</b>	15	0.236	13	0.205	9	0.143	7	0.106
<b>Southern Trust</b>	13	0.180	11	0.163	15	0.216	17	0.239
<b>South Eastern Trust</b>	16	0.226	26	0.362	30	0.413	38	0.602
<b>Northern Trust</b>	20	0.279	20	0.288	22	0.304	25	0.337
<b>Belfast Trust</b>	38	0.281	47	0.346	50	0.375	36	0.255
<b>Northern Ireland</b>	102	0.246	117	0.287	126	0.307	123	0.296

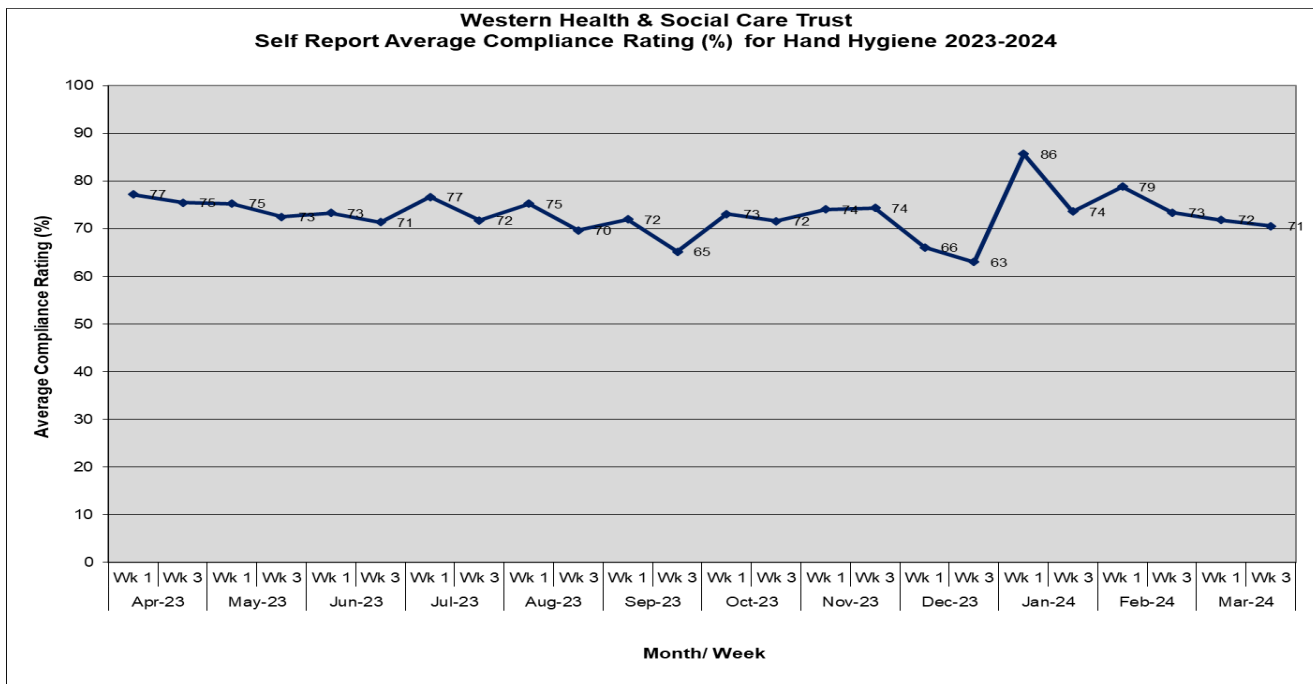
## 6. Hand Hygiene Compliance

The Trust's overall average self-reported hand hygiene score is 72% when non-submission areas are included. These areas score an automatic 0%. 50 areas out of 193 applicable areas failed to submit scores for March 2024. They are as follows:

Site	Ward/ Department/ Facility
Altnagelvin	Ward 9 Rheumatology Ward 24 AMU Ward 25 FOU Ward 26 ARM Ward 40 Ward 42 Ward 50 Sperrin ACU Antenatal Clinic Breast Screening Unit DCU Theatre 8

