

## Infection Prevention & Control Report to Trust Board

Meeting Date – 9<sup>th</sup> January 2020

### 1. Executive Summary

#### Reduction Targets

The Department of Health for Northern Ireland has issued healthcare-associated infection reduction targets for 2019/20.

For Meticillin-Resistant *Staphylococcus aureus* (MRSA) bacteraemia, the Trust's target is 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 is 56; a reduction of nine cases or 13.85% compared to last year.

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

#### Current *C. difficile* Performance

So far this year 47 cases of *C. difficile* have been reported. 26 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 (21) 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 2019 three MRSA bacteraemia cases have been reported. They are all categorised as community-associated as they occurred less than 48 hours after admission to hospital (definition used by the PHA).

As of 31<sup>st</sup> December 2019, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin Hospital – 421 days	(Last recorded case was in Ward 42)
South West Acute Hospital (SWAH) – 1417 days	(Last recorded case was in Ward 8)
Tyrone County Hospital/ Omagh Hospital & Primary Care Complex – 1806 days	(Last recorded case was in the Rehab Unit)

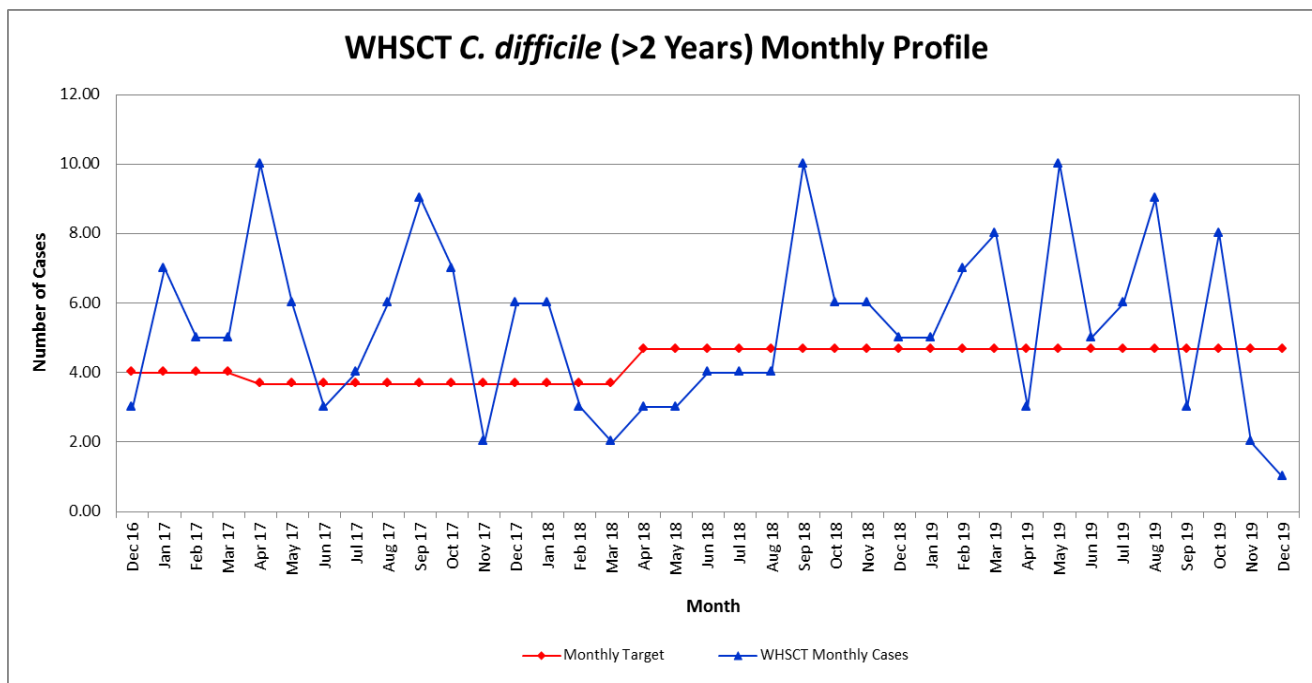
#### Current GNB Performance

As of 31<sup>st</sup> December 2019, 49 healthcare-associated GNB cases have been reported. Therefore, the Trust is currently off profile to meet the target, with a cumulative increase of 33.33%.

## 2. C. difficile Performance

The 2019/20 target for *C. difficile* ( $\geq$  two years) is 56 cases, which equates to a reduction of 13.85% on the baseline figure of 2018/19 (65 cases).

