

Infection Prevention & Control Report to Trust Board

Meeting Date – 7th March 2019

1. Executive Summary

Reduction Targets

The Department of Health (DoH) for Northern Ireland (NI) has issued healthcare-associated infection (HCAI) reduction targets for 2018/19.

For Meticillin-Resistant *Staphylococcus aureus* (MRSA) bacteraemia, the Trust's target is five cases. That is the same target as was required last year and one case more than the number actually reported in 2017/18 (four).

The Trust's reduction target for *Clostridium difficile* (*C. difficile*) associated disease is 56; a reduction of eight cases or 12.5% compared to last year.

In response to the O'Neill Review on Antimicrobial Resistance, the United Kingdom has adopted two ambitions in relation to human health, i.e. to improve antibiotic prescribing and to reduce gram-negative bacteraemias (GNBs).

As of 2018/19 the DoH NI has introduced targets for reducing healthcare-associated GNBs, specifically *Escherichia coli*, *Klebsiella species* and *Pseudomonas aeruginosa*. The Western Trust is expected to achieve one fewer case in 2018/19 (49 cases) compared to the baseline figure of 2017/18 (50 cases), which equates to a reduction of 2%.

Current MRSA Bacteraemia Performance

Since the beginning of April 2018 seven MRSA bacteraemia cases have been reported. Six are categorised as community-associated as they occurred less than 48 hours after admission to hospital (definition used by the Public Health Agency [PHA]) and one case is classified as healthcare-associated as it occurred more than 48 hours after admission. As such, the reduction target set has been exceeded and cannot now be achieved.

As of 27th February 2019, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin Hospital – 114 days	(Last recorded case was in Ward 42)
South West Acute Hospital (SWAH) – 1110 days	(Last recorded case was in Ward 8)
Tyrone County Hospital/ Omagh Hospital & Primary Care Complex (OHPCC) – 1499 days	(Last recorded case was in the Rehab Unit)

Current *C. difficile* Performance

So far this year 57 cases of *C. difficile* have been reported. 30 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 PHA). However, this is not always an accurate predictor of being healthcare-associated. The remainder (27) are categorised as community-acquired as the patients presented with symptoms within a 72 hour period after admission.

Current GNB Performance

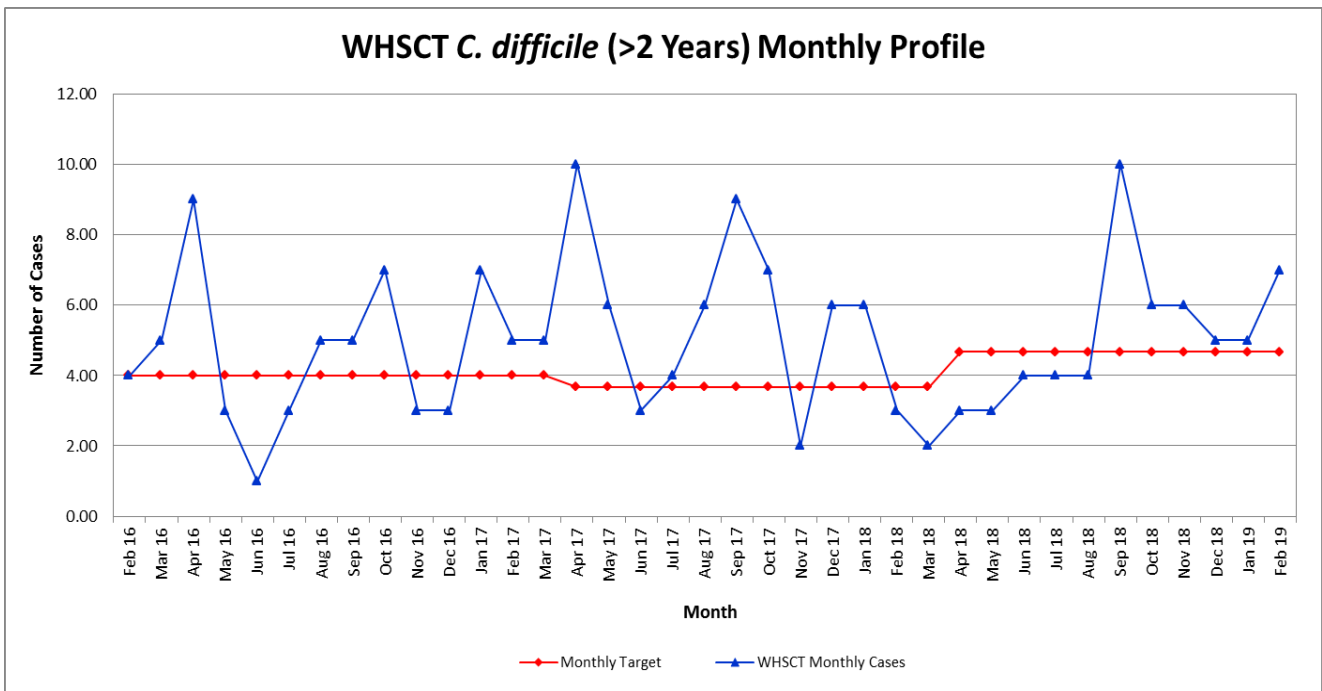
As of 27th February 2019, 40 healthcare-associated GNB cases have been reported.