	DCU Theatre 9 DESU Theatre 4 Emergency Department GUM Clinic Main Theatre 3 OPALS South Wing Clinics Physiotherapy Outpatients Department
SWAH	Ward 1 MSAU Ward 2 Ward 5 Ward 6 Ward 7 Ward 9 Emergency Department Physiotherapy Outpatients Department Women's Health Centre
OHPCC	Cardiac Assessment Unit Outpatients Department Physiotherapy Outpatients Department Theatres Urgent Care & Treatment Centre Women's Centre
Tyrone & Fermanagh Hospital	Ash Villa Elm Villa Oak Villa
Lakeview Hospital	Strule Lodge Berryburn Centre
Day Care	Benbradagh ATC Beragh Day Centre Dromore Day Centre Evergreen Centre Foyleville Day Centre Glen Oaks Maybrook ATC Strabane Day Centre Tempo Road Day Centre
Other Community	Avalon House The Cottages Children's Respite Rapid Response Team Derry

A number of the areas also did not submit scores for the previous month. These are highlighted in yellow on the above table.



However, when adjusted for non-submission areas, the Trust’s overall self-reported hand hygiene score improves to 99%.

The hand hygiene dashboard has been circulated to Directors for action through their governance arrangements.

It is important to note that scores from independent audits conducted by the IP&C Team and Lead Nurses tend to be lower than self-reported scores. The table below shows the wards/ departments where the IP&C Team undertook validation audits during March 2024 and the scores obtained compared with self-reported scores for the same areas.

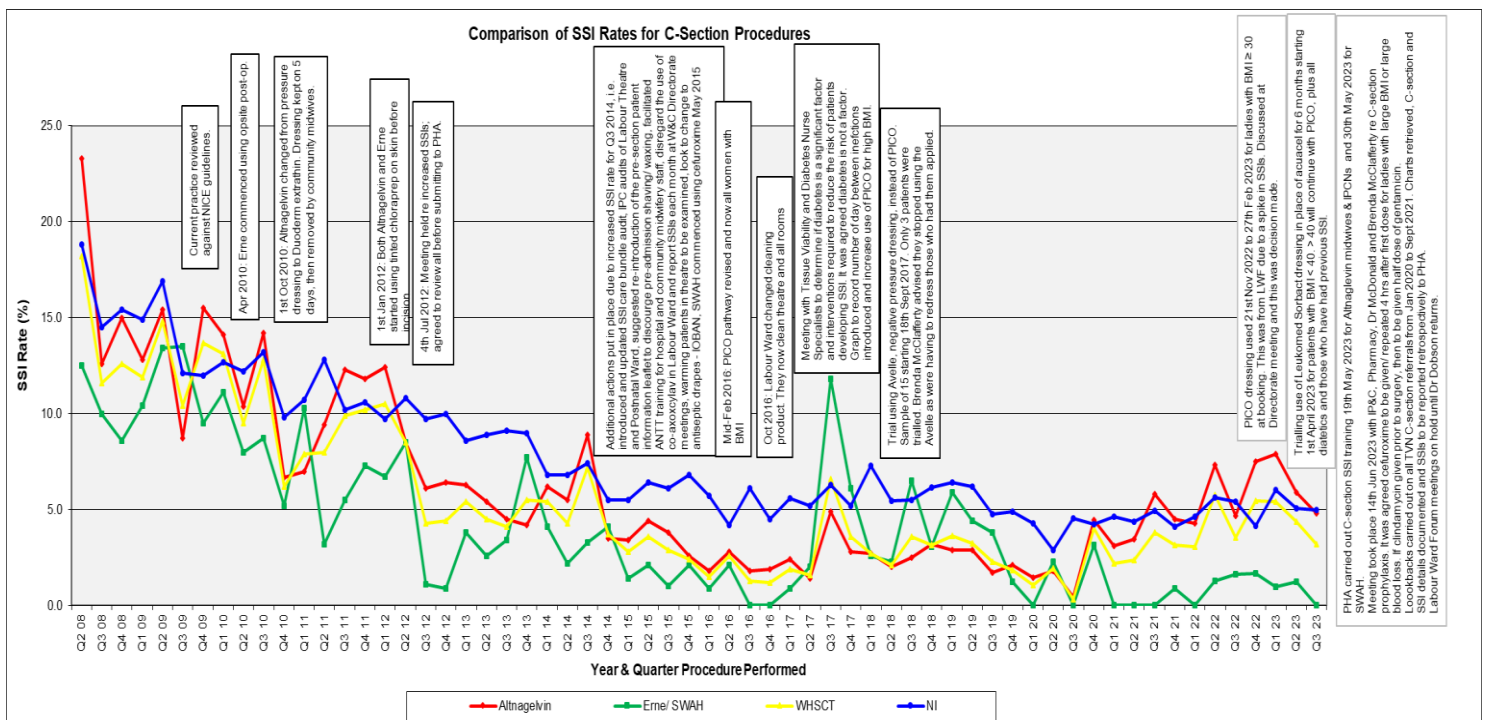
Ward/ Department/ Facility	IP&C Team Validation Score	Self-Reported Score
Ward 4, Altnagelvin	50%	1) 100% 2) 100%
Ward 40, Altnagelvin	85%	1) 90% 2) Not submitted
Ward 41 AGM, Altnagelvin	90% (Pass)	1) 100% 2) 100%
Ward 1 MSAU, SWAH	100%	1) 95% 2) Not submitted
Ward 7, SWAH	80%	1) 100% 2) Not submitted
Ward 9, SWAH	64%	1) 100% 2) Not submitted
ICU, SWAH	100%	1) 100% 2) 100%
Ward 3, Waterside	82% 88% (Pass)	1) 100% 2) 100%
Ward 4, Waterside	70%	1) 100% 2) 100%
Greenfield Residential Home	50%	1) 100% 2) 100%