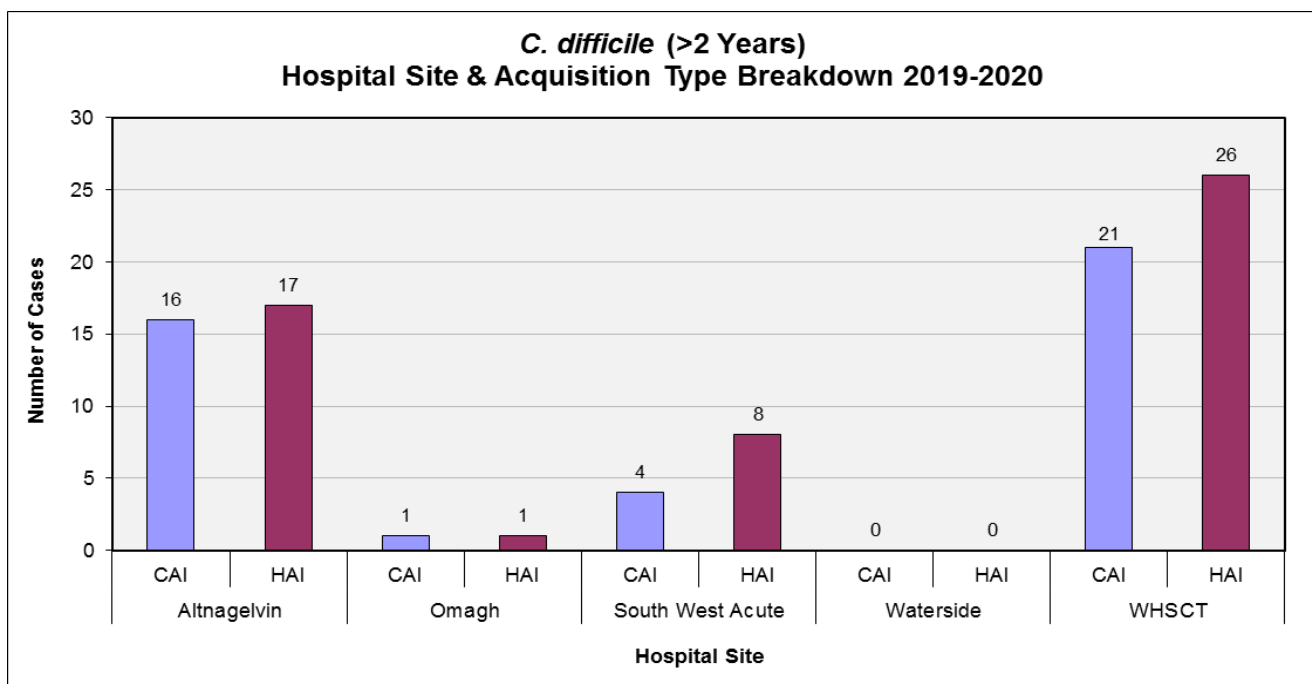
As of 31<sup>st</sup> December 2019, 47 cases have been reported, with 21 of those being categorised as community-associated. Therefore, the Trust is currently off profile, with a cumulative decrease of just 3.59% compared to 2018/19. This comprises a decrease in healthcare-associated infection cases of 0.95% versus a decrease in community-acquired infection cases of 6.67%.



\* The value for Dec 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



Since the last Report to Trust Board, which contained figures as at 26<sup>th</sup> November 2019, there have been two new cases of *C. difficile* (breakdown below). Root cause analyses (RCAs) are required for both of these cases and are currently pending.

2 *C. difficile* cases → 0 CAI  
→ 2 HAI

Preventable/ Non-Preventable

In respect of *C. difficile* cases occurring during 2019/20 a total of 28 RCAs have been conducted. The RCAs found that four of the cases were preventable, 19 were non-preventable and five were difficult to determine.

**3. 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
<b>2016/17</b>	0	0	0	0	0	0	0	1	1	1	0	0	3
<b>2017/18</b>	0	1	0	0	1	0	0	1	0	0	0	0	3

<b>2018/19</b>	0	0	1	1	0	0	0	0	0	1	0	0	0	3
<b>2019/20</b>	0	0	0	2	0	0	0	0	1	0 <sup>†</sup>				3 <sup>†</sup>