Therefore, the Trust is currently on track to meet the target, with a cumulative reduction of 12.72%.

2. C. difficile Performance

The 2018/19 target for *C. difficile* (\geq two years) is 56 cases, which equates to a reduction of 12.5% on the baseline figure of 2017/18 (64 cases).

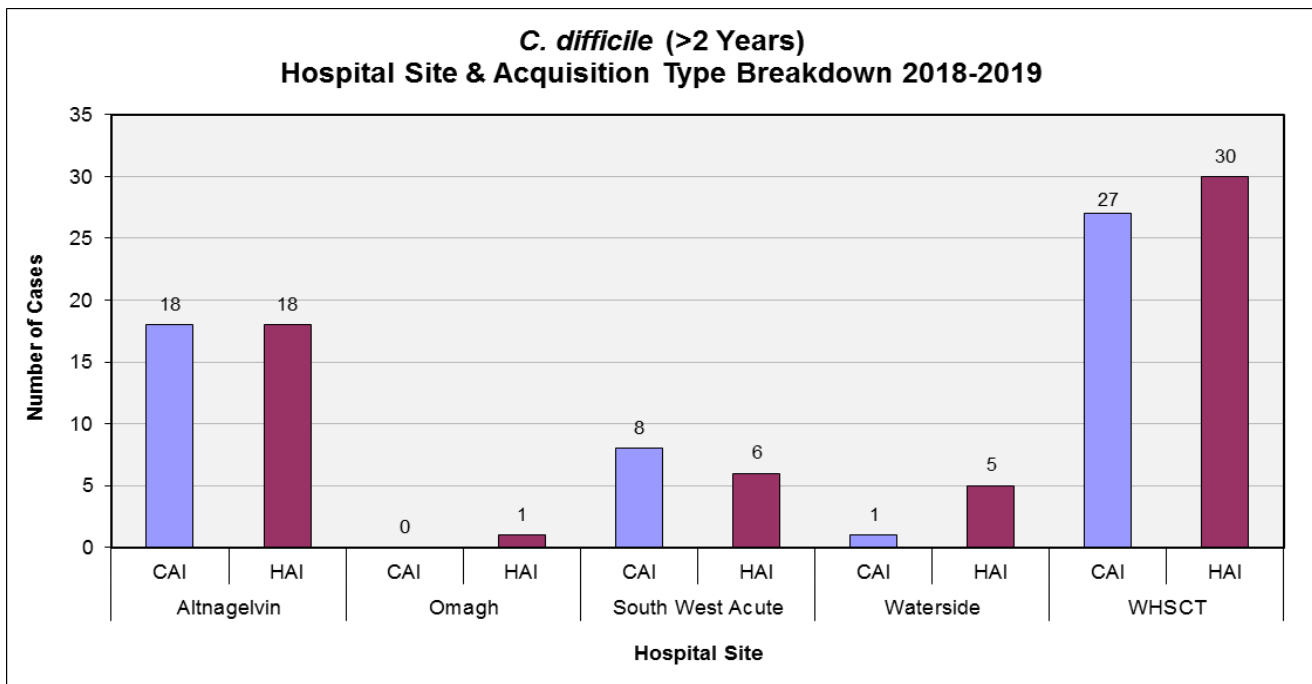
As of 27th February 2019, 57 cases have been reported, with 27 of those being categorised as community-associated. Although the Trust is currently recording a cumulative decrease of 2.85% compared to 2017/18 (comprising a decrease in healthcare-associated infection cases of 9.09% versus an increase in community-acquired infection cases of 5.18%), the reduction target set has been exceeded and cannot now be achieved.



