

Infection Prevention & Control Report to Trust Board

Meeting Date – 11th June 2020

1. Executive Summary

Reduction Targets 2019/20

In 2019/20 the Department of Health for Northern Ireland issued three healthcare-associated infection (HCAI) reduction targets.

For Meticillin-Resistant *Staphylococcus aureus* (MRSA) bacteraemia, the Trust's target was five cases. That is a reduction of two cases or 28.57% compared to 2018/19 (seven cases).

The Trust's reduction target for *Clostridium difficile* (*C. difficile*) associated disease was 56; a reduction of nine cases or 13.85% compared to the previous year (65 cases).

With regard to healthcare-associated gram-negative bacteraemia (GNB), specifically *Escherichia coli*, *Klebsiella species* and *Pseudomonas aeruginosa*, the Trust was expected to maintain the reduction achieved in 2018/19 – a maximum of 49 cases.

C. difficile Performance 2019/20

A total of 63 cases of *C. difficile* were reported in 2019/20; two fewer than in 2018/19. However, this was not enough of a reduction to meet the challenging target that was set. 37 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 (26) were categorised as community-acquired as the patients presented with symptoms within a 72 hour period after admission.

MRSA Bacteraemia Performance 2019/20

A total of four MRSA bacteraemia cases were reported in 2019/20. All four 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 2019/20

A total of 59 healthcare-associated GNB cases were reported during 2019/20. That is 10 more cases than in the previous year; an increase of 20.4%. The reduction target was, therefore, not met.

Current GNB Performance

The new reduction target for 2020/21 has not yet been issued. As of 4th June 2020, three healthcare-associated GNB cases have been reported.

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 and the development of COVID-19 pathways and processes across the Western Trust. Given the extent and priority of this work, some previously planned ward-based support and Mandatory IP&C Training

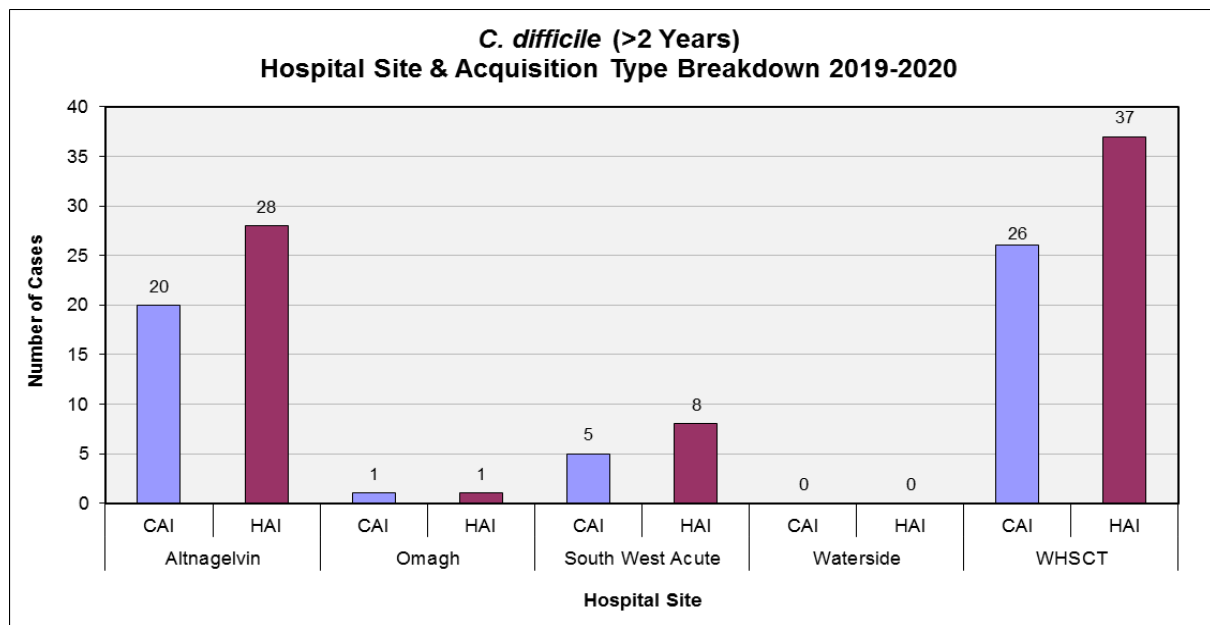
continues to be postponed until it is completed. As services are resetting, it is anticipated that this will resume in late June 2020 with a blended model, including e-learning.

