

Infection Prevention & Control Report to Trust Board

Meeting Date – 3rd October 2019

1. Executive Summary

Reduction Targets

The Department of Health for Northern Ireland has not yet issued new healthcare-associated infection reduction targets for 2019/20. 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*.

Current *C. difficile* Performance

So far this year 34 cases of *C. difficile* have been reported. 18 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 (16) 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 two MRSA bacteraemia cases have been reported. They are both categorised as community-associated as they occurred less than 48 hours after admission to hospital (definition used by the PHA).

As of 25th September 2019, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin Hospital – 324 days	(Last recorded case was in Ward 42)
South West Acute Hospital (SWAH) – 1320 days	(Last recorded case was in Ward 8)
Tyrone County Hospital/ Omagh Hospital & Primary Care Complex (OHPCC) – 1709 days	(Last recorded case was in the Rehab Unit)

Current GNB Performance

As of 25th September 2019, 35 healthcare-associated GNB cases have been reported.

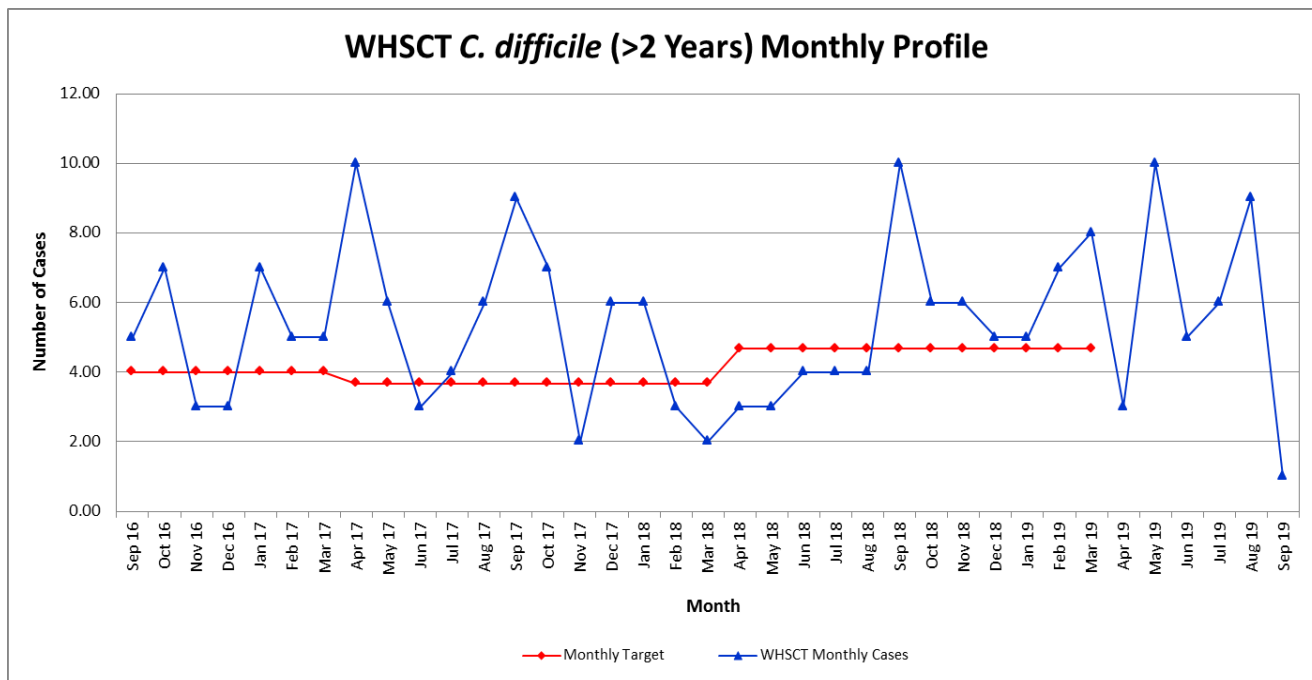
Pseudomonas aeruginosa in the Renal Unit, Altnagelvin

As part of routine water testing the Trust has identified positive results for *Pseudomonas aeruginosa* in the Renal Unit on the Altnagelvin Hospital site. The Trust is working in conjunction with the PHA in managing the issue. Remedial works have been put in place which renders the water safe to use.

