

Infection Prevention & Control Report to Trust Board

Meeting Date – 2nd November 2023

1. Executive Summary

Reduction Targets

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

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

The Trust's reduction target for *Clostridium difficile* (*C. difficile*) associated disease is 71; a reduction of ten cases or 12.35% compared to last year's baseline (81 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 has decided not to set a target for 2023/24. Rather Trusts are being encouraged to minimise risk factors for GNB infections where possible.

Current *C. difficile* Performance

So far this year 21 cases of *C. difficile* have been reported. 13 of the cases are 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 (eight) are classified as community-acquired as the patients presented with symptoms within a 72-hour period after admission.

Current MRSA Bacteraemia Performance

Since the beginning of April 2023 one MRSA bacteraemia case has been reported. It is categorised as community-associated as it occurred less than 48 hours after admission to hospital (definition used by the PHA).

Current GNB Performance

As of 24th October 2023, 30 healthcare-associated GNB cases have been reported.

2. Coronavirus (COVID-19)

Outbreak Management

COVID-19 outbreaks continue to be declared in Trust wards, departments and facilities. Between August and late October 2023, a total of 34 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.

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.

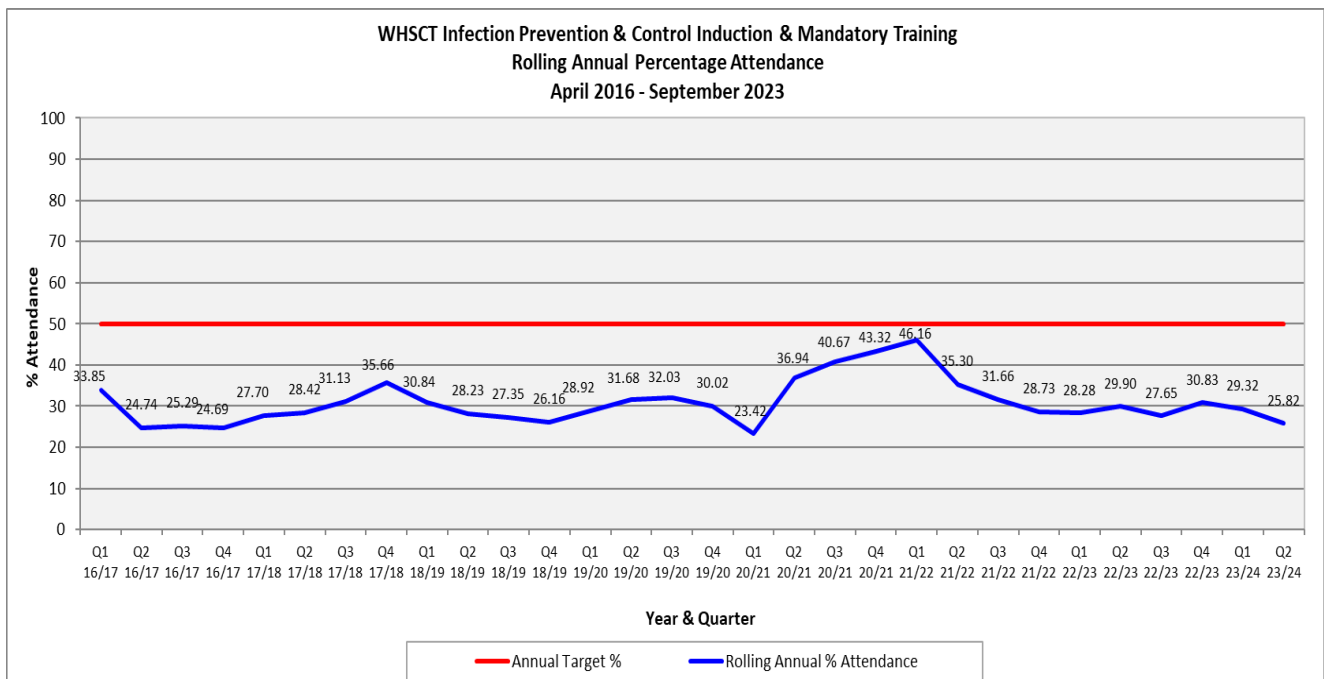
Access to the e-learning is through the regional learning management system, LearnHSCNI (<https://learn.hscni.net/>), which is available to all Western Trust staff. The website can be accessed from any internet-enabled Trust or personal device (PC/ laptop/ mobile phone/ tablet).