2. C. difficile Performance

The 2019/20 reduction target for *C. difficile* (\geq two years) was 56 cases, which equates to a reduction of 13.85% on the baseline figure of 2018/19 (65 cases). In the year to the end of March 2020 the Trust actually reported 63 cases, with 26 of those being categorised as community-associated. That is an overall decrease of 3.08% compared to the previous year and comprises an increase in healthcare-associated infection cases of 5.71% versus a decrease in community-acquired infection cases of 13.33%. However, the overall reduction was not enough to meet the 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

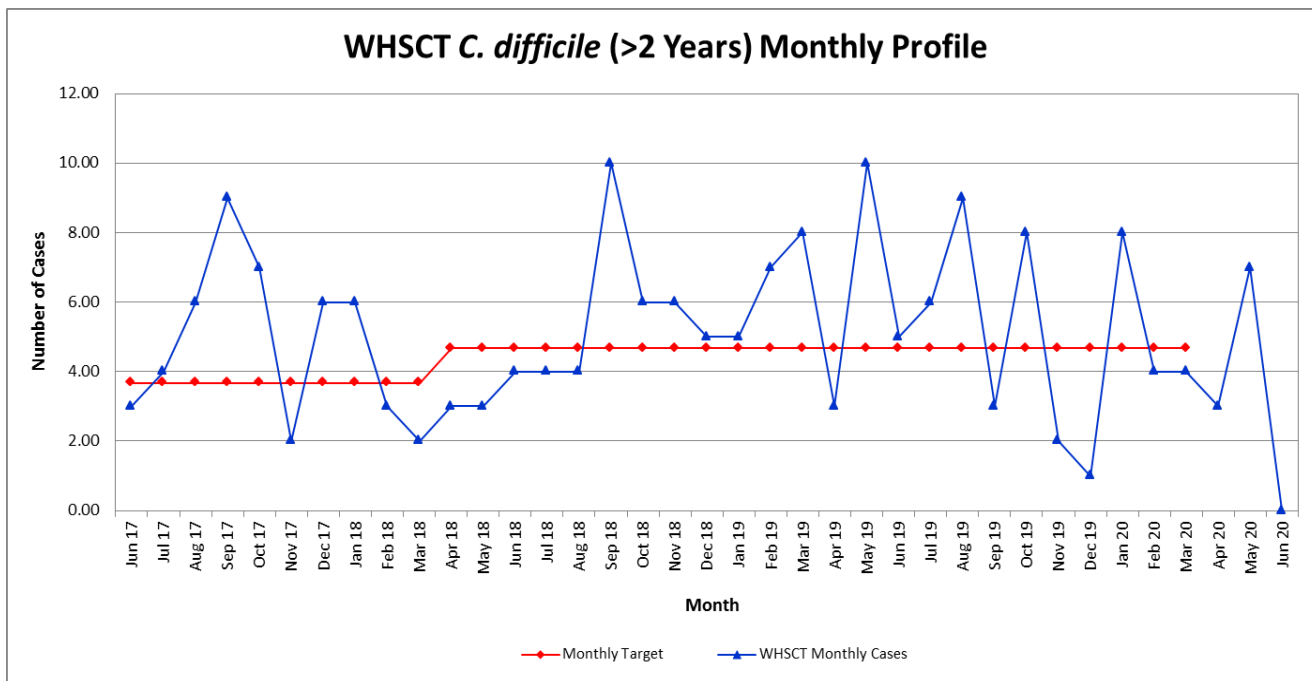


Preventable/ Non-Preventable

In respect of *C. difficile* cases occurring during 2019/20 a total of 36 post infection reviews (PIRs)/ root cause analyses (RCAs) were conducted. These found that five of the cases were preventable, 26 were non-preventable and five were difficult to determine. A further six cases were due to be reviewed but the PIRs/ RCAs were unable to proceed due to the Coronavirus pandemic.

The new reduction target for 2020/21 has not yet been issued.

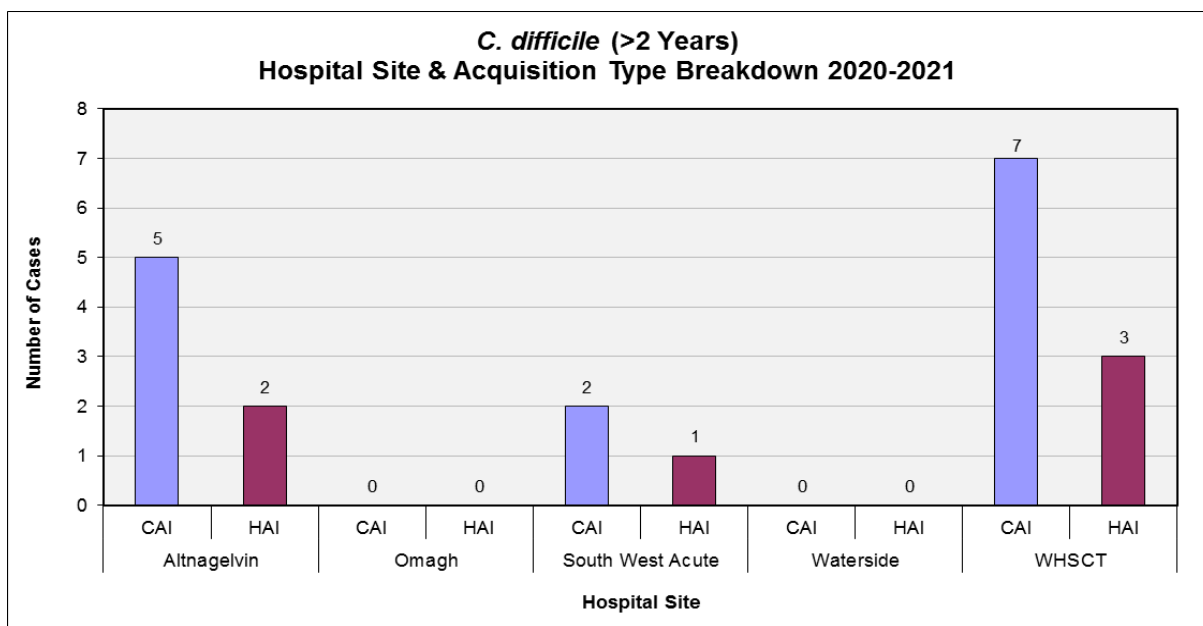
Since the beginning of April 2020 10 new cases have been reported, with seven categorised as community-associated.