There has been no impact to services and this does not affect the water used for dialysis. No patients have come to harm because of this issue. Further water sampling has been carried out, with results expected by 30th September 2019.

2. C. difficile Performance

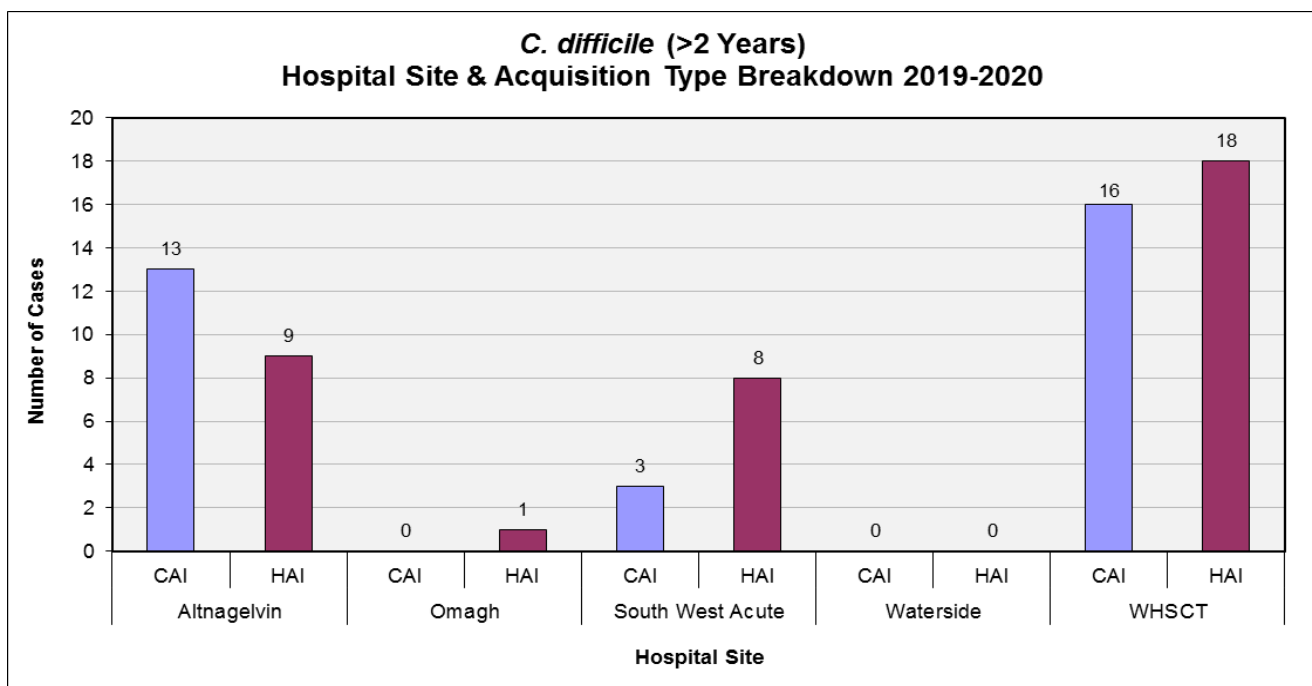
The new 2019/20 reduction target for *C. difficile* (≥ 2 years) has not yet been issued. To date the Trust has reported 34 cases, with 16 of those being categorised as community-associated.



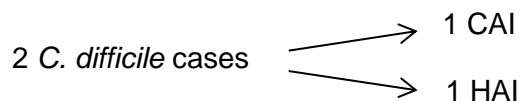
* The value for Sep 19 is subject to change as the report was compiled prior to the end of the month.

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 28th August 2019, there have been two new cases of *C. difficile* (breakdown below). A root cause analysis (RCA) is required for one of these cases (the HAI one) and is currently pending.