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. Emergency Department, Support Services staff.

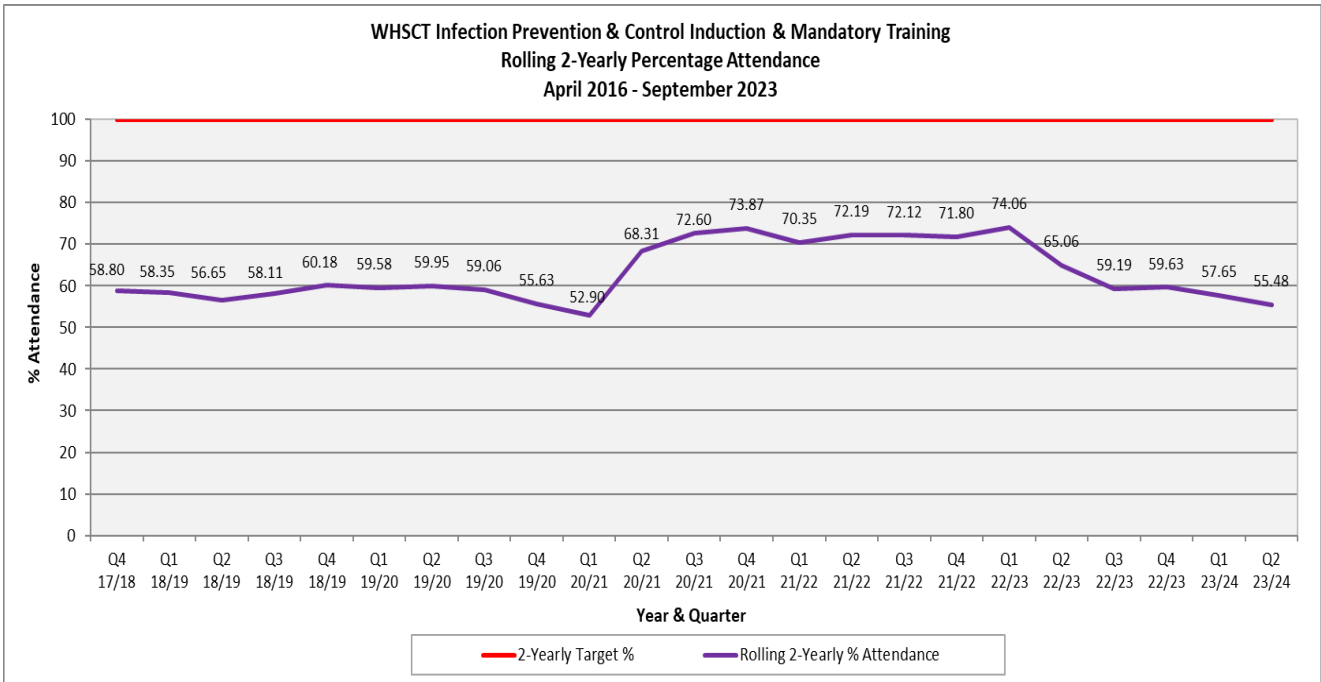
Training must be completed every two years.

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.

In the period April to September 2023, a total of 1613 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 the 12 months ending September 2023, the percentage stands at 25.82%. That is 24.18% less than required.