* The value for Jun 20 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/ RCAs are pending for the three hospital-associated cases.

3. S. aureus Bacteraemia Performance

MRSA Bacteraemia

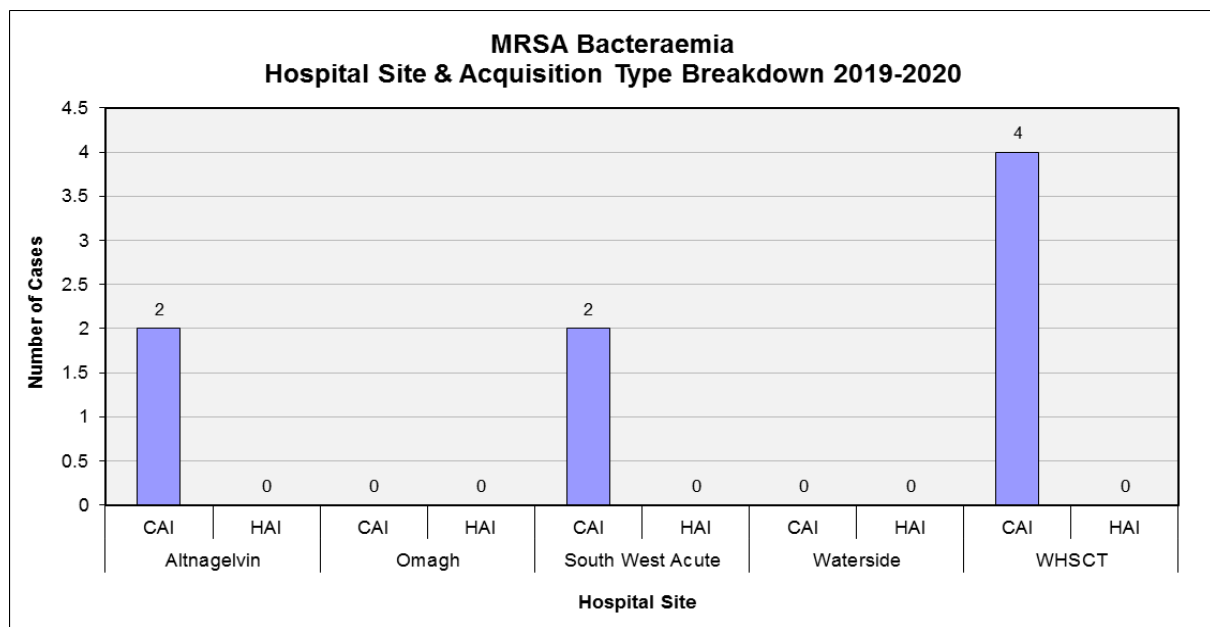
The 2019/20 reduction target for MRSA bacteraemia was five cases. In the year to the end of March 2020 four MRSA bacteraemias were reported. As such, the reduction target was

met and a decrease of 42.86% compared to 2018/19 was achieved. It should also be noted that the proportion of those cases which can be attributed to the Trust was zero, as all four cases were categorised as community-associated.