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

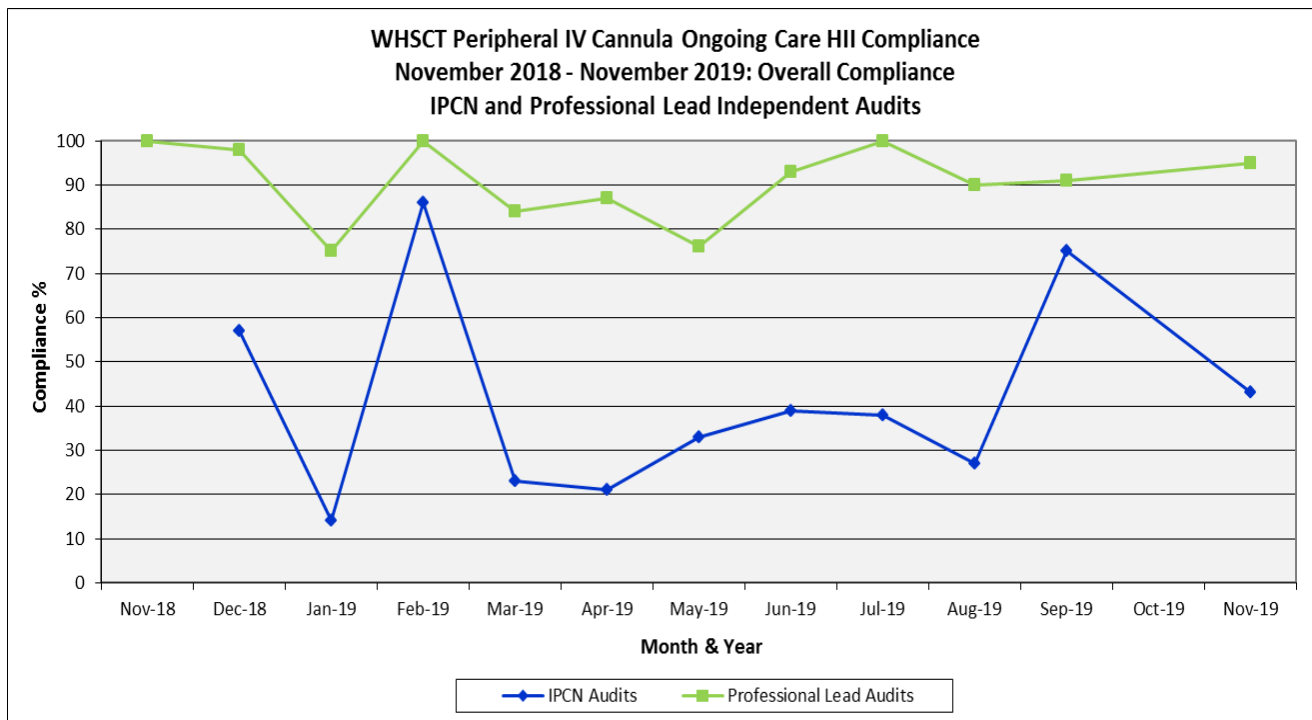
† These values are subject to change as the report was compiled prior to the end of the month/ year.

Since the beginning of April 2019 three *Pseudomonas* cases have been reported. All are categorised as healthcare-associated. There have been no healthcare-associated positive blood cultures in augmented care areas since July 2019.

#### 4. Evidence Based Care Bundle Compliance – Peripheral Intravenous Cannula Ongoing Care

The graph below shows average independent audit scores from November 2018 to November 2019 in both Altnagelvin and the SWAH for peripheral intravenous (IV) cannula ongoing care. From May 2016 the Infection Prevention & Control (IP&C) Team have not undertaken routine independent audit of peripheral line ongoing care due to a range of other enhanced improvement work at ward level. The burden to oversee improvement and compliance with standards rests with the Ward Managers and Professional Leads in each area, as a wide range of education and enhanced support has been provided. The IP&C Team continue to work with ward based teams on aseptic non-touch technique (ANTT) as part of ward based support.

Assurance regarding practice of peripheral IV cannula ongoing care is carried out by the IP&C Team as part of the RCA of healthcare-associated bacteraemias. Compliance and improvement plans are discussed at the Assistant Director of Nursing’s Safe & Effective Care Meetings. Consistent compliance with the peripheral IV cannula high impact intervention (HII) care bundle remains a challenge.



## **5. Aseptic Non-Touch Technique (ANTT)**

The concept of ANTT for clinical procedures is now much more readily understood by staff and practice has improved, although audits carried out by the IP&C Team are not yet at the stage of showing consistent compliance.

Core Trainers for ANTT are in place across many areas of the Trust. It is the responsibility of these staff to cascade the training received to colleagues in their wards/ departments. In order to build further capacity into the system, training sessions took place for new staff nurse registrants at Altnagelvin in October 2019 and new Core Trainers at Altnagelvin, SWAH and Omagh in May and June 2019.

The training of medical staff remains a challenge. The IP&C Team currently input to the FY0 Assistantship Programme in March/ April each year and FY1 Workshadowing in July; although attendance is on a voluntary basis by FY1 staff. Four such sessions took place during 2019. Four specific sessions also took place for Anaesthetists in Altnagelvin.

The number of staff who received ANTT training in 2019 is 192.

The IP&C Team are currently involved regionally in the development of a training programme to support the learning of junior doctors in aseptic principles and device management. This will create a standardised approach to training across the region; combining e-learning with observations of practice. The e-learning set will also be used by a wide range of other disciplines across the region to help develop competence in such procedures and the management of devices. The new training programme is due to be launched in the first half of 2020.