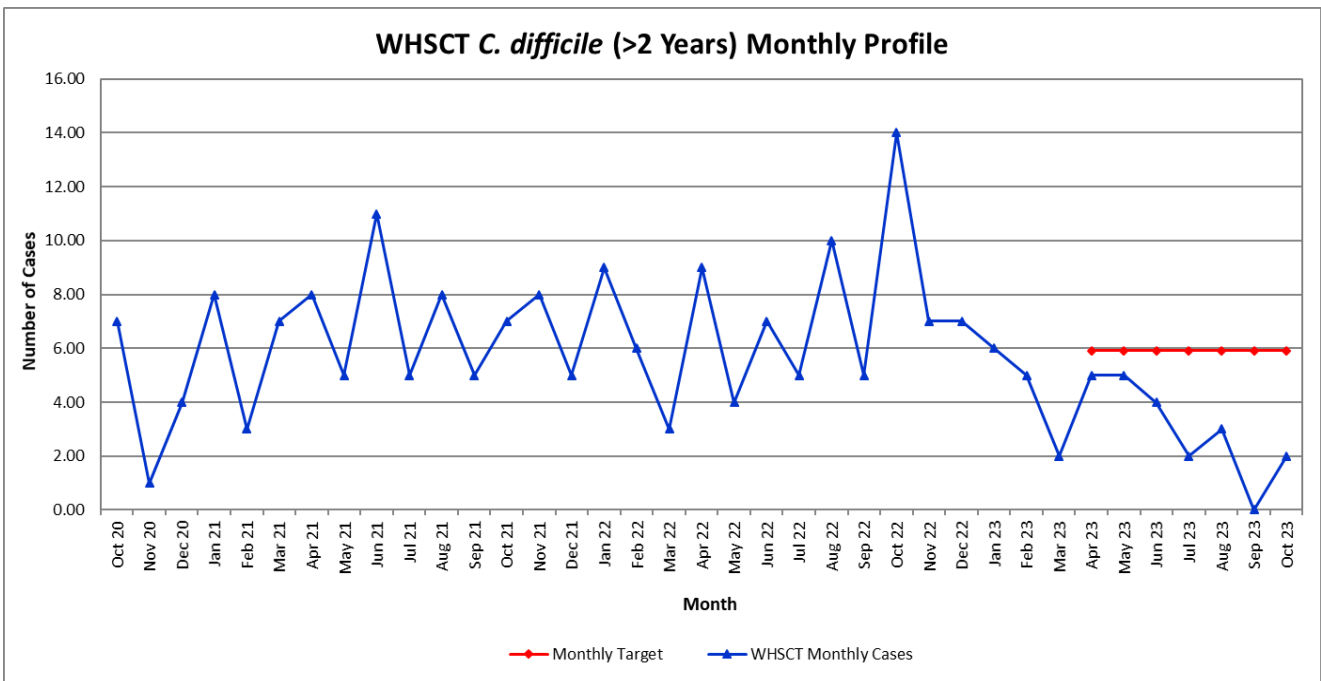
As attendance at IP&C Training is required on a biennial basis, the attendance rate over a 24-month period has also been calculated. As of the end of September 2023, it is 55.48%.



4. C. difficile Performance

The 2023/24 target for *C. difficile* (\geq two years) is 71 cases, which equates to a reduction of 12.35% on the baseline figure of 2022/23 (81 cases).

