

Infection Prevention & Control Report to Trust Board

Meeting Date – 6th May 2021

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. 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.

Reduction Targets 2020/21

Due to the COVID-19 pandemic the Department of Health for Northern Ireland did not issue reduction targets for healthcare-associated infections in 2020/21. 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*.

C. difficile Performance 2020/21

A total of 66 cases of *C. difficile* were reported in 2020/21; three more than in 2019/20. 31 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 (35) were categorised as community-acquired as the patients presented with symptoms within a 72 hour period after admission.

MRSA Bacteraemia Performance 2020/21

A total of seven MRSA bacteraemia cases were reported in 2020/21. Six were categorised as community-associated as they occurred less than 48 hours after admission to hospital and one was categorised as healthcare-associated as it occurred more than 48 hours after admission to hospital (definition used by the PHA).

GNB Performance 2020/21

A total of 39 healthcare-associated GNB cases were reported during 2020/21. That is 20 fewer cases than in the previous year (59); a reduction of 33.9%.

Current GNB Performance

The new reduction target for 2021/22 has not yet been issued. As of 28th April 2021, 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, although the number has greatly reduced over the last few weeks. The IP&C Team and/ or Occupational Health are supporting the management of these incidents as applicable. Incident meetings are taking place and all IP&C measures have been instigated. Recently affected areas include:

NB: Closure of an outbreak is deemed to be 28 days from the last positive case.

Ward/ Department/ Facility	Date of Commencement	Date of Closure	People Affected
Ward 3, Waterside Hospital	10/02/2021	25/03/2021	Patients & Staff
Benbradagh Day Centre, Limavady	24/02/2021	18/03/2021	Staff
Ward 50, Altnagelvin Hospital	15/03/2021	21/04/2021	Patients & Staff
Ewish Ward, Grangewood Hospital	23/03/2021	Ongoing	Patients
Ward 6, South West Acute Hospital (SWAH)	09/04/2021	Ongoing	Patients & Staff

The key learning themes arising from these outbreaks are shared for wider learning across the Trust via the Working Safely Together Daily Safety Messages 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 has reduced significantly in recent weeks and there are currently no affected homes within the Western Trust's geography.

Support to these homes requires an on-site visit by a Senior IP&C Nurse. 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 will, therefore, continue to be risk assessed as the need occurs and will be organised as capacity allows.

COVID-19 Training

The IP&C Team launched a programme of COVID-19 Training sessions commencing in mid-September 2020. Originally the training was delivered through a combination of face-to-face and virtual sessions. The face-to-face sessions were restricted to small groups in order to comply with social distancing requirements. The training is now fully virtual.

As of 28th April 2021, 54 sessions have taken place and a total of 1474 staff have attended. That is 13.46% of the total number of staff who require training (approximately 10,953 people).

A further five sessions are planned up until the end of June 2021. There was initially very high demand for this training, with many sessions being fully booked. Over the last few weeks, however, demand has reduced. This may be a reflection of the increased workload on the wards and the limited capacity to release staff to attend training.