The PHA has 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

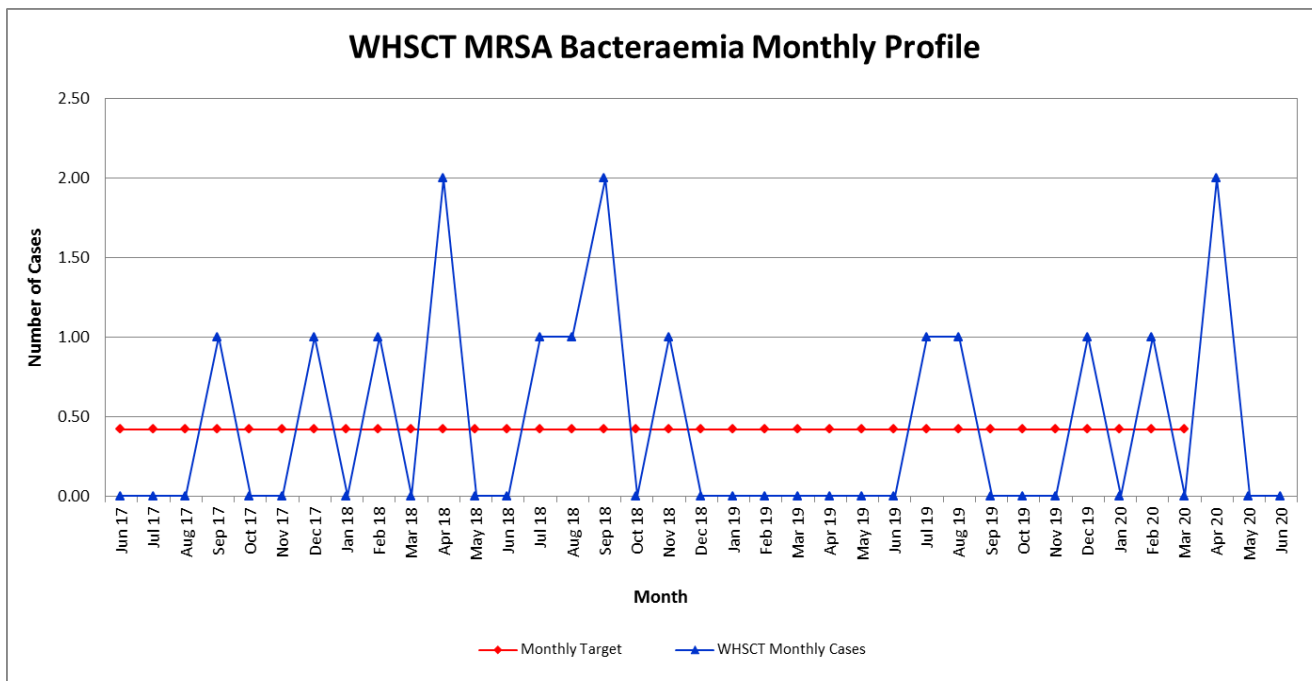


The new reduction target for 2020/21 has not yet been issued.

Since the beginning of April 2020 two new cases have been reported. Both are categorised as community-associated.

As of 4th June 2020, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin Hospital – 577 days (Last recorded case was in Ward 42)
 South West Acute Hospital (SWAH) – 1573 days (Last recorded case was in Ward 8)
 Tyrone County Hospital/ Omagh Hospital &
 Primary Care Complex (OHPCC) – 1962 days (Last recorded case was in the Rehab Unit)



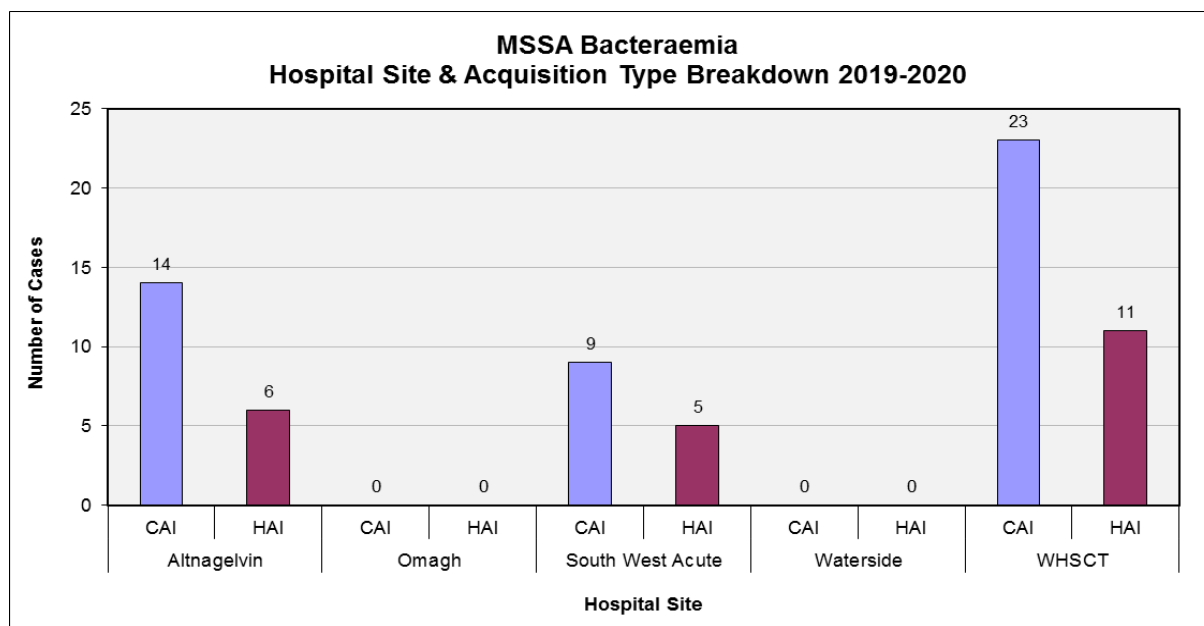
* The value for Jun 20 is subject to change as the report was compiled prior to the end of the month.

Meticillin-Sensitive Staphylococcus aureus (MSSA) Bacteraemia

There was no reduction target associated with MSSA bacteraemia for 2019/20, 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 2020 a total of 34 MSSA bacteraemias were reported. A breakdown of the cases by hospital site and acquisition type is given in the chart below.