## 7. Caesarean Section Surgical Site Infection (SSI) Surveillance

During quarter three of 2023 the Trust achieved 79.7% compliance with surveillance related documentation, compared to a 76.9% average compliance rate in NI as a whole.

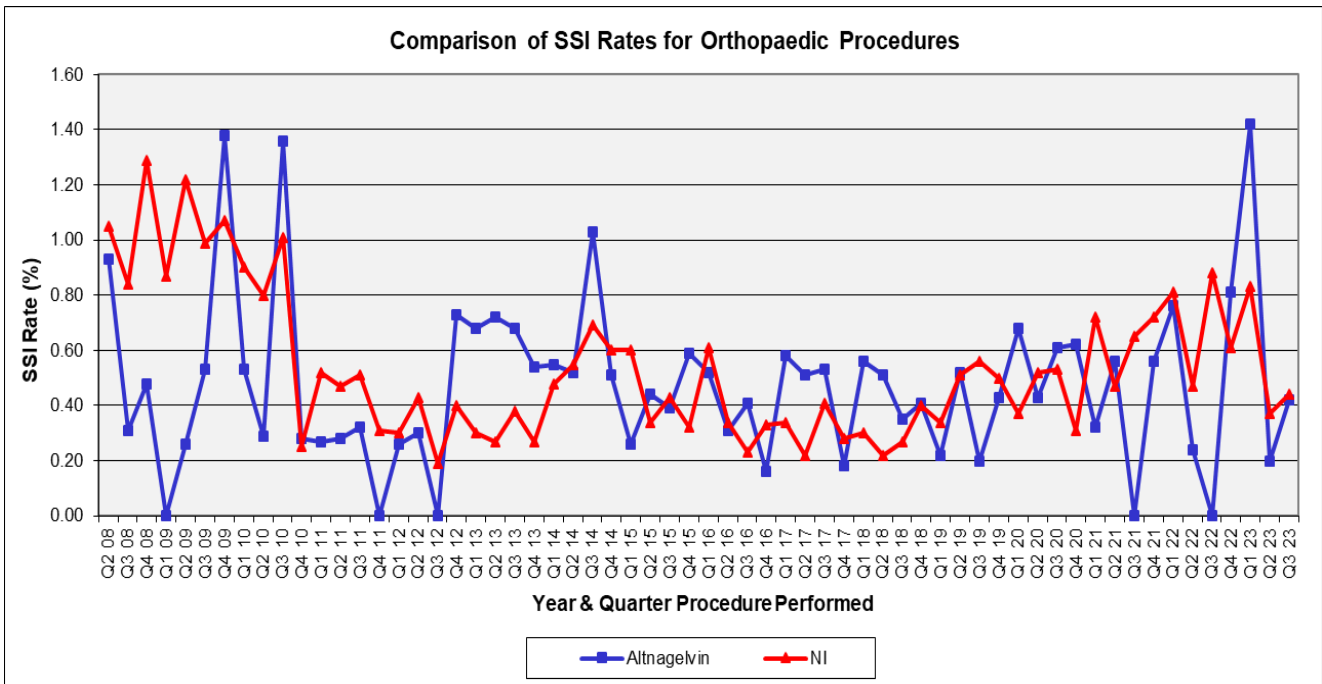
The graph below demonstrates infection rates over time. It is noted that there has been an increase in the SSI rate for Altnagelvin Hospital over the last few quarters. However, the two most recent quarters show the beginning of a downward trend and the Altnagelvin SSI rate is now slightly below the NI rate; 4.81% and 4.97% respectively. The overall Western Trust SSI rate is 3.19%.

Multi-disciplinary team work is ongoing with regard to validation and assurance of the surveillance information and to continue driving forward improvements.



## 8. Orthopaedic Surgical Site Infection Surveillance

In quarter three of 2023 the Trust's SSI rate is 0.42% of all surgery; slightly below the NI average of 0.44%. Multi-disciplinary team work is ongoing with regard to validation and assurance of the surveillance information and to continue driving forward improvements. Evidence based care bundles are in place for orthopaedic surgery.



## 9. Legionella

Water testing continues throughout key Trust owned facilities and a range of mitigating actions are in place as per the Trust Water Safety Plan. A planned Legionella and *Pseudomonas* testing programme is also in place for PFI buildings, including the SWAH and the Labs & Pharmacy Building, Altnagelvin. The process is managed by Mitie FM and Integral FM respectively. All positive results and proposed actions are reported to core members of the Trust’s Water Safety Group (WSG) on an ongoing basis. Exceptions are discussed at the WSG meetings.

The WSG, which is a multidisciplinary group, is responsible for ensuring the Trust’s water systems are safe for all patients, staff and visitors at point of use. In order to ensure the Trust has safe, clean water systems the WSG has a robust process in place to monitor all water sampling results.

There has been a decrease in the number of outlets testing positive for Legionella on the Altnagelvin site during December 2023 to February 2024. This has been as a result of the water safety improvements which have been undertaken. The Trust Water Safety Team continue to proactively work on reducing the number of positives. A planned programme of work is in place for 2024/25 to improve the water system infrastructure.

The Tower Block and Nucleus have the highest percentage of positive outlets on the Altnagelvin site. This is currently being managed, as per the Water Safety Plan, with the use of point-of-use filters. These ensure the safety of users and allow the facilities to remain operational, with no adverse effect on the service.

### Increasing Compliance

The Estates’ Water Safety Team continues to build compliance and demonstrate this via the Zetasafe compliance database tool. The Trust’s compliance position is risk based and, although not 100% compliant, it is currently stable and high risks are being managed appropriately. The Trust’s current compliance level is 98%.

The Trust Estates Team is currently experiencing recruitment difficulties. Any potential impact, which may affect the ability to manage any water safety risks, is being monitored.