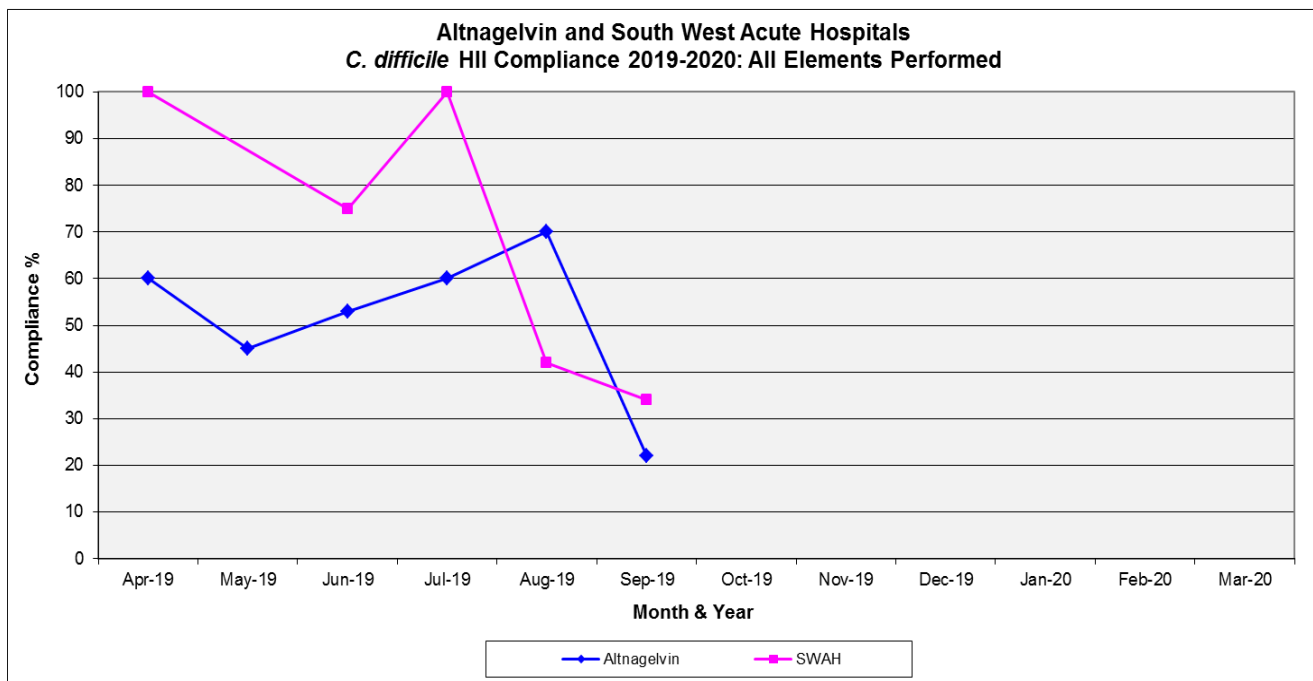
Preventable/ Non-Preventable

In respect of *C. difficile* cases occurring during 2019/20 a total of 19 RCAs have been conducted. The RCAs found that two of the cases were preventable, 14 were non-preventable and three were difficult to determine.

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. The findings indicate issues around antibiotic prescribing, hand hygiene and environmental decontamination.