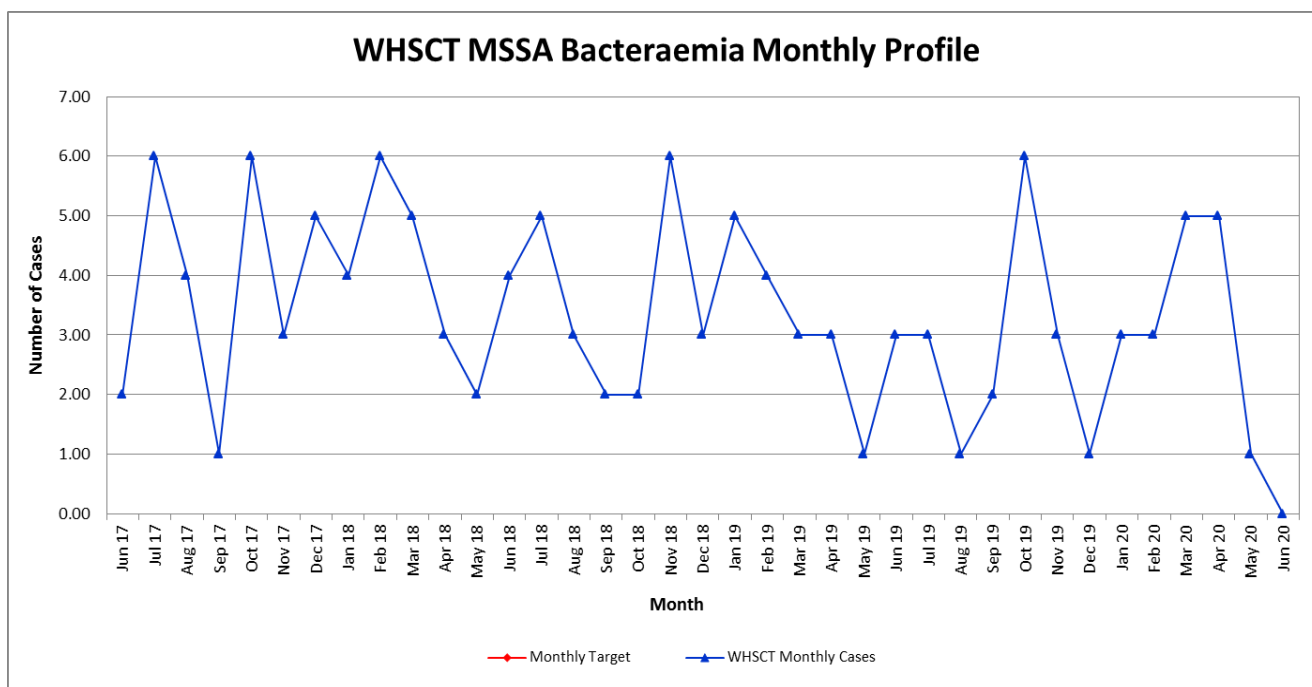
Key:
CAI Community-associated infection
HAI Hospital-associated infection



Since the beginning of April 2020 six new cases have been reported. Five cases are categorised as community-associated and one as Trust hospital-associated.

As of 4th June 2020, the total number of days since the last Trust hospital-associated MSSA bacteraemia is as follows:

| | |
|------------------------|--|
| Altnagelvin – 105 days | (Last recorded case was in Ward 40) |
| SWAH – 59 days | (Last recorded case was in Ward 8) |
| OHPCC – 962 days | (Last recorded case was in the Rehab Unit) |



* The value for Jun 20 is subject to change as the report was compiled prior to the end of the month.

4. 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 |
|---------|-----|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|
| 2017/18 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 2018/19 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 2019/20 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 2020/21 | 0 | 0 | 0 [†] | | | | | | | | | | 0 [†] |

* 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 2020 no *Pseudomonas* cases have been reported. There have been no healthcare-associated positive blood cultures in augmented care areas since July 2019.

5. Hand Hygiene Compliance

The Trust's overall self-reported hand hygiene scores are 59% when non-submission areas are included. These areas score an automatic 0%. 69 areas out of 194 applicable areas failed to submit scores for March 2020. They are as follows:

| Site | Ward/ Department/ Facility |
|-----------------------------|---|
| Altnagelvin | Ward 5 EOU Ward 40 Ward 41 AMU Ward 42 ACU Anderson House/ Dermatology Antenatal Clinic Breast Unit Cardiac Investigations Emergency Department EPU GUM Clinic Main Theatre 1 Main Theatre 4 Main Theatres Paediatric Recovery OPALS South Wing Clinics Outpatients Department Physiotherapy Outpatients Department Roe Valley Outpatients Department Spruce House |
| SWAH | Ward 1 MSAU Ward 2 Ward 3 Ward 6 Emergency Department Physiotherapy Outpatients Department Radiology Department Women's Health Centre |
| OHPCC | Cardiac Assessment Unit Cardiac Investigations Children's Centre Outpatients Department Physiotherapy Outpatients Department Radiology Department Urgent Care & Treatment Centre Women's Centre |
| Tyrone & Fermanagh Hospital | Asha Centre Elm Villa |
| Lakeview Hospital | Lakeview (Brook & Strule Lodges) Berryburn Centre |