* The value for Feb 19 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



A breakdown of the healthcare-associated cases by ward is given in the table below.

Hospital	Ward/ Department	Number of Cases
Altnagelvin	Ward 1	2
	Ward 2 TOU	2
	Ward 3	2
	Ward 5 EOU	1
	Ward 8 AHAN	1
	Ward 20	3
	Ward 31	1
	Ward 32 ESU	2
	Ward 42	1
	Ward 50	2
	ICU	1
SWAH	Ward 2	3
	Ward 6	2
	Ward 9	1
OHPCC	Palliative Care	1
Waterside	Ward 1	2
	Ward 4	3

Since the last Report to Trust Board, which contained figures as at 24th January 2019, there have been nine new cases of *C. difficile* (breakdown below). RCAs are pending for two of the HAI cases. The third HAI case was already RCA'd in relation to a previous positive episode, so a second RCA is not required.

9 *C. difficile* cases

- 6 CAI (1 of these was a previous positive CAI case and 1 was a previous positive HAI case*)
- 3 HAI (1 of these was a previous positive HAI case*)

* Previously positive *C. difficile* cases that are re-tested 28 or more days after the initial positive episode are classed as new cases and must be reported to the PHA as such.

Preventable/ Non-Preventable

Since the beginning of April 2018 a total of 31 RCAs have been conducted regarding *C. difficile*. The RCAs determined that five of the cases were preventable and 26 were non-preventable.

3. Legionella

Water testing continues throughout key Trust owned facilities. A range of mitigating actions are in place, ranging from increased flushing, chlorination and placement of PAL filters to the removal of dead legs and replacement of pipework.

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 Interserve 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.

Nucleus Building, Altnagelvin

Although progress has been made on the reduction of positive Legionella water sampling in the Nucleus Building, Altnagelvin, it continues to be a challenge to manage by normal water safety measures. Work is to commence on the new cold water storage tanks in February 2019, with the tender for decentralisation of the hot water supply advertised mid-February 2019.

Tower Block, Altnagelvin

Ward 1 and Ward 3 in the Tower Block, Altnagelvin, have moved/ are moving to the new North Wing and Ward 7 will be moving to Ward 4. Once these areas become vacant, flushing of the water outlets will be required until contractors commence refurbishment.

Review of Water Sampling Procedures

The Western Trust has been producing a significant amount of information on water sampling and, as a result, is now in a more informed position with regard to the efficacy of its water systems due to historical water sampling data. Following the recent review of Water Sampling Procedures, a risk matrix of all areas in the Trust has been completed showing which areas were clear and the length of time since the facilities last tested positive. A review has been undertaken to establish the frequency of testing required based on the risk assessment of the area and water sampling data; this will reduce sampling in some areas whilst sustaining compliance. Unfortunately, due to financial constraints, this reduction in sampling has not facilitated the re-allocation of resources to improve compliance in others, which was the plan.

Community Facilities

Greenfield Residential Home continues to return sero-group 1 Legionella water results. Flushing regimes have increased to daily and all remedial actions have been carried out. The home is due for refurbishment, which will include an upgrade of the water system.

Trust Water Safety Plan

The Trust Water Safety Plan is currently under review.