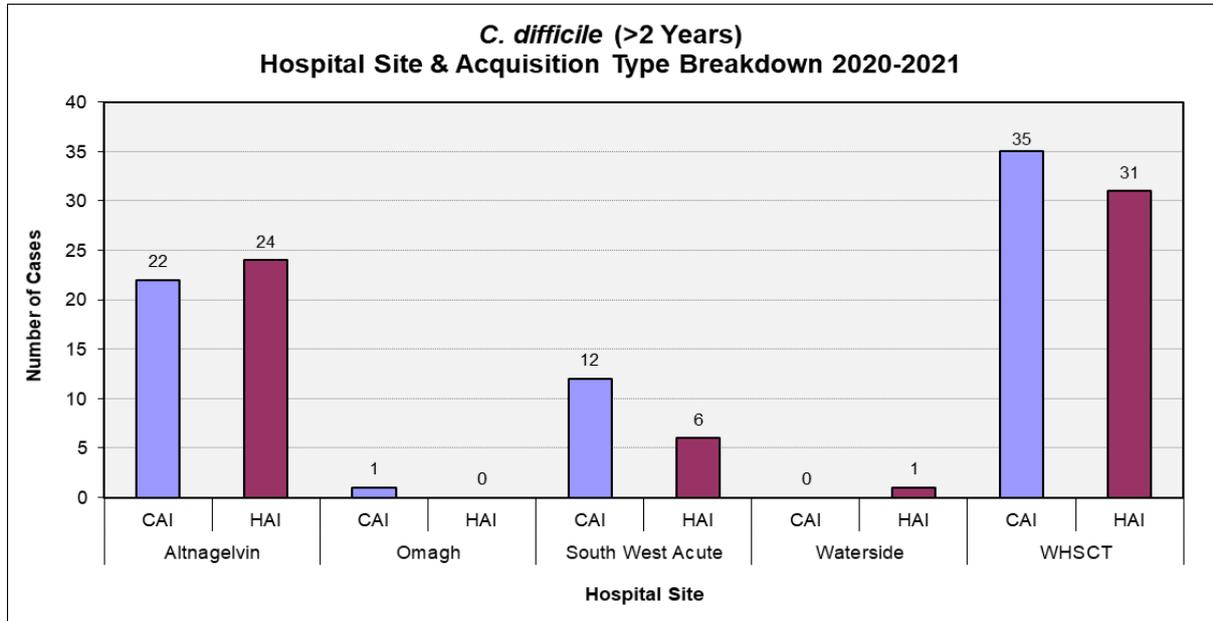
3. C. difficile Performance

There was no reduction target set for *C. difficile* (\geq two years) in 2020/21. In the year to the end of March 2021 the Trust reported 66 cases, with 35 of those being categorised as community-

associated. That is an overall increase of 4.76% compared to the previous year (63 cases) and comprises a decrease in healthcare-associated infection cases of 16.22% versus an increase in community-associated infection cases of 34.62%.