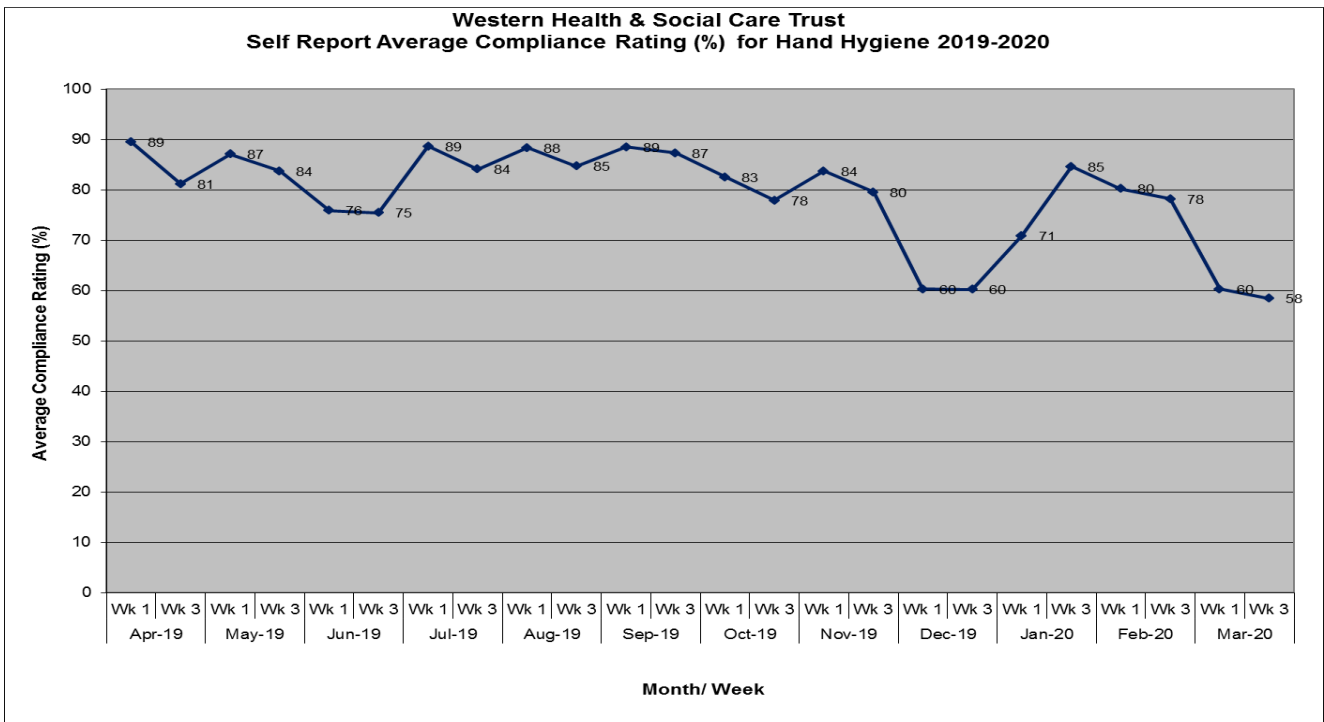
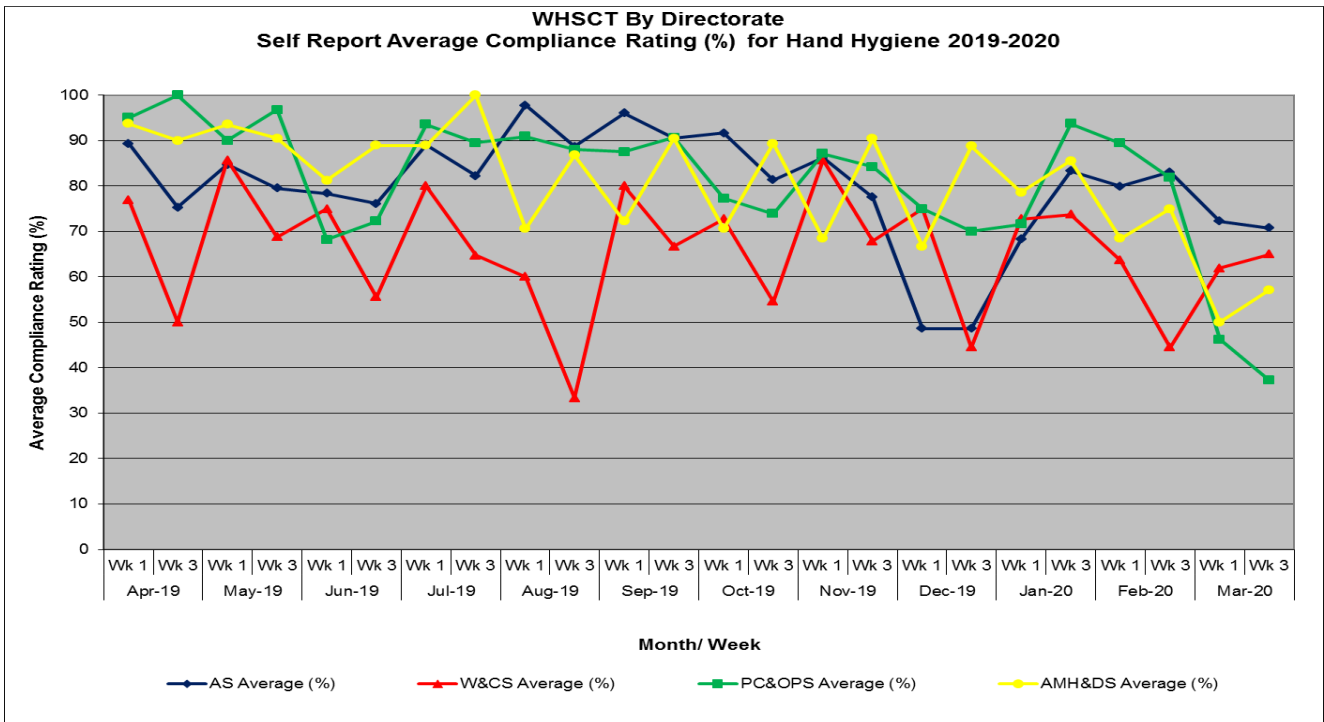
| | |
|---------------------|---|
| Grangewood Hospital | Carrick Evisk |
| Residential Homes | Greenfield Residential Home |
| Day Care | Benbradagh Adult Training Centre Beragh Day Centre Creggan Day Centre Dromore Day Centre Drumcoo Day Centre Drumhaw Day Centre Foylevillee Day Centre Glen Oaks Gortin Day Centre Newtownstewart Day Centre Strabane Day Centre Tempo Road Day Centre |
| Other Community | Avalon House Children's Community Nursing Team The Cottages Children's Respite Crannog Intensive Treatment Team Claudy District Nursing Donemana District Nursing Dungiven District Nursing Eglinton District Nursing Limavady Community 1 Limavady Community 2 Strabane Mourneside District Nursing Strabane Riverside District Nursing Waterside Community 1 Waterside Community 1 |