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



3. Hand Hygiene Compliance

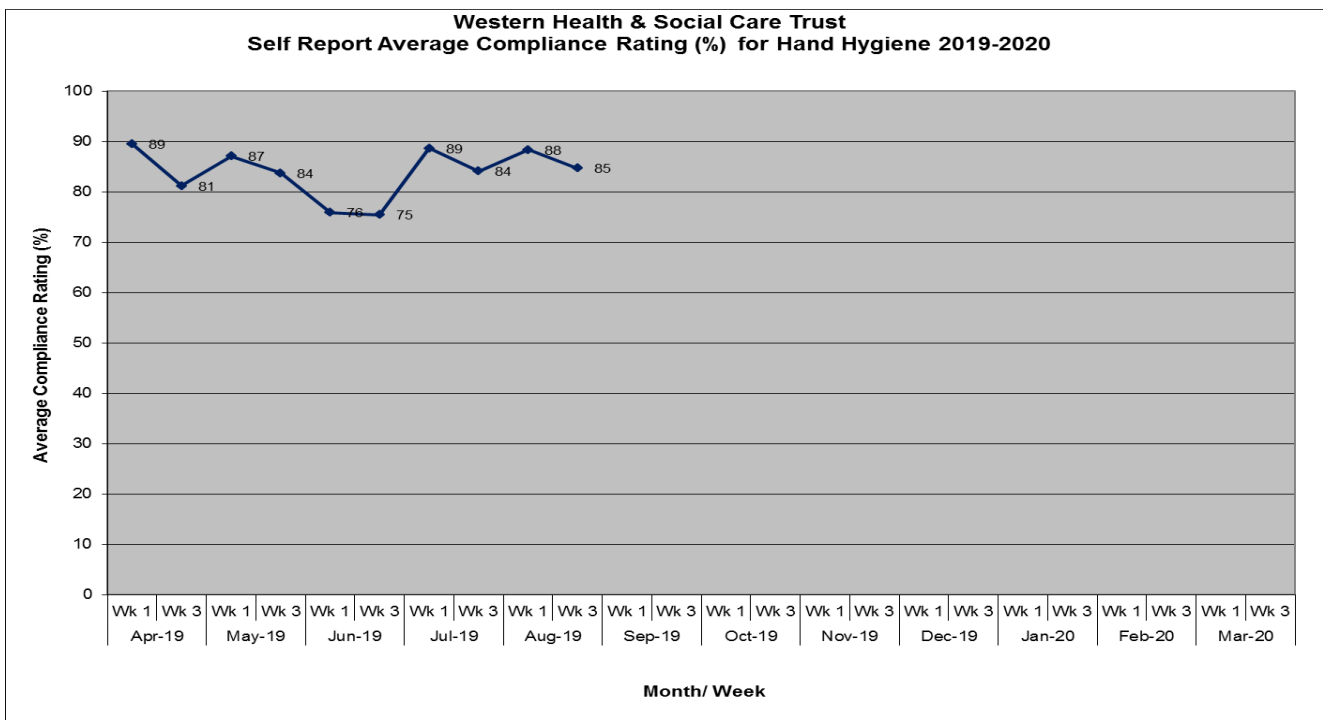
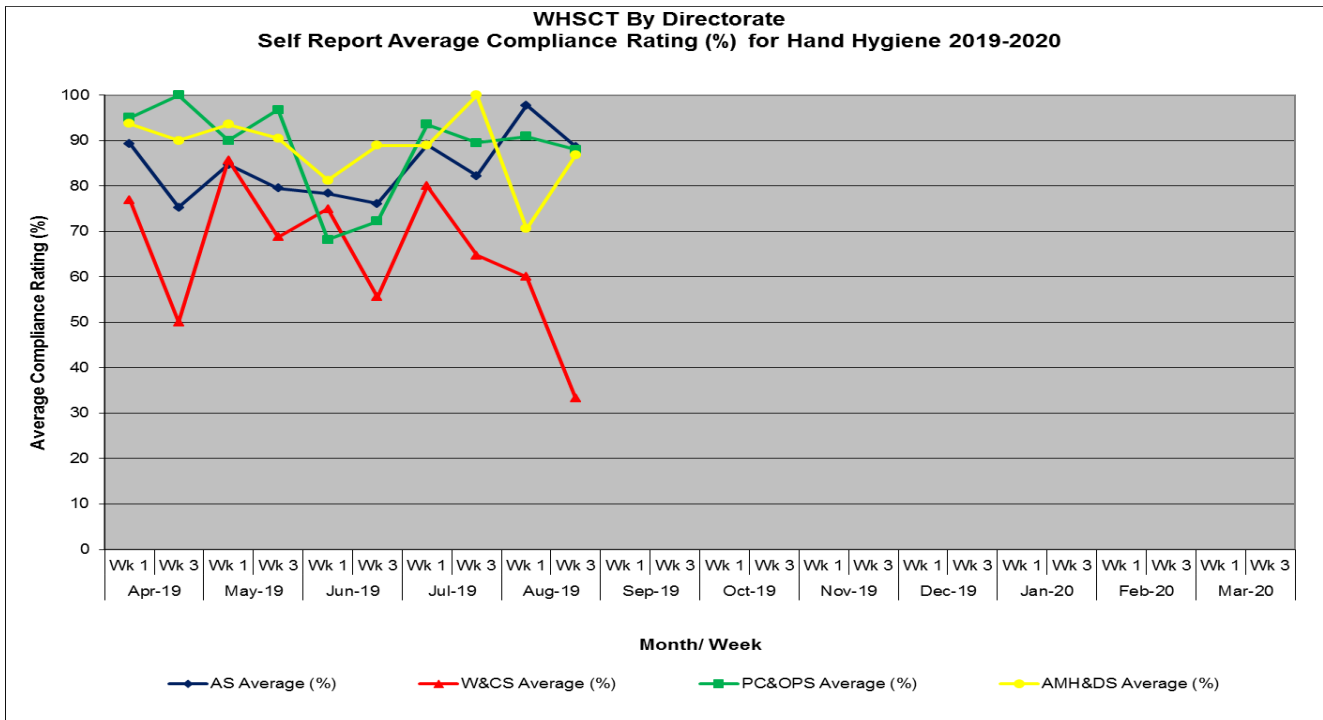
The Trust’s overall self-reported hand hygiene scores are 87% when non-submission areas are included. These areas score an automatic 0%. 22 areas out of 194 applicable areas failed to submit scores for August 2019. They are as follows:

Altnagelvin – OPALS South Wing Clinics, Main Theatre 3, Main Theatre 4, GUM Clinic and Breast Unit

SWAH – Ward 6, Ward 8, Women’s Health Centre and Cardiac Investigations

OHPCC – Rehabilitation Unit and Outpatients Department
Tyrone & Fermanagh Hospital – Elm Villa
Grangewood – Carrick and Evisk
Day Care – Glen Oaks, Drumcoo Day Centre, Gortin Day Centre, Foyleville Day Centre and Strabane Day Centre
Other Community – The Cottages Children’s Respite, Avalon House and Crannog Intensive Treatment Team

Main Theatre 4, GUM Clinic, Women’s Health Centre, Cardiac Investigations, Carrick, Evisk, Gortin 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%.

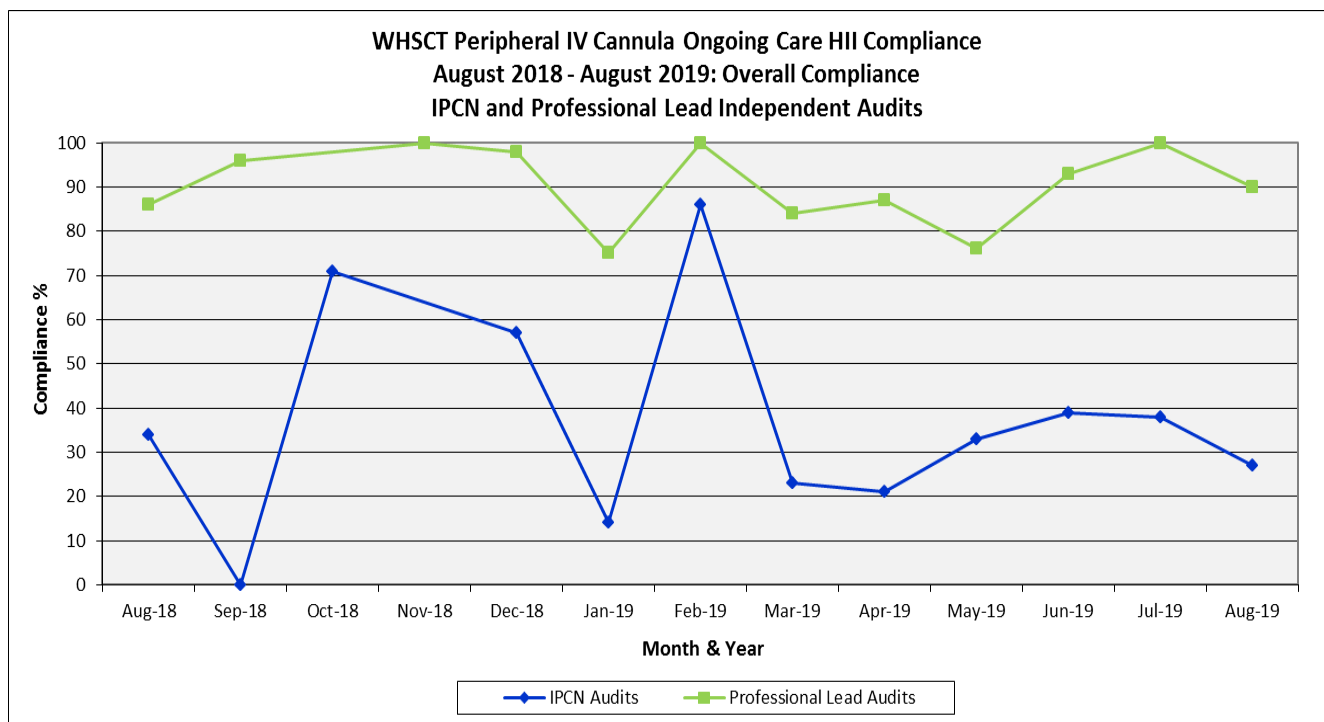
The hand hygiene dashboard has been circulated to Directors for action through their governance arrangements.

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

4. Evidence Based Care Bundle Compliance – Peripheral Intravenous Cannula Insertion Actions/ Ongoing Care

The graphs below show average independent audit scores from August 2018 to August 2019 in both Altnagelvin and the SWAH for peripheral intravenous (IV) cannula insertion actions and ongoing care. From May 2016 the 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 as part of ward based support.

Assurance regarding practice of peripheral IV cannula insertion and/ or 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. New and Updated Infection Prevention & Control Guidance

The following guidance was approved by the Chief Executive HCAI Accountability Forum in September 2019. One was a newly developed guideline for the Trust, while the other three were updates of existing documents.

New:

- Guideline on the Safe Use of Fans (Bladed and Bladeless) in the Clinical Environment

Updated:

- Guidelines for the Prevention and Control of Infection Related to Urinary Catheter Care
- Guidelines for the Management of Patients with Suspected/ Confirmed Cytomegalovirus (CMV) within a Healthcare Setting
- Infection Prevention & Control Standard Precautions Policy

6. Critical Care Device-Associated Infection Surveillance

Critical care device-associated infection surveillance commenced in June 2011. The most recent infection recorded was a ventilator-associated pneumonia (VAP) in ICU, Altnagelvin, in October 2018. This was the first device-related infection to have occurred in the Trust since September 2016. However, the ICU clinical team subsequently agreed they could not definitely diagnose a VAP in this instance. As such, a request has been made for the PHA and Critical Care Network NI to review the case and remove it from the figures. The outcome of this appeal is still awaited. If removal is confirmed, future surveillance reports will be amended to reflect this change.

Results, as of August 2019, are shown in the table below.

	Date of Last Recorded Case in Hospital		Hospital Rolling Average Infection Rate Per 1000 Device Utilisation Days		NI Rolling Average Infection Rate Per 1000 Device Utilisation Days
	Altnagelvin	SWAH	Altnagelvin	SWAH	
Ventilator-Associated Pneumonia	11/10/2018	21/09/2016	0.88	0.00	1.12
Catheter-Associated Urinary Tract Infection	Zero to date	23/07/2011	0.00	0.00	0.07
Central Line Associated Blood Stream Infection	Zero to date	11/03/2012	0.00	0.00	0.38