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

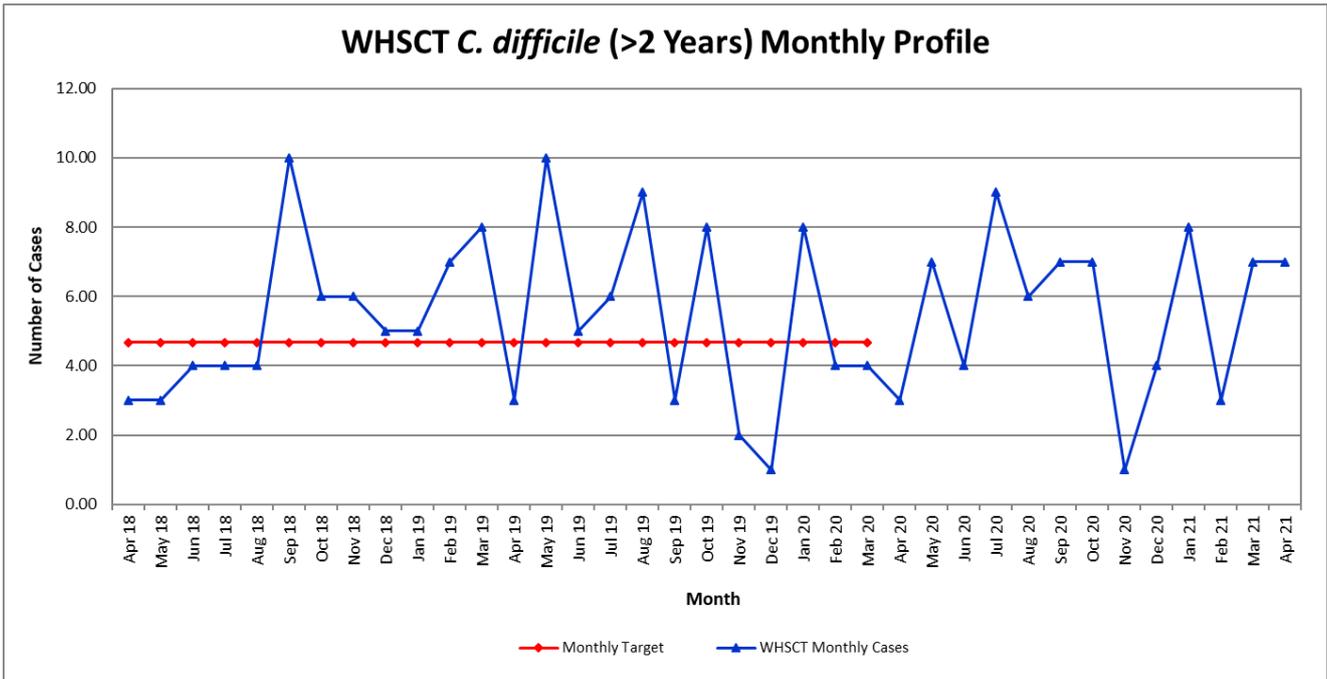


Preventable/ Non-Preventable

In respect of *C. difficile* cases occurring during 2020/21 a total of 13 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, 12 were non-preventable and one was difficult to determine.

The new reduction target for 2021/22 has not yet been issued.

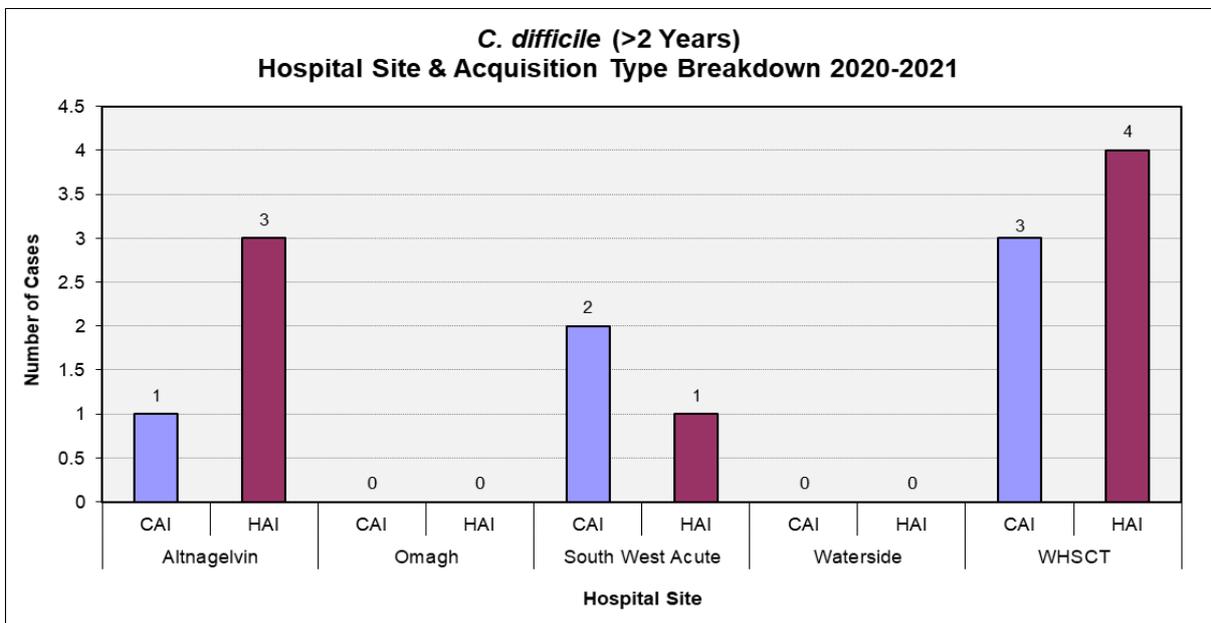
Since the beginning of April 2021 seven new cases have been reported, with three of those being categorised as community-associated.



* The value for Apr 21 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.

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PIRs are currently pending for all seven of these cases.