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

Furthermore, two areas submitted scores for March 2020 which are not mathematically possible to achieve if using the hand hygiene audit tool correctly. These areas are as follows:

Altnagelvin – Rheumatology
SWAH – ICU

Rheumatology also submitted incorrect scores for the previous month.



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.

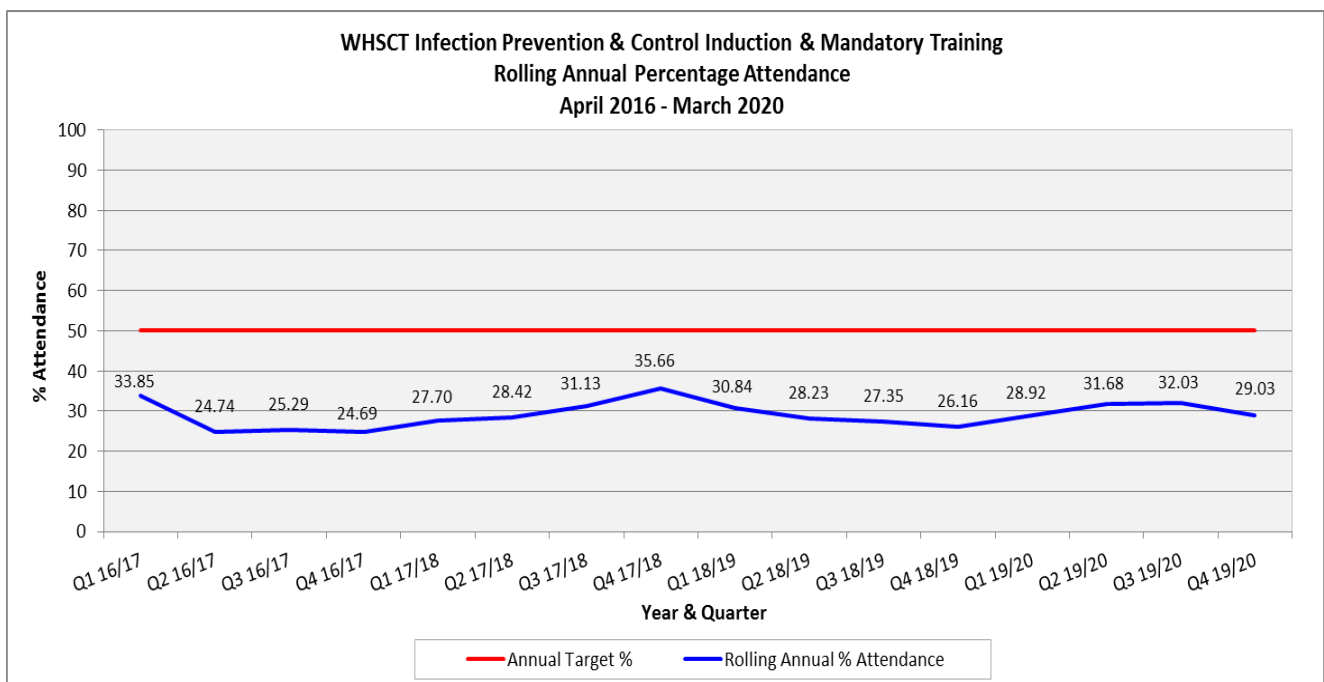
It is important to note that scores from independent audits conducted by the IP&C Team and Lead Nurses tend to be lower than self-reported scores.

