Western Health and Social Care Trust

Infection Prevention & Control Report to Trust Board

Meeting Date – 9th June 2022

1. Executive Summary

COVID-19

The Infection Prevention & Control (IP&C) Team continue to be significantly involved with the management of any suspected or confirmed cases of COVID-19, the continued development of COVID-19 pathways, contact tracing and processes and outbreak management. The IP&C Team are also required to continue to support Independent Sector care homes in the event of any declared outbreaks, but this has not been possible from January 2022 due to the unprecedented numbers of Trust outbreaks and IP&C nursing capacity. As a result of the increased demands upon the Team and within the current IP&C resources, there are challenges in attending to other routine work.

Monkeypox

There are currently confirmed cases of Monkeypox across the UK, including Northern Ireland (NI). The Public Health Agency (PHA) is in regular contact with the UK Health Security Agency regarding the situation and a regional multidisciplinary Incident Management Team has been established here to ensure that we are fully prepared for any potential risk to the population of NI.

The Trust has also established a multidisciplinary management team to ensure the Trust is prepared to manage any suspected or confirmed cases. Significant work continues to reinforce existing and to develop further new clinical pathways.

Monkeypox is not a new virus and an effective vaccine is available.

Monkeypox does not spread easily between people, is usually a mild self-limiting illness and most people recover within a few weeks.

Person-to-person spread is uncommon, but may occur through:

- contact with clothing or linens (such as bedding or towels) used by an infected person;
- direct contact with Monkeypox skin lesions or scabs;
- coughing or sneezing of an individual with a Monkeypox rash.

The Trust is keeping the situation under review and will review and implement any updated evidence or guidance.

Reduction Targets 2021/22

Due to the COVID-19 pandemic the Department of Health NI did not issue reduction targets for healthcare-associated infections in 2021/22. These targets relate to *Clostridium difficile* (*C. difficile*) associated disease, Meticillin-Resistant *Staphylococcus aureus* (MRSA) bacteraemia and gram-negative bacteraemia (GNB), specifically *Escherichia coli*, *Klebsiella species* and *Pseudomonas aeruginosa*.

The most recently available reduction targets were for the year 2019/20. These are discussed in subsequent relevant sections to provide a point of reference when examining performance in 2021/22.

C. difficile Performance 2021/22

A total of 80 cases of *C. difficile* were reported in 2021/22; 14 more than in 2020/21. 48 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 PHA). However, this is not always an accurate predictor of being healthcare-associated. The remainder (32) were categorised as community-acquired as the patients presented with symptoms within a 72 hour period after admission.

A reduction target of 56 cases was previously set for 2019/20. The performance in 2021/22 has exceeded that target.

MRSA Bacteraemia Performance 2021/22

A total of 10 MRSA bacteraemia cases were reported in 2021/22. Five were categorised as community-associated as they occurred less than 48 hours after admission to hospital and five were categorised as healthcare-associated as they occurred more than 48 hours after admission to hospital (definition used by the PHA).

This performance would fail to meet the reduction target previously set for 2019/20, which was a maximum of five cases.

GNB Performance 2021/22

A total of 45 healthcare-associated GNB cases were reported during 2021/22. That is five more cases than in the previous year (40); an increase of 12.5%.

Compared with the most recently set reduction target for 2019/20, when a maximum of 49 cases were allowed, this performance would achieve that target.

Current GNB Performance

The new reduction target for 2022/23 has not yet been issued. As of 27th May 2022, two 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 mid-January and late May 2022, a total of 82 outbreaks occurred. The number of affected areas remained high until March but then began to decrease from April onwards. The IP&C Team, in conjunction with Occupational Health and/ or Contact Tracing, are supporting the management of these incidents as applicable. Incident meetings are taking place and all IP&C measures have been instigated.

The key learning themes arising from outbreaks are shared for wider learning across the Trust via the Working Safely Together Group and governance arrangements. They are also incorporated into the ECHO Programme.

The IP&C Team are also required to continue to support Independent Sector care homes in the event of any declared outbreaks. The number of homes affected increased significantly between January and March 2022 but from April onwards there has been a sharp decline. A total of 86 outbreaks occurred during the period mid-January to late May.

Support to these homes requires an on-site visit by a Senior IP&C Nurse. It involves assessing

their current IP&C practices and giving recommendations on possible improvements. The IP&C Team are challenged to provide this due to other workload commitments, as well as the limited availability of Senior IP&C Nurses. Independent Sector visits are, therefore, being risk assessed and organised as capacity allows.

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 and was originally launched across the Trust in late June 2020.

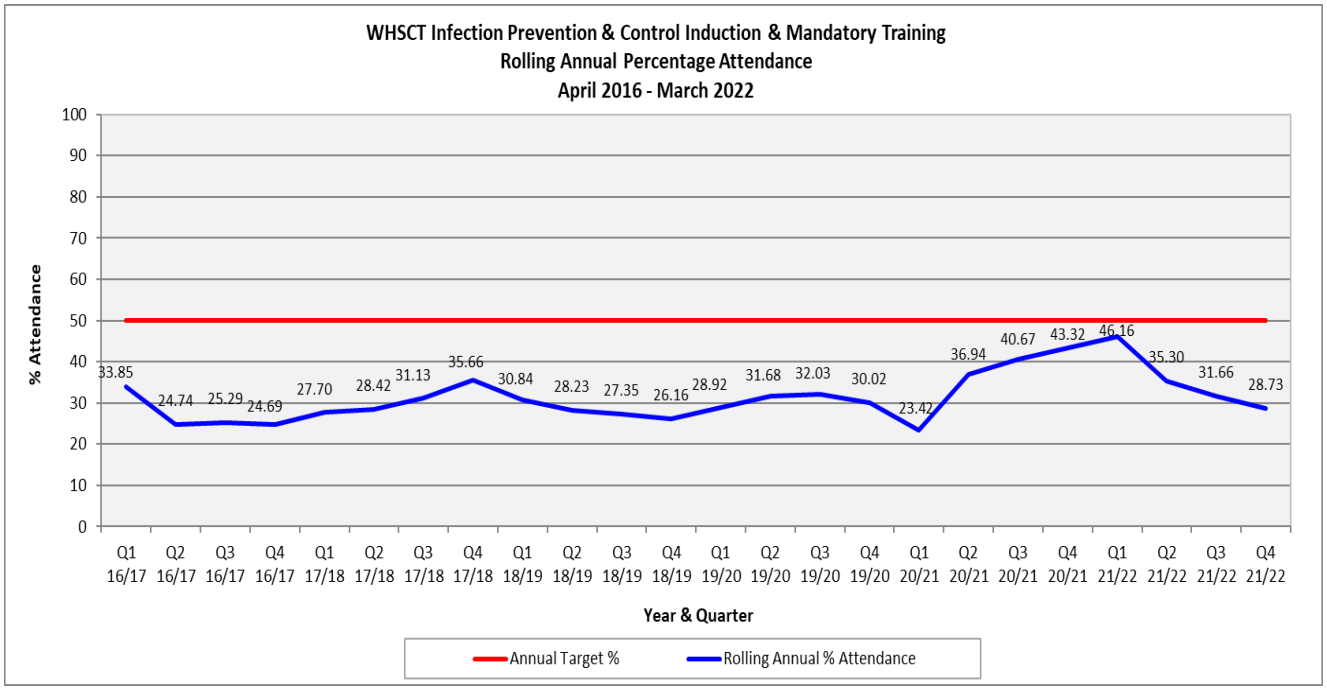
The e-learning programme comprises two tiers – Tier 1 and Tier 2. Staff only need to complete one of the tiers. Clarification on which tier each staff member should complete is provided via a Tier Matrix. The e-learning includes a short assessment to test understanding and awareness, with a certificate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