4. S. aureus Bacteraemia Performance

MRSA Bacteraemia

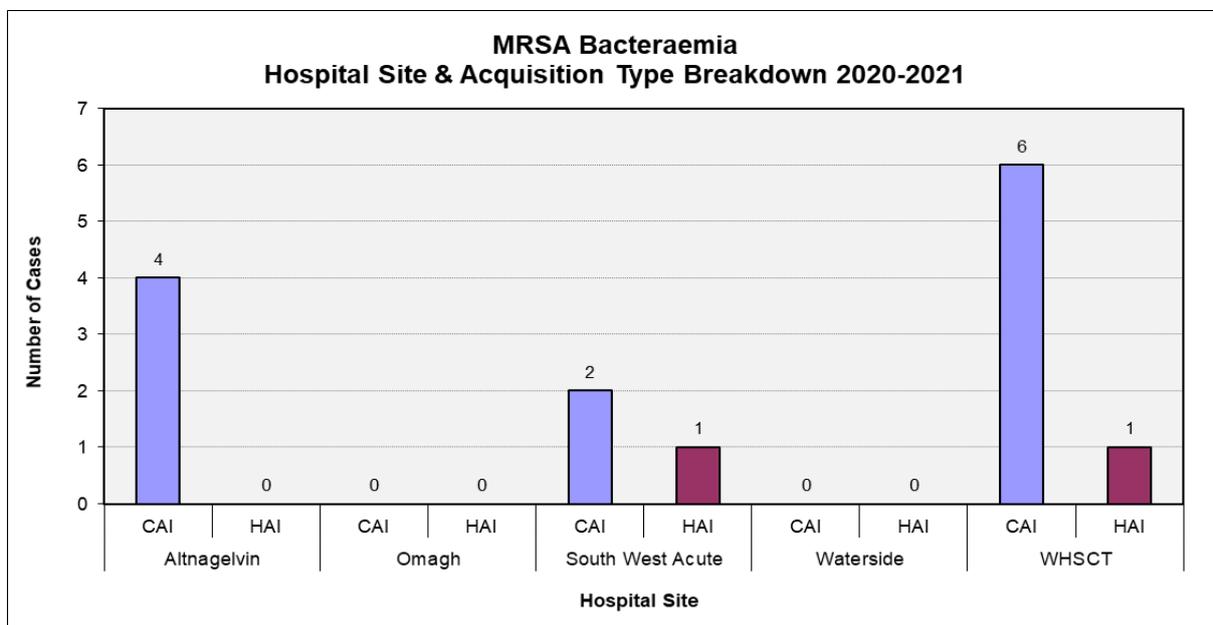
No reduction target was set for MRSA bacteraemia in 2020/21. In the year to the end of March 2021 seven MRSA bacteraemias were reported. That is three cases more than in the previous

year (four); an increase of 75%. It should be noted that the proportion of those cases which can be attributed to the Trust was one. The other six cases were categorised as community-associated.

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:
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HAI Hospital-associated infection