Independent Water Safety Audit

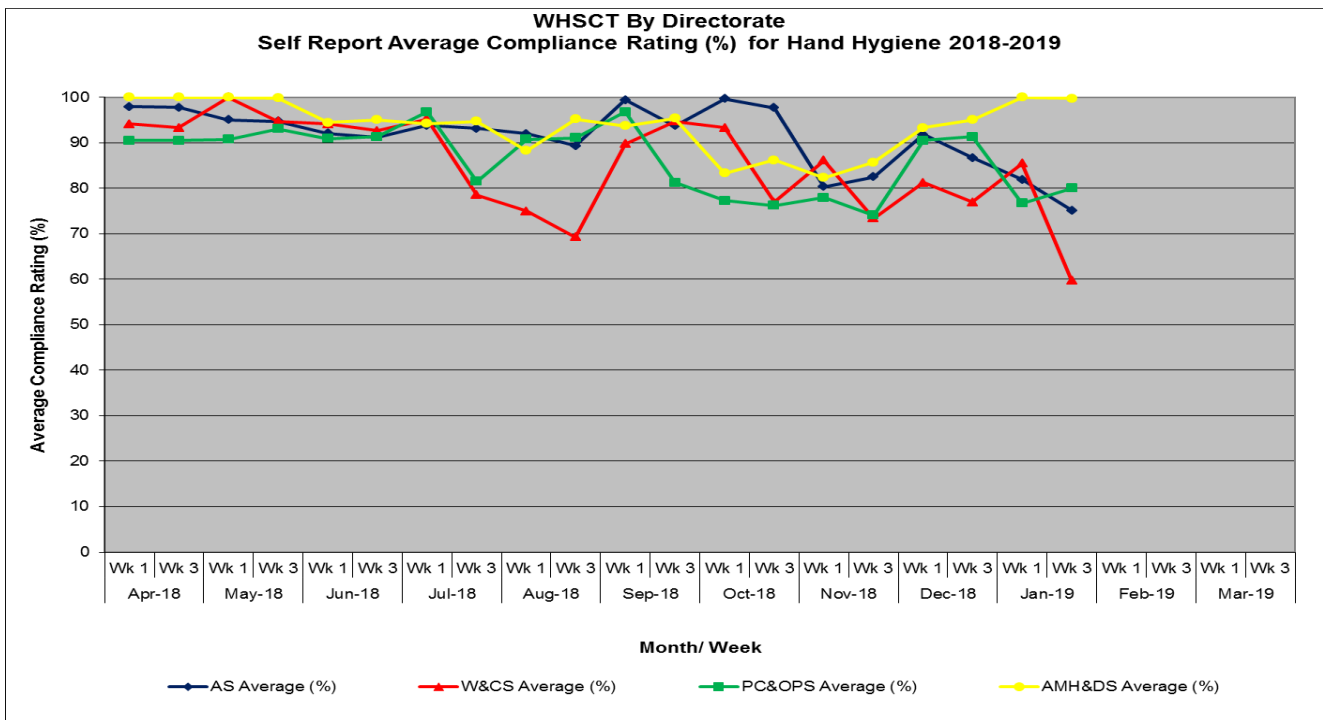
Work continues on outstanding actions, some of which require regional contracts. There are no concerns regarding progress to date.