Beginning in July 2021 the IP&C Team also delivered a series of virtual training sessions via Zoom. These sessions were 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.

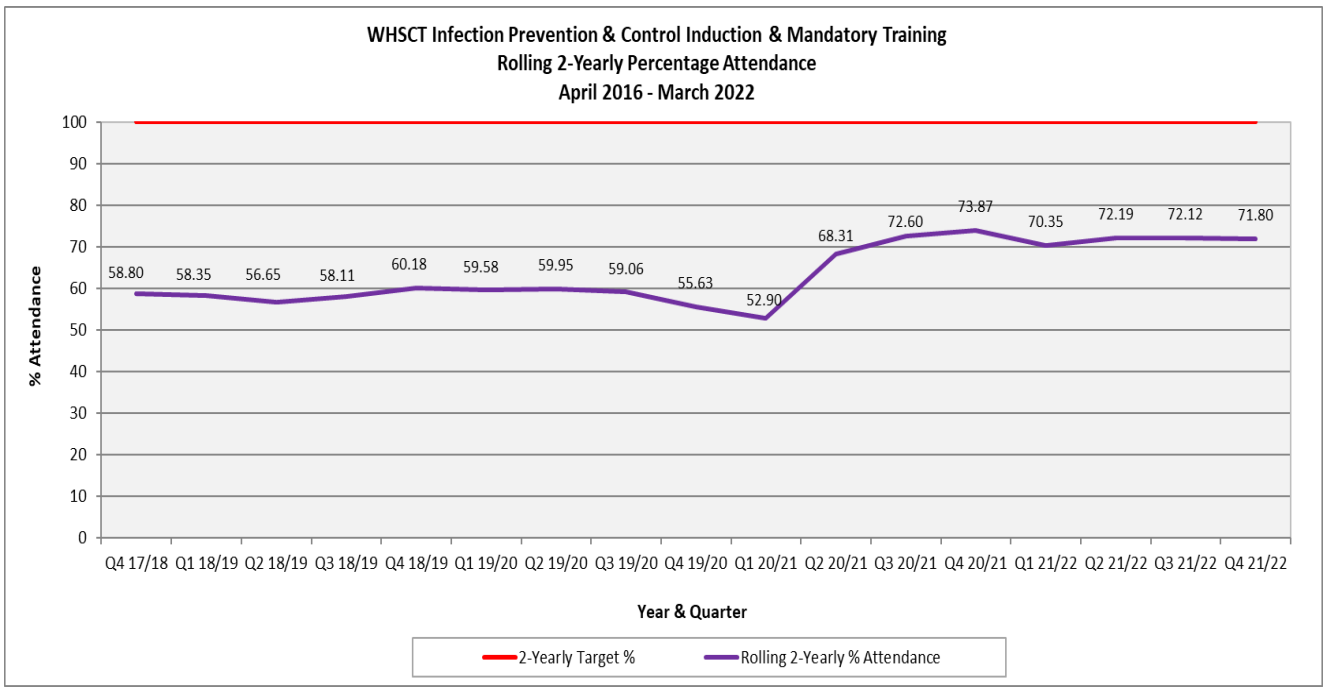
Training must be completed every two years. This frequency of completion and the content of the e-learning is to be reviewed by the Regional IP&C Lead Nurses Forum.

As of 31st March 2022, a total of 3256 staff completed the training.

The attendance target for each year is 50% of the total number of staff who require training (i.e. 5667 out of 11,334 applicable staff). For the year 2021/22 the percentage is 28.73%. That is 21.27% 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 2022, it is 71.8%.