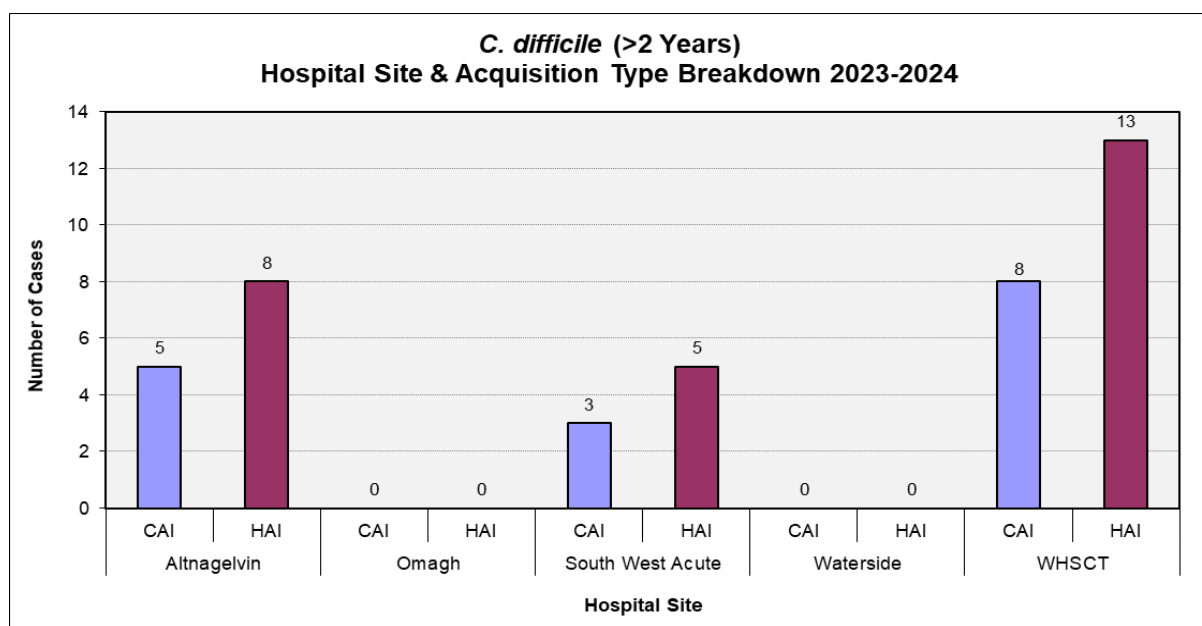
As of 24th October 2023, 21 cases have been reported, with eight of those being categorised as community-associated. Therefore, the Trust is currently on track to achieve the target, with a cumulative decrease of 53.36% compared to 2022/23. This comprises a decrease in healthcare-associated infection cases of 52.28% versus a decrease in community-acquired infection cases of 55.03%.



* The value for Oct 23 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 June 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.

	July-September 2022		October-December 2022		January-March 2023		April-June 2023	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
Western Trust	20	0.320	28	0.437	13	0.205	14	0.221
Southern Trust	19	0.287	21	0.296	22	0.305	23	0.341
South Eastern Trust	19	0.276	20	0.280	17	0.240	19	0.265
Northern Trust	11	0.162	13	0.182	7	0.097	10	0.144
Belfast Trust	27	0.212	22	0.163	34	0.251	32	0.235
Northern Ireland	96	0.244	104	0.252	93	0.225	98	0.240

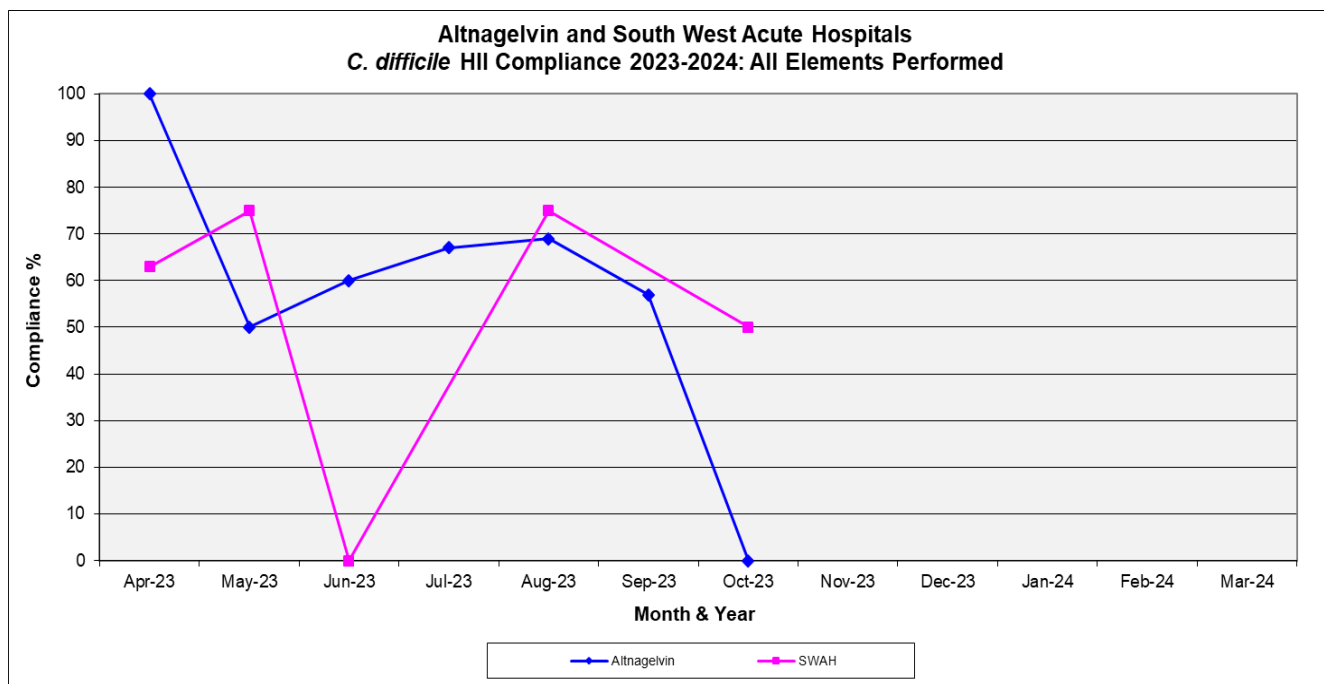
Previously a rise in the number of cases in the Western Trust was noted. This was highlighted at the Chief Executive HCAI Accountability Forum, IP&C Committee, Safe & Effective Care, Corporate Safety Huddle and Antimicrobial Management Team. An action plan was also developed to try to address the issue. It was recognised that the ability to make any significant improvements would be affected by staffing challenges, as well as the need to effect wider change