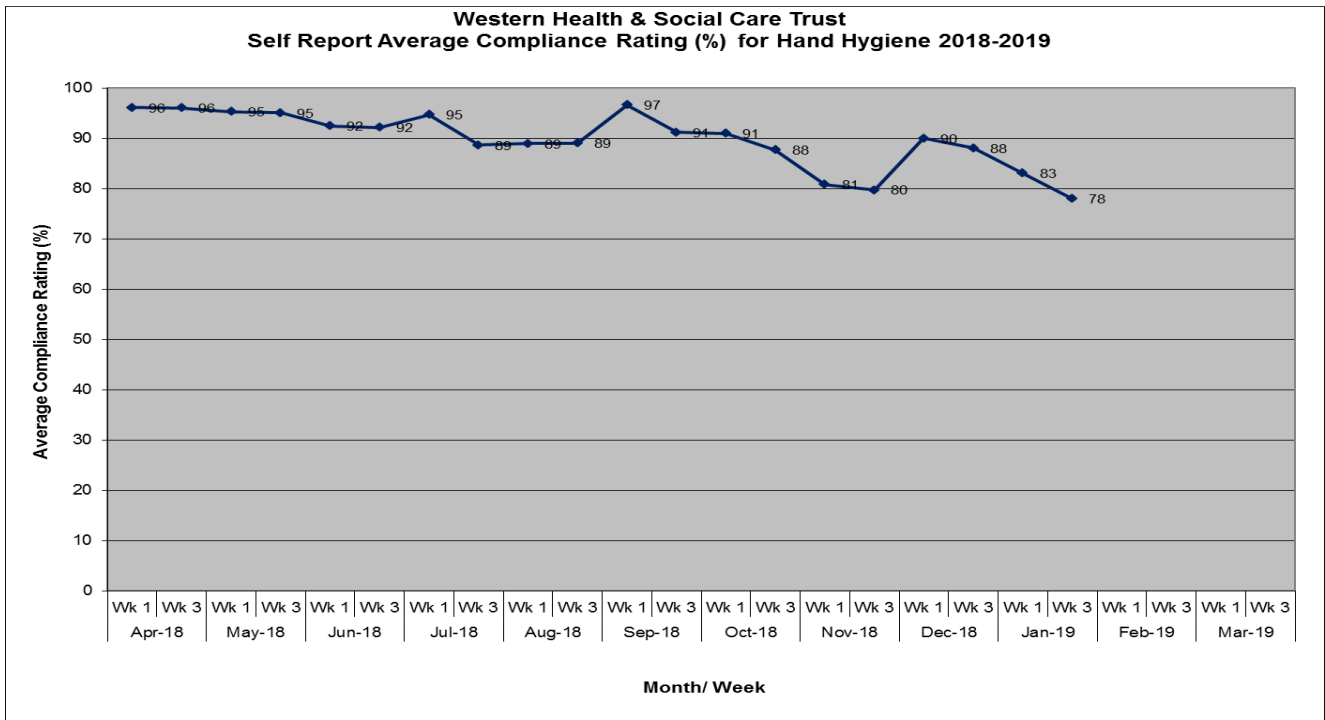
4. Hand Hygiene Compliance

The Trust's overall self-reported hand hygiene scores are 81% when non-submission areas are included. These areas score an automatic 0%. 36 areas out of 193 applicable areas failed to submit scores for January 2019. They are as follows:

- Altnagelvin – Ward 21 Rheumatology, Ward 22 Specialist Medicine, Ward 41 AMU, Ward 42, Pre-Op Assessment, Main Theatre 3, DESU Theatre 1, DESU Theatre 3, DESU Theatre 4, Radiology Department, Fracture Clinic and GUM Clinic
- SWAH – Ward 1 MSAU, Ward 2, Ward 3, Ward 6, Ward 9, Maternity Ward, Children's Ward, Emergency Department, Pre-Op Assessment and Cardiac Investigations
- OHPCC – Palliative Care Ward, Rehabilitation Ward, Outpatients Department, Cardiac Investigations and Pre-Op Assessment
- Tyrone & Fermanagh Hospital – Oak A & B and Ash Villa
- Residential Homes – Greenfield Residential Home and Thackeray Place Residential Home
- Day Care – Creggan Day Centre and Drumhaw Day Centre
- Other Community – The Cottages Children's Respite, Avalon House and Crannog Intensive Treatment Team

Ward 41 AMU, Emergency Department, Altnagelvin Pre-Op Assessment, SWAH Pre-Op Assessment, Thackeray Place Residential Home, Creggan Day Centre, The Cottages Children's Respite, Avalon House and Crannog Intensive Treatment Team also did not submit scores for the previous month.