4. *C. difficile* Performance

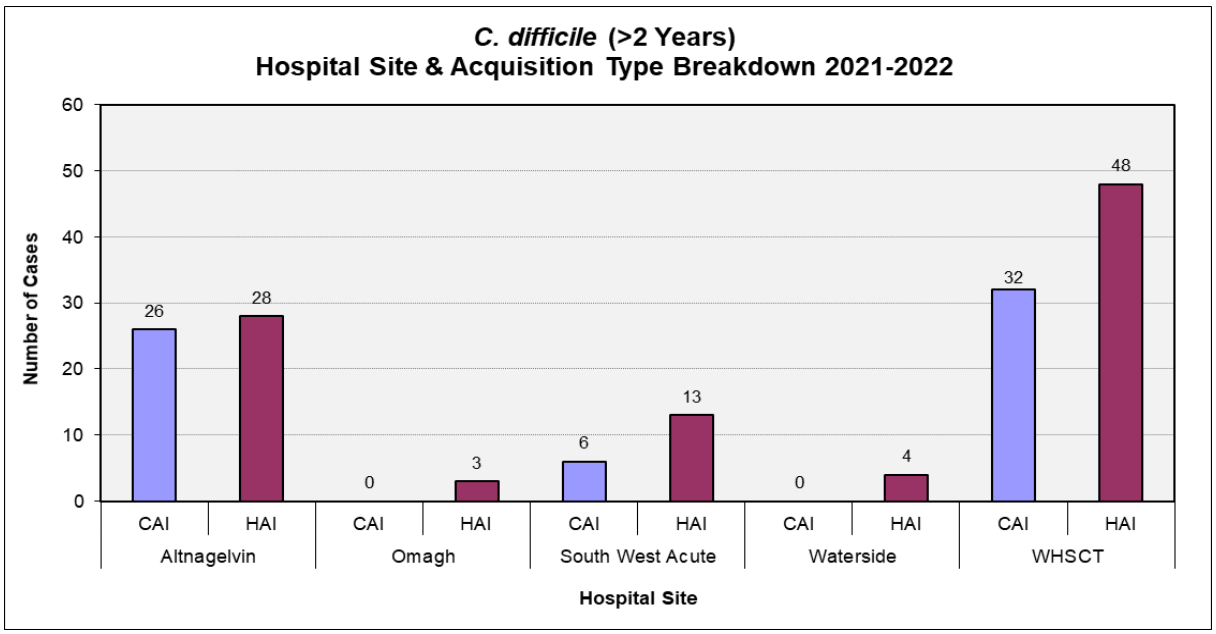
There was no reduction target set for *C. difficile* (≥ two years) in 2021/22. In the year to the end of March 2022 the Trust reported 80 cases, with 32 of those being categorised as community-associated. That is an overall increase of 21.21% compared to the previous year (66 cases) and comprises an increase in healthcare-associated infection cases of 54.84% versus a decrease in community-associated infection cases of 8.57%.

As a point of comparison, the reduction target previously set for 2019/20 was 56 cases. The 2021/22 performance has exceeded that target.

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

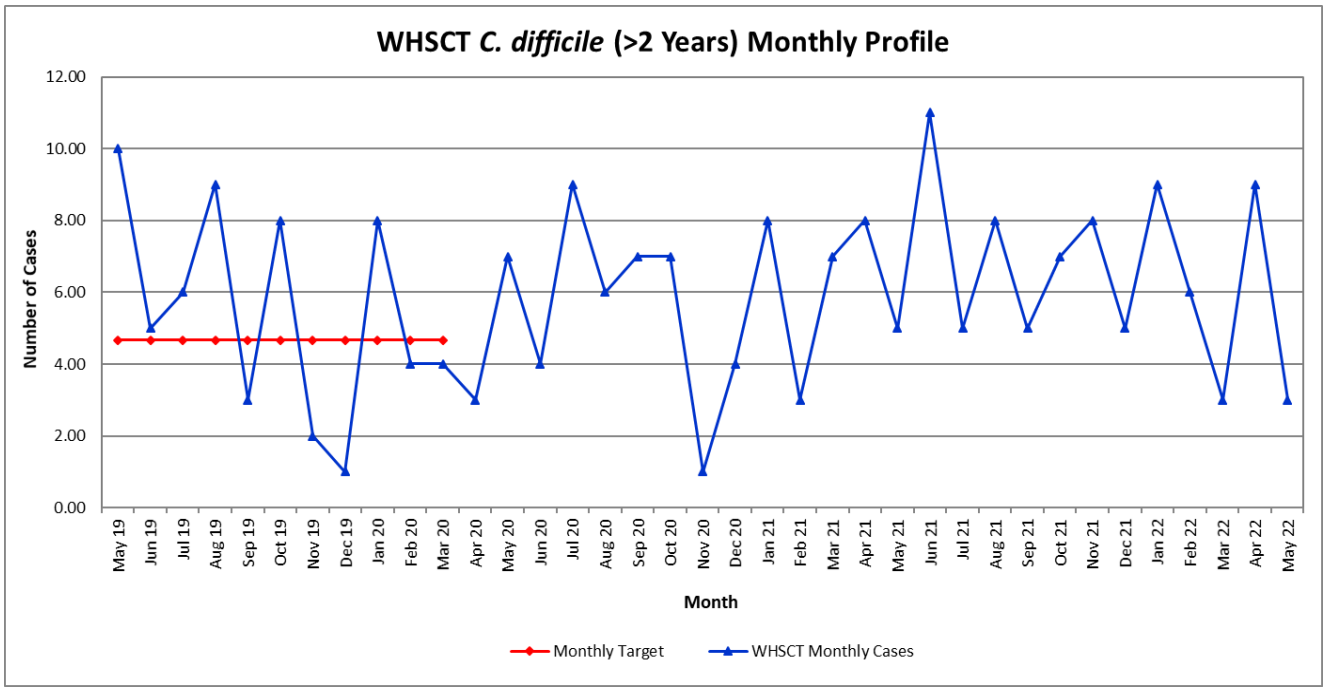


Preventable/ Non-Preventable

In respect of *C. difficile* cases occurring during 2021/22 a total of 37 post-infection reviews (PIRs) were conducted (PIRs were suspended for part of the year due to the COVID-19 pandemic). These found that none of the cases were preventable, 33 were non-preventable and four were difficult to determine.

The new reduction target for 2022/23 has not yet been issued.