6. Attendance at Infection Prevention & Control Training

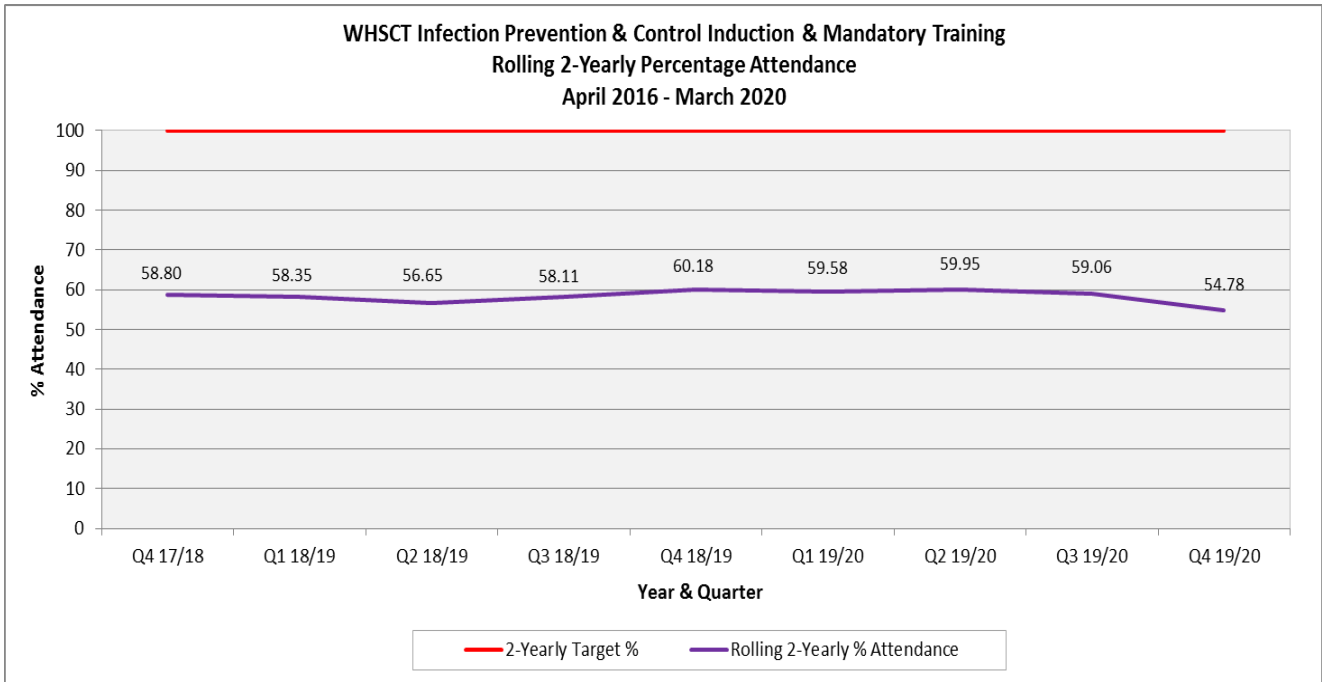
Induction/ Mandatory Training

72 Induction and Mandatory Training sessions were delivered by the IP&C Team during the period April 2019 to March 2020. That is an average of 1.5 sessions per week across the Trust. As of the end of March, 2937 staff had attended the training (1854 in the Northern Sector and 1083 in the Southern Sector).

The attendance target for each year is 50% of the total number of staff who require training. The actual attendance rate is 29.03% for the 12 months ending March 2020 – well below the required target. It should be noted, however, that more than half of the sessions planned for the most recent quarter (13 of 24) had to be cancelled as a consequence of the Coronavirus pandemic. This had a significant impact on the overall attendance rate for the year.



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 2020 it is 54.78%.



Target attendance at IP&C Mandatory Training should be monitored through Directorate Governance arrangements, as well as through the Chief Executive HCAI Accountability Forum.

Development of a regional e-learning programme is underway and this will support a new tiered structure for Mandatory IP&C Training. Prior to the Coronavirus pandemic this was nearing completion and had an original launch date of May 2020, but the Trust will now be implementing some of the tiered training in late June 2020.

7. New and Updated Infection Prevention & Control Guidance

The following guidance was approved by the Chief Executive HCAI Accountability Forum in March 2020. Both were updates of existing documents.

- Infectious Incident/ Outbreak Control Plan
- Policy for the Control of Transmissible Spongiform Encephalopathy (TSE), Including Creutzfeldt Jakob Disease (CJD) and variant Creutzfeldt Jakob Disease (vCJD)