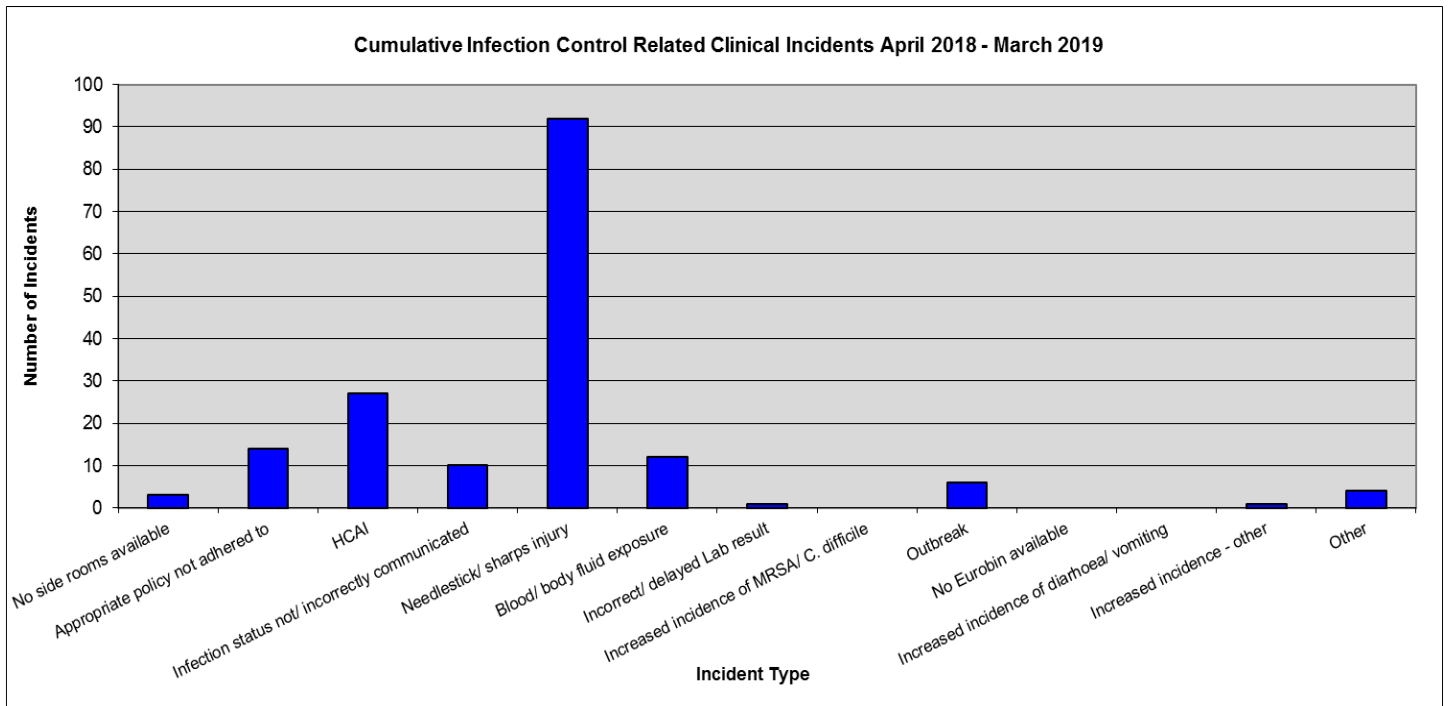
However, when adjusted for non-submission areas, the Trust’s overall self-reported hand hygiene scores improve to 100%.

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.

5. Clinical Incidents Relating to Infection Control

The table below demonstrates the cumulative infection control related clinical incidents reported from April 2018 to date. These clinical incidents are reported and managed by the ward/ department clinical teams.



6. Antimicrobial Management Team

The Antimicrobial Management Team met on 6th February 2019. The following items were discussed:

- **Outpatient Parenteral Antibiotic Therapy (OPAT)** – Jobs have been to advert. Awaiting interviews.
- **Antibiotic Review Kit (ARK)** – Kardex in use. For Medical wards in Altnagelvin the prescription review rate within 72 hours was 88% at baseline; now above 95%. There will be further roll out of audits in Surgery, Altnagelvin, and selected wards in the SWAH.
- **Guidelines** – Several have been passed by the Drugs & Therapeutics Committee regarding general surgical antimicrobial prophylaxis, maternity and gynaecology, and urinary tract infection. NICE guidelines for bronchiectasis and chronic obstructive pulmonary disease have been released. A meeting is scheduled for the Trust to discuss these.