in community prescribing in Primary Care. As of the last two quarters, the number of *C. difficile* cases in the Western Trust has decreased quite significantly. Trends will continue to be monitored moving forward.

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 and is currently poor across both acute sites. The findings indicate issues around antibiotic prescribing, environmental decontamination and isolation/ cohort nursing.

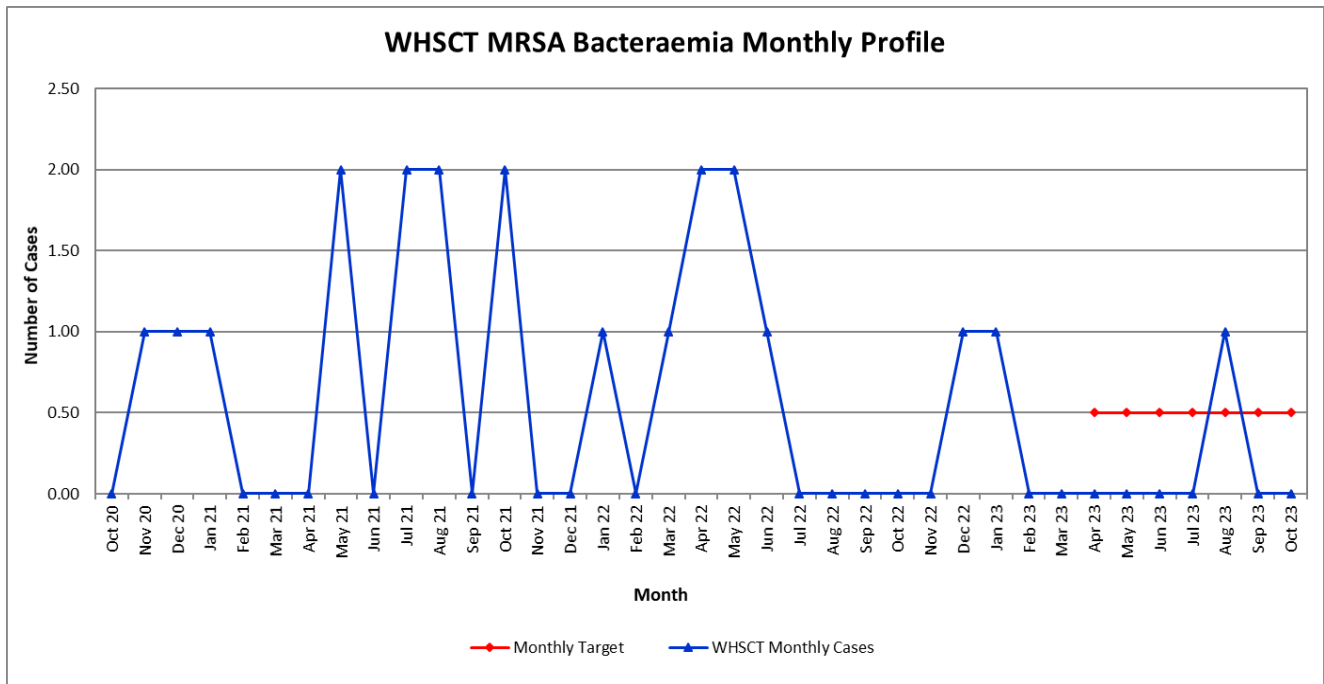
The graph below illustrates the overall compliance with all of the elements of the *C. difficile* high impact intervention (HII) care bundle for Altnagelvin Hospital and the South West Acute Hospital (SWAH).