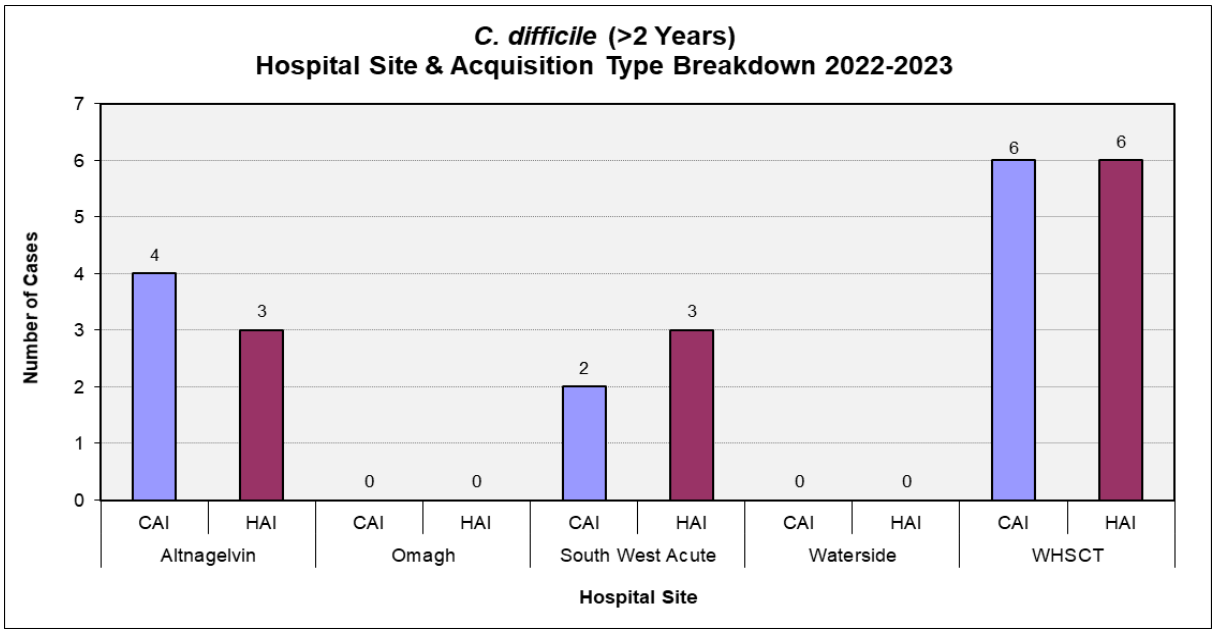
Since the beginning of April 2022 12 new cases have been reported, with six of those being categorised as community-associated.



* *The value for May 22 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



PIRs are required for nine of these cases. Eight are currently pending. One has taken place and it found the development of *C. difficile* associated disease to be non-preventable.

5. *S. aureus* Bacteraemia Performance

MRSA Bacteraemia

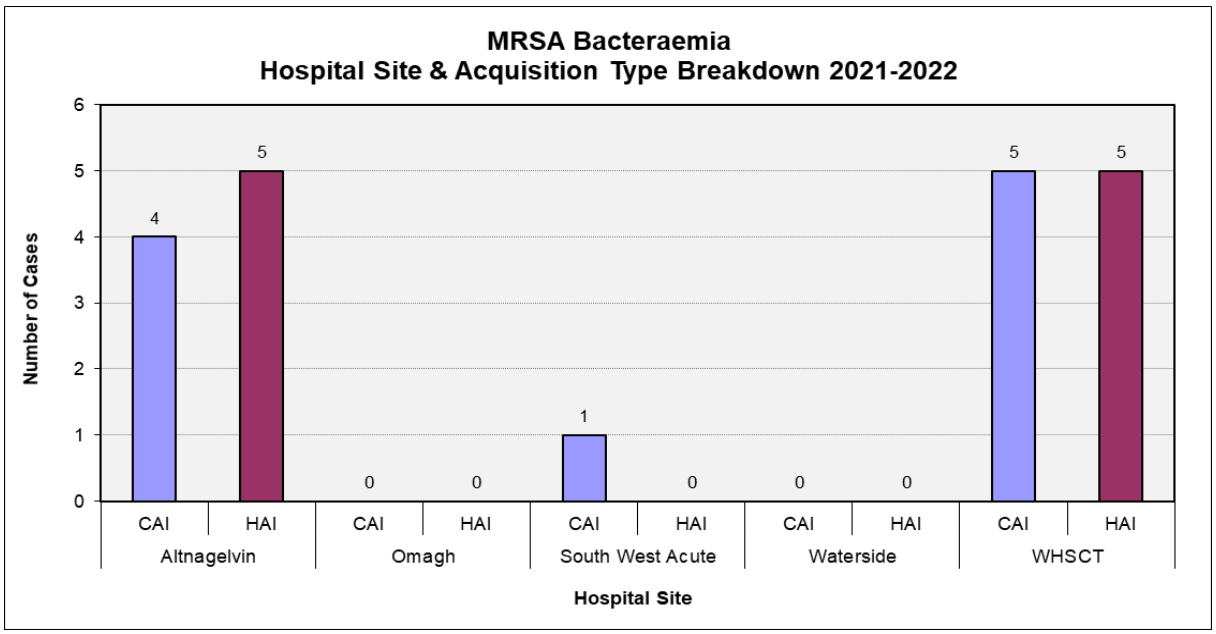
No reduction target was set for MRSA bacteraemia in 2021/22. In the year to the end of March 2022 10 MRSA bacteraemias were reported. That is three cases more than in the previous year (seven); an increase of 42.86%. The proportion of those cases which can be attributed to the Trust was five. The other five cases were categorised as community-associated.

This performance would have failed to meet the previous reduction target set for 2019/20, which was a maximum of five cases.

The PHA has previously advised that community-associated infections will remain as part of the target/ published figures. These cases are not related to the healthcare environment, which limits the Trust's ability to influence a reduction in numbers. All community-associated cases are, however, reviewed to ensure there has not been any healthcare intervention within the previous 48 hours. The PHA presents the number of cases according to the time of sampling following hospital admission; although, as stated by the PHA, this should not be taken as inferred attribution of infection (hospital or community).