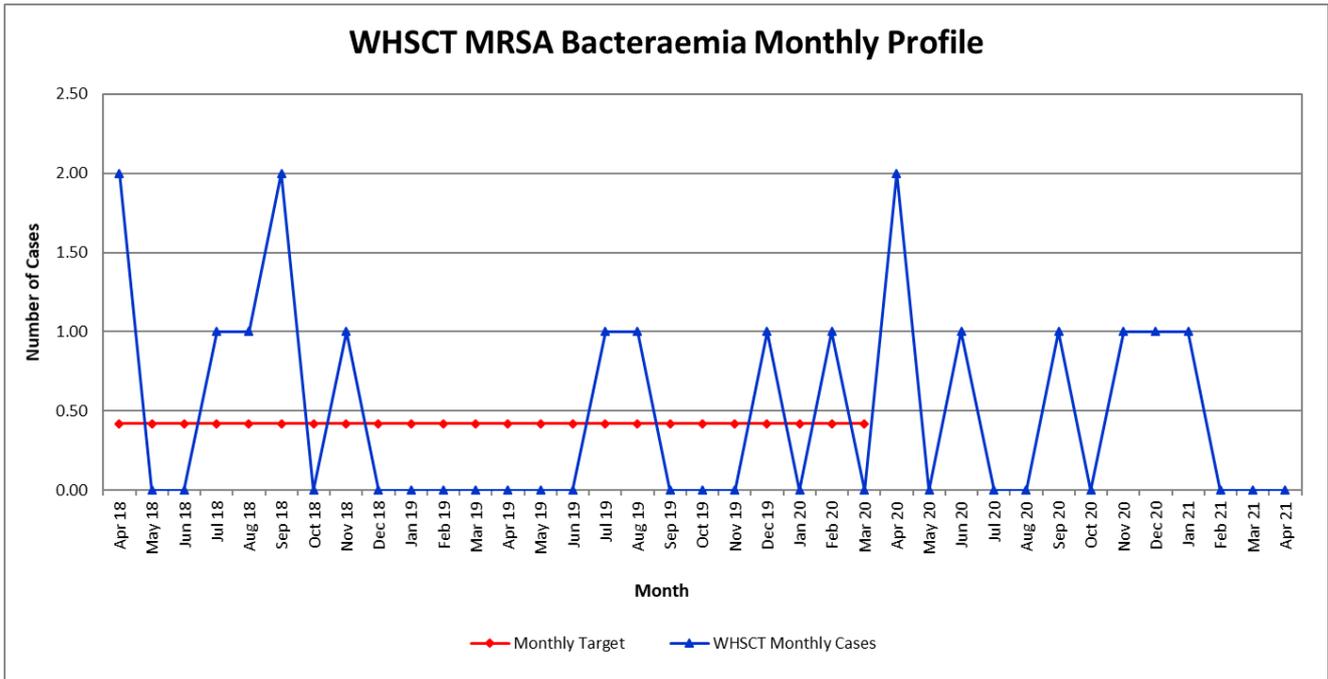


The new reduction target for 2021/22 has not yet been issued.

Since the beginning of April 2021 no new cases have been reported.

As of 28th April 2021, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin – 905 days	(Last recorded case was in Ward 42)
SWAH – 318 days	(Last recorded case was in Ward 8)
Tyrone County Hospital/ Omagh Hospital & Primary Care Complex (OHPCC) – 2290 days	(Last recorded case was in the Rehab Unit)



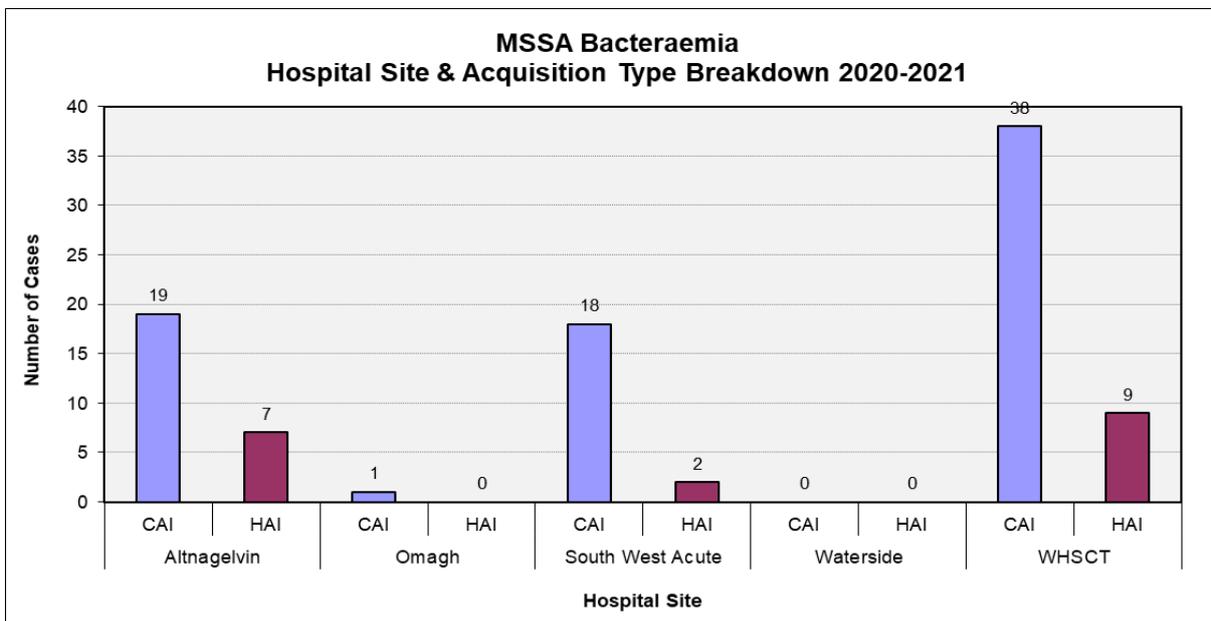
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Meticillin-Sensitive Staphylococcus aureus