5. MRSA Bacteraemia Performance

The 2023/24 target for MRSA bacteraemia is six cases, which equates to a reduction of 14.29% on the baseline figure of 2022/23 (seven cases).

Since the beginning of April 2023 one case has been reported. It is categorised as community-associated. As such, the Trust is currently on track to meet the reduction target, with a cumulative decrease of 74.30% compared to last year.



* The value for Oct 23 is subject to change as the report was compiled prior to the end of the month.

As of 24th October 2023, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin – 282 days (Last recorded case was in Ward 50 Sperrin)
 SWAH – 1226 days (Last recorded case was in Ward 8)
 Tyrone County Hospital/ Omagh Hospital
 & Primary Care Complex (OHPCC) – 3198 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 June 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.

	July-September 2022		October-December 2022		January-March 2023		April-June 2023	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
Western Trust	0	0.000	1	0.016	1	0.016	0	0.000
Southern Trust	2	0.030	0	0.000	2	0.028	2	0.030
South Eastern Trust	3	0.044	0	0.000	4	0.056	1	0.014
Northern Trust	2	0.029	4	0.056	1	0.014	3	0.043
Belfast Trust	4	0.031	1	0.007	2	0.015	7	0.051
Northern Ireland	11	0.028	6	0.015	10	0.024	13	0.032

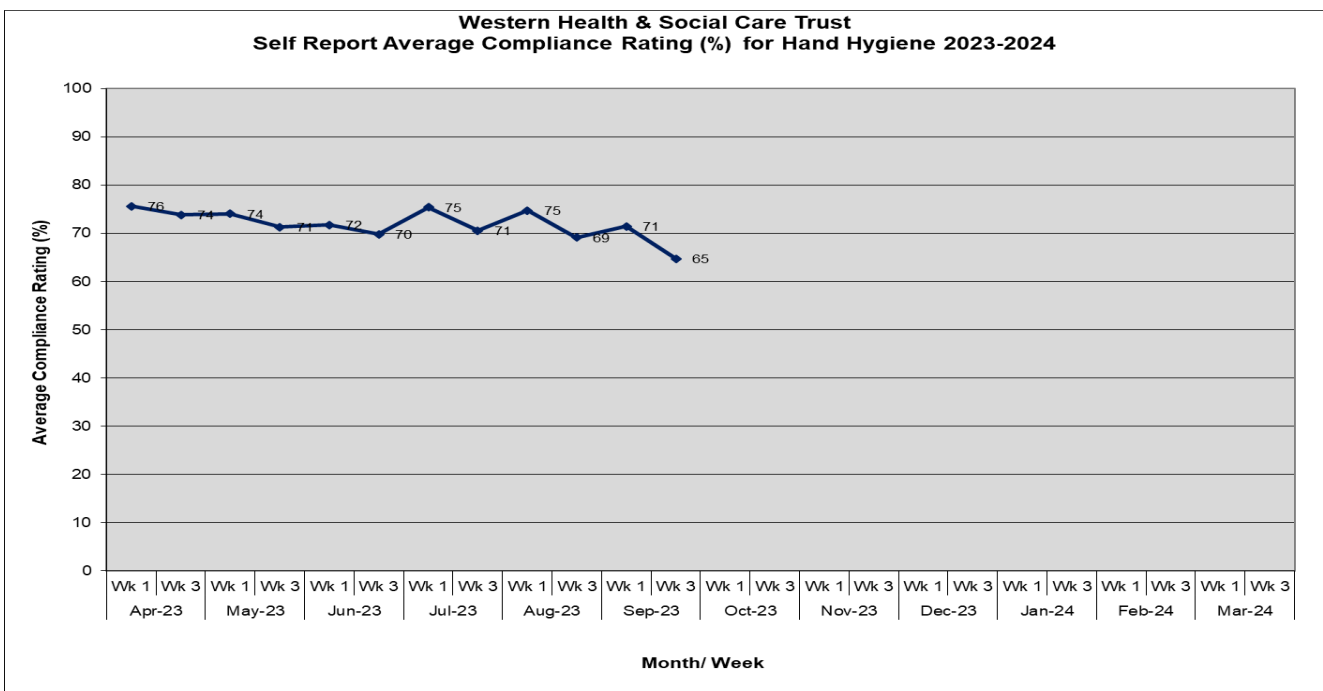
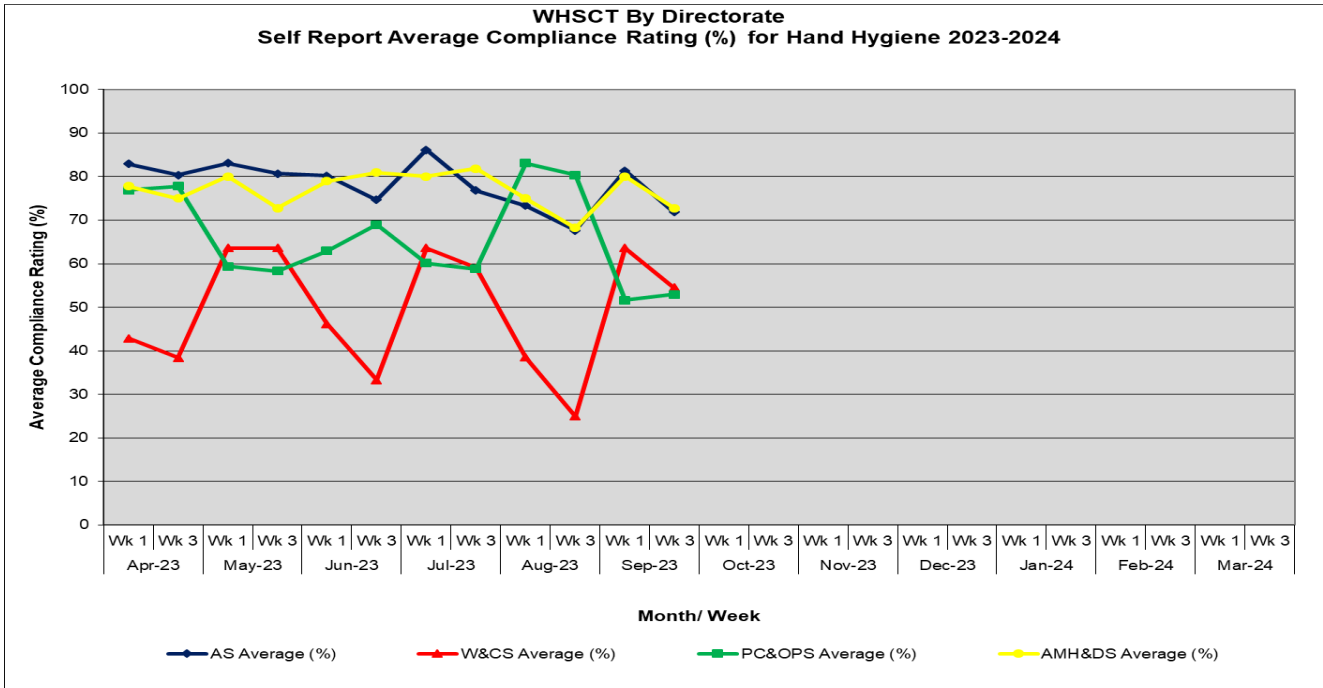
6. Hand Hygiene Compliance

The Trust's overall average self-reported hand hygiene score is 68% when non-submission areas are included. These areas score an automatic 0%. 56 areas out of 194 applicable areas failed to submit scores for September 2023. They are as follows:

Site	Ward/ Department/ Facility
Altnagelvin	Ward 9 Rheumatology Ward 22 ASM Ward 24 AMU Ward 40 Ward 44 ACU Anderson House/ Dermatology Antenatal Clinic Breast Unit DCU Ophthalmic Theatre Emergency Department GUM Clinic Main Theatre 1 Main Theatre 3 Main Theatre 4 Main Theatre 6 Main Theatre 7 OPALS South Wing Clinics Physiotherapy Outpatients Department
SWAH	Ward 1 MSAU Ward 2 Ward 5 Ward 6 Ward 7 Ward 9 Cardiac Unit Children's Ward Emergency Department Labour Ward Physiotherapy Outpatients Department Women's Health Centre
OHPCC	Cardiac Assessment Unit Cardiac Investigations Physiotherapy Outpatients Department Urgent Care & Treatment Centre Women's Centre
Tyrone & Fermanagh Hospital	Elm Villa
Waterside Hospital	Ward 4
Lakeview Hospital	Strule Lodge Berryburn Centre
Grangewood Hospital	Carrick Ward
Residential Homes	Thackeray Place Residential Home
Day Care	Beragh Day Centre Dromore Day Centre Drumcoo Day Centre Drumhaw day Centre Foyleville Day Centre Gortin Day Centre

	Newtownstewart Day Centre Tempo Road Day Centre
Other Community	Avalon House Children's Community Nursing Team The Cottages Adults' Respite The Cottages Children's Respite Crannog Intensive Treatment Team Rapid Response Team Derry

A number of 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 100%.

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.

7. IP&C Nurse Independent Audits

The tables below show average compliance per quarter on a number of IP&C key performance indicators where audits have been completed by the IP&C Team. These audits are discussed through the normal governance arrangements, as well as at Safe & Effective Meetings and the Chief Executive HCAI Accountability Forum.

January – March 2023

	Northern Sector Average Compliance	Southern Sector Average Compliance	Trust Average Compliance
Hand Hygiene	85%	83%	84%
PPE	83%	81%	82%
<i>C. difficile</i>	47%	63%	52%
<i>C. difficile</i> Care Pathway	Pass x 14 Fail x 2	Pass x 7 Fail x 1	Pass x 21 Fail x 3
Peripheral Line Ongoing Care	43%	19%	25%
ANTT	95%	100%	96%
Isolation	No audits completed	100%	100%
Commode	33%	No audits completed	33%
Cleaning & Decontamination	30%	72%	51%
Mattress	100%	No audits completed	100%
MRSA	No audits completed	46%	46%

April – June 2023

	Northern Sector Average Compliance	Southern Sector Average Compliance	Trust Average Compliance
Hand Hygiene	82%	93%	86%
PPE	82%	79%	81%
<i>C. difficile</i>	67%	58%	63%
<i>C. difficile</i> Care Pathway	Pass x 7 Fail x 2	Pass x 5 Fail x 3	Pass x 12 Fail x 5
Renal Dialysis Catheter Insertion	No audits completed	100%	100%
Renal Dialysis Catheter Ongoing Care	No audits completed	100%	100%
Commode	92%	No audits completed	92%
4-Cloth Cleaning	No audits completed	100%	100%
Cleaning & Decontamination	16%	61%	49%

July – September 2023

	Northern Sector Average Compliance	Southern Sector Average Compliance	Trust Average Compliance
Hand Hygiene	77%	90%	85%
PPE	84%	86%	85%
<i>C. difficile</i>	63%	75%	64%
<i>C. difficile</i> Care Pathway	Pass x 25 Fail x 5	Pass x 2 Fail x 0	Pass x 27 Fail x 5
Peripheral Line Ongoing Care	25%	68%	64%
Urinary Catheter Ongoing Care	No audits completed	79%	79%
Central Line Ongoing Care	No audits completed	100%	100%
ANTT	No audits completed	100%	100%
Commode	0%	83%	63%
4 Cloth Cleaning	No audits completed	100%	100%
Cleaning & Decontamination	11%	65%	47%
MRSA	No audits completed	69%	69%