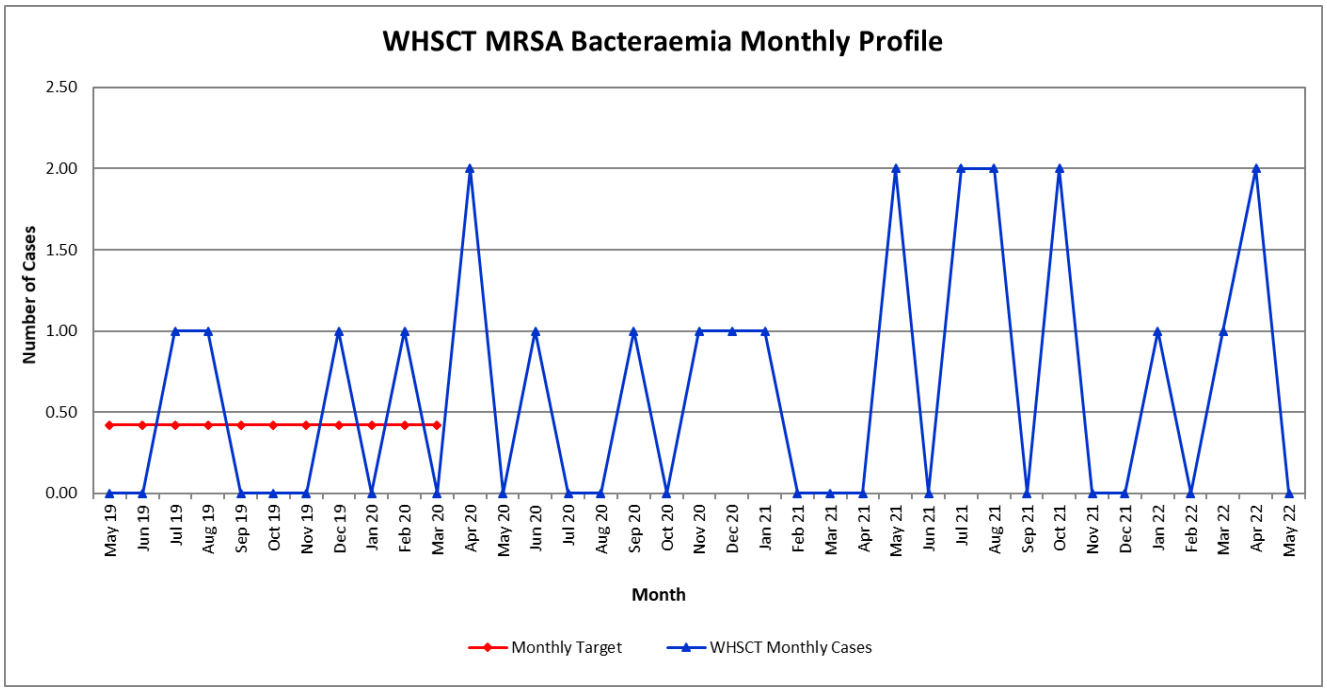
A breakdown of the cases by hospital site and acquisition type is given in the chart below.

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



The new reduction target for 2022/23 has not yet been issued.

Since the beginning of April 2022 two new cases have been reported. Both are categorised as community-associated.



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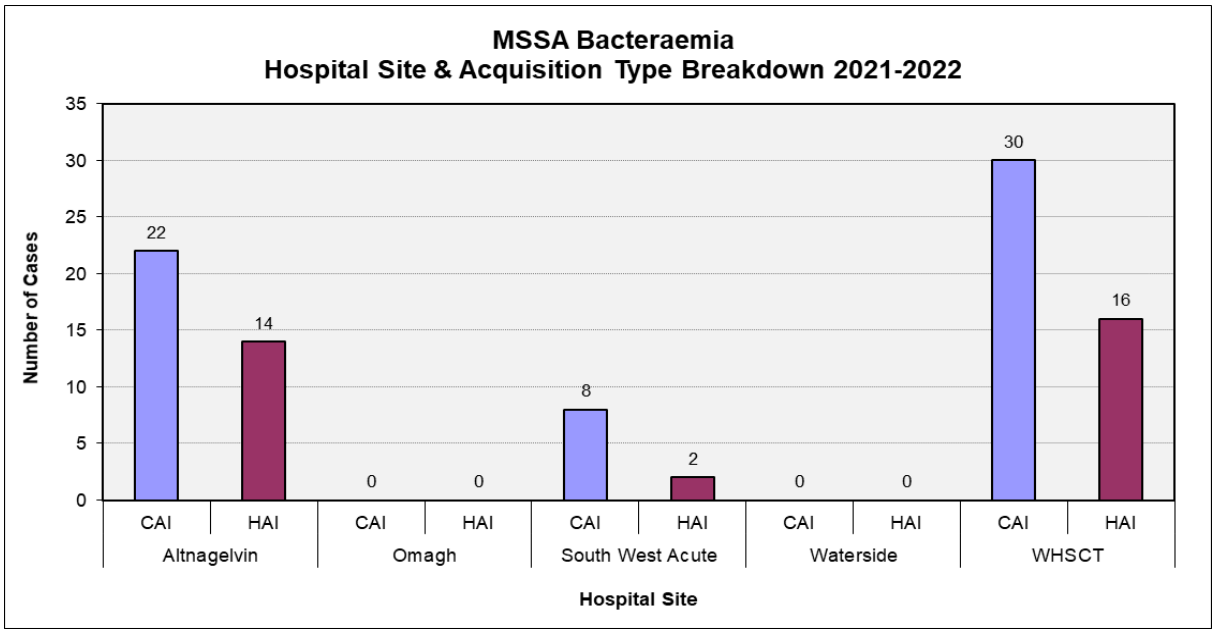
Meticillin-Sensitive Staphylococcus aureus (MSSA) Bacteraemia

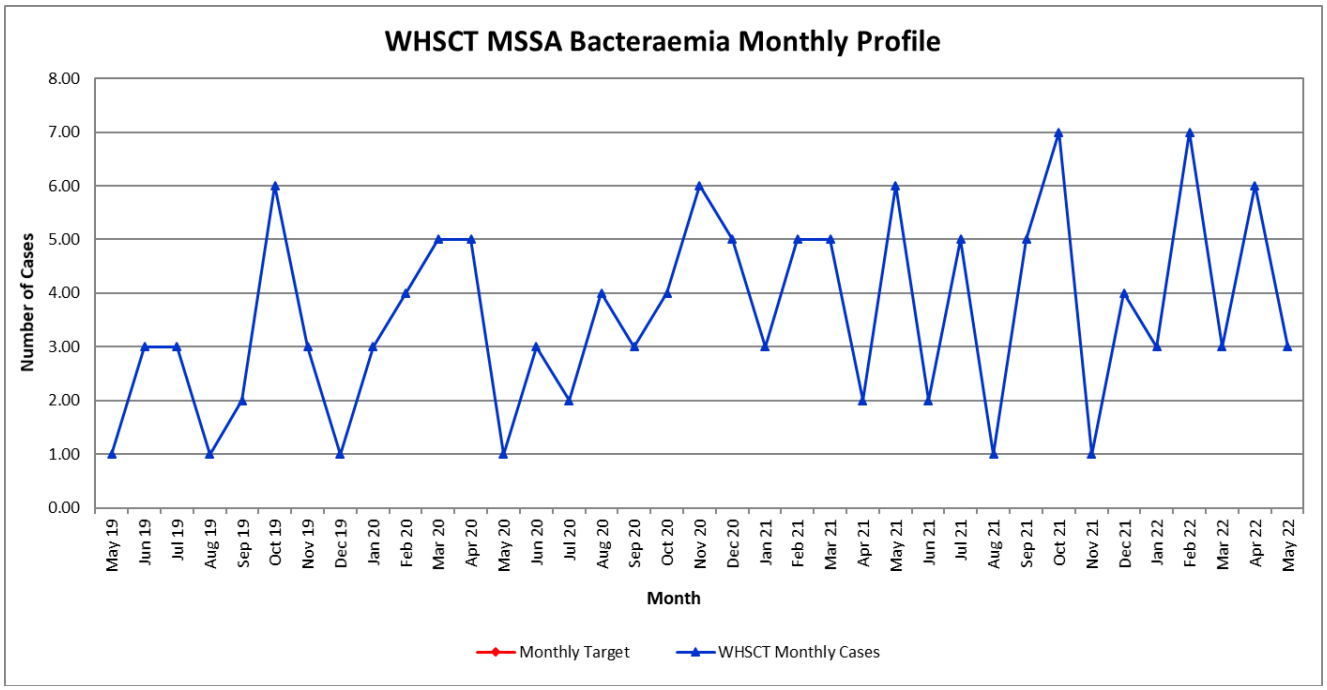
There was no reduction target associated with MSSA bacteraemia for 2021/22, however surveillance remained mandatory. MSSA is part of the skin normal flora of approximately 25-30% of the well population. It is, therefore, more difficult to control endogenous (self) exposure, which is the reason for removing 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 2022 a total of 46 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 2022 nine new cases have been reported. Seven cases are categorised as community-associated and two are categorised as healthcare-associated.



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6. ***Pseudomonas***

Pseudomonas aeruginosa is an opportunistic pathogen or coloniser, well known in the hospital environment. *Pseudomonas* is predominantly an environmental organism and is highly attracted to

water sources. *Pseudomonas* is ubiquitous in the alimentary tract of humans and, therefore, carriage is normal and its presence is not indicative of infection. The term 'colonisation' is used to describe the identification of any organism without signs of infection. Specific groups of patients who are immunocompromised are at a higher risk of colonisation or infection than the normal population. The Trust has stringent measures in place regarding the surveillance and management of *Pseudomonas* in augmented care areas and participates in the PHA surveillance as detailed below.

Pseudomonas Surveillance (Augmented Care* Areas Only)

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2019/20	0	0	0	2	0	0	0	1	0	0	0	0	3
2020/21	0	0	0	2	0	0	0	0	1	0	1	0	4
2021/22	0	0	1	0	0	0	2	1	0	0	0	0	4
2022/23	1	0†											1†

* *The PHA defines augmented care as NNICU, Adult ICU/ HDU, Renal, Oncology/ Haematology.*

† *These values are subject to change as the report was compiled prior to the end of the month/ year.*

Since the beginning of April 2022 one *Pseudomonas* case has been reported. It is categorised as healthcare-associated.

The most recent healthcare-associated positive blood culture in an augmented care area pertains to an inpatient admission in Ward 50, Altnagelvin, in April 2022. All IP&C measures were put in place. There have been no other positive patients in this area for over a year, nor have any recent water samples identified the presence of *Pseudomonas aeruginosa*. The water supply in the patient's room was tested and the result was negative. The IP&C Team are liaising with the Belfast Trust to investigate if there are any potential connections.

Prior to this, there had been no healthcare-associated positive blood cultures in augmented care areas since December 2020.

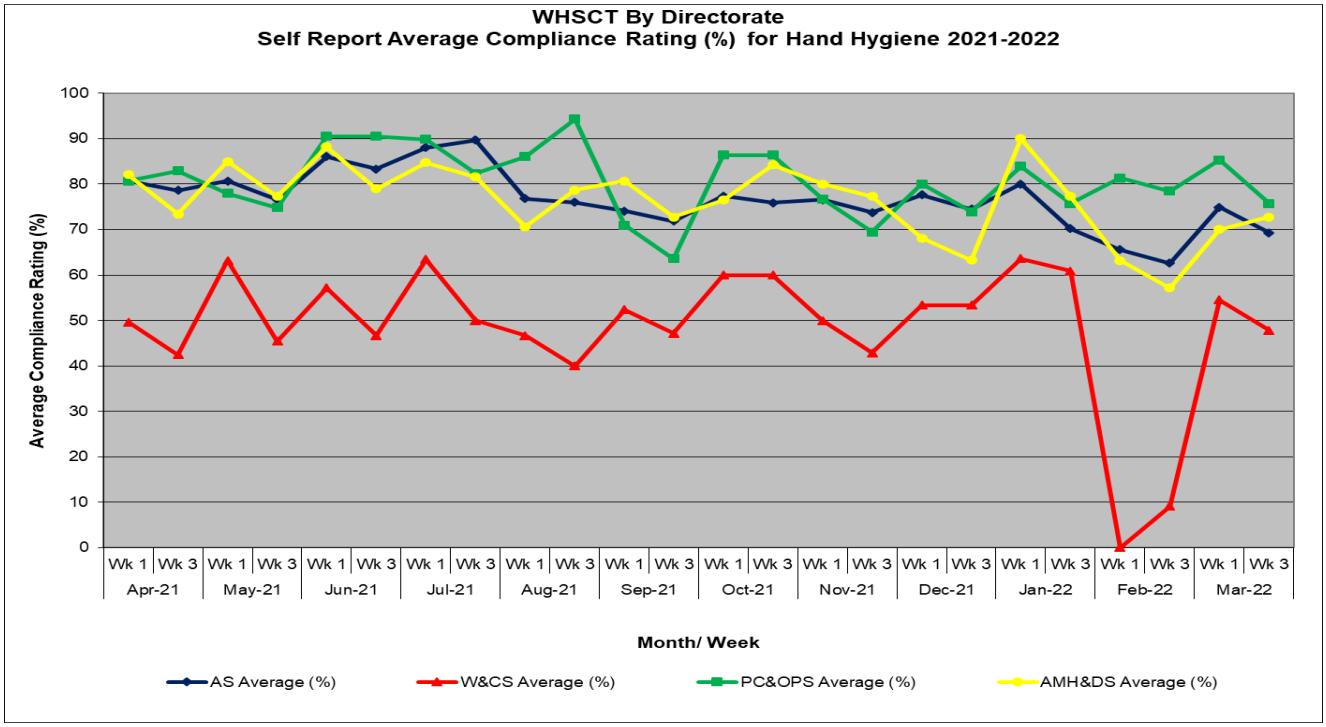
7. Hand Hygiene Compliance

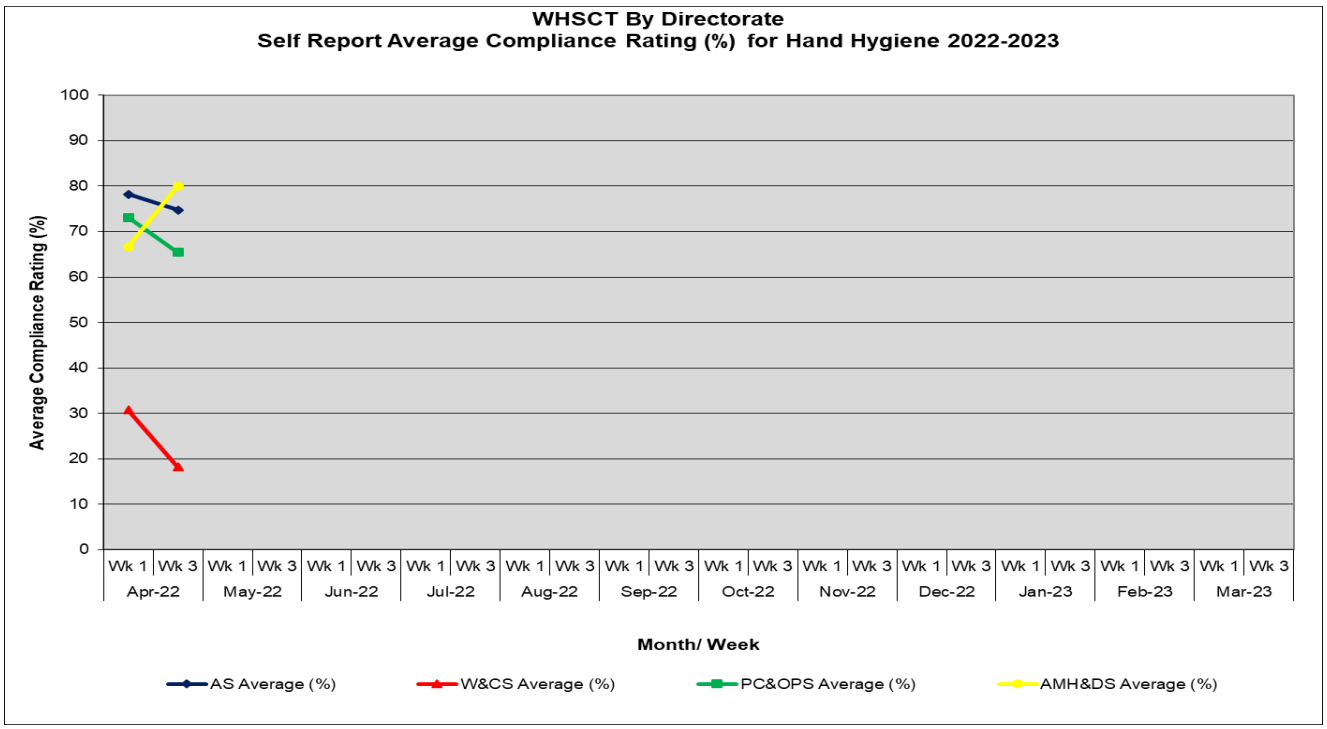
The Trust's overall average self-reported hand hygiene score is 69% when non-submission areas are included. These areas score an automatic 0%. 41 areas out of 195 applicable areas failed to submit scores for April 2022. They are as follows:

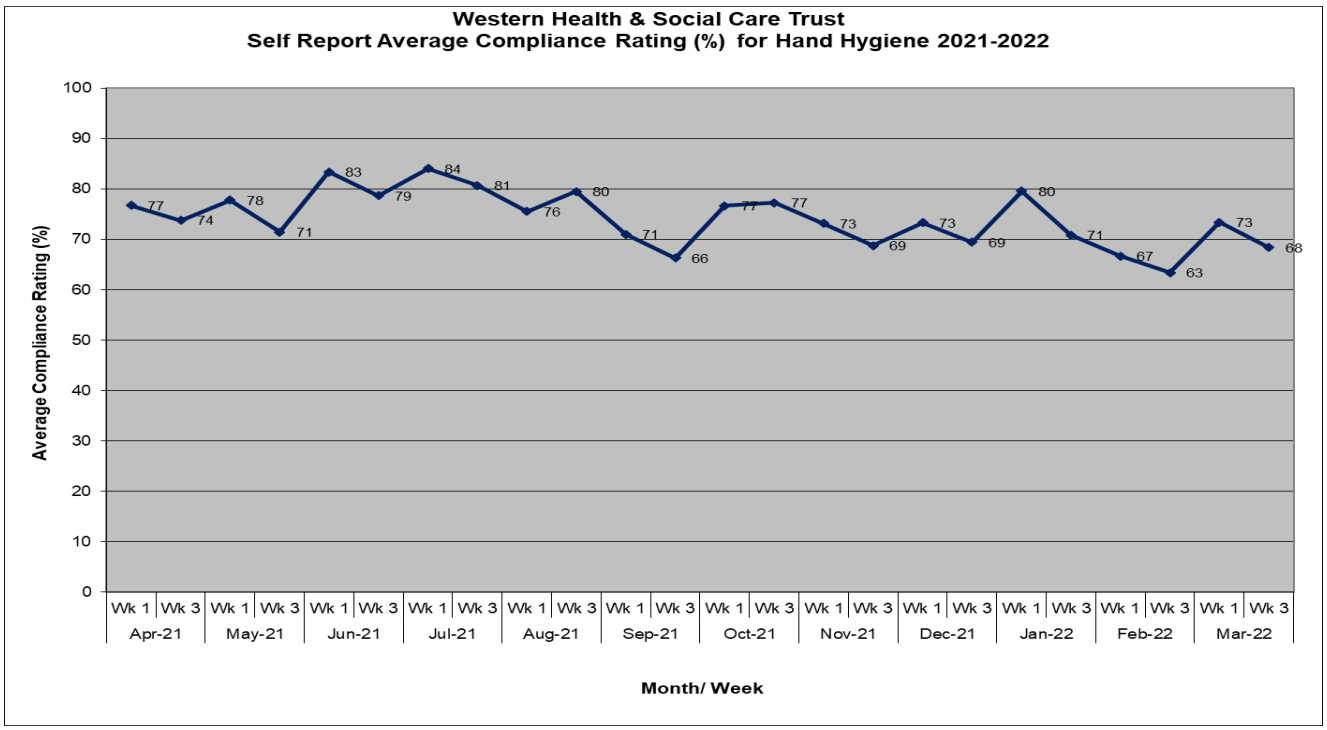
Site	Ward/ Department/ Facility
Altnagelvin	Ward 21C Ward 40 ACU Anderson House/ Dermatology Antenatal Clinic Cath Lab Emergency Department Fracture Clinic GUM Clinic Main Theatre 2 Main Theatre 3 Main Theatres Recovery OPALS South Wing Clinics

	Physiotherapy Outpatients Pre-Operative Assessment
SWAH	Cardiac Unit Emergency Department Physiotherapy Outpatients Pre-Operative Assessment Women's Health Centre
OHPCC	Cardiac Investigations Children's Centre Outpatients Department Physiotherapy Outpatients Pre-Operative Assessment Women's Centre
T&F	Elm Villa Lime Villa
Lakeview	Melvin Lodge Strule Lodge
Residential Homes	Thackeray Place Residential Home
Day Care	Drumcoo Day Centre Gortin Day Centre Maybrook Adult Training Centre Newtownstewart Day Centre
Other Community	Avalon House Children's Community Nursing Team The Cottages Children's Respite Crannog Intensive Treatment Team Rapid Response Team Derry Waterside Community 2 District Nursing Team

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




WHSCT By Directorate
Self Report Average Compliance Rating (%) for Hand Hygiene 2022-2023
Average Compliance Rating (%)
100
90
80
70
60
50
40
30
20
10
0
Wk 1 Wk 3 Apr-22
Wk 1 Wk 3 May-22
Wk 1 Wk 3 Jun-22
Wk 1 Wk 3 Jul-22
Wk 1 Wk 3 Aug-22
Wk 1 Wk 3 Sep-22
Wk 1 Wk 3 Oct-22
Wk 1 Wk 3 Nov-22
Wk 1 Wk 3 Dec-22
Wk 1 Wk 3 Jan-23
Wk 1 Wk 3 Feb-23
Wk 1 Wk 3 Mar-23
Month/ Week
AS Average (%)
W&CS Average (%)
PC&OPS Average (%)
AMH&DS Average (%)


Western Health & Social Care Trust
Self Report Average Compliance Rating (%) for Hand Hygiene 2021-2022
Average Compliance Rating (%)
100
90
80
70
60
50
40
30
20
10
0
77 74 78 71 83 79 84 81 76 80 71 66 77 77 73 69 73 69 80 71 67 63 73 68
Wk 1 Wk 3 Apr-21
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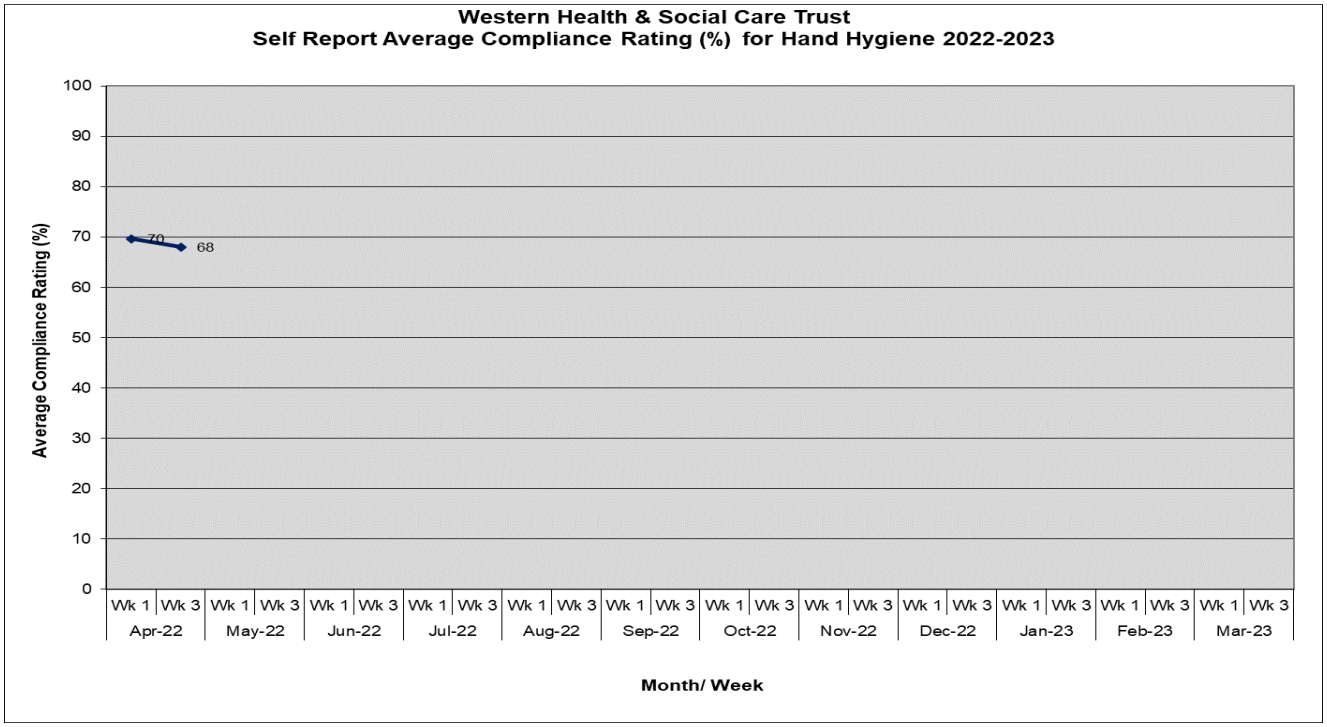
Month/ Week



However, when adjusted for non-submission areas, the Trust's overall self-reported hand hygiene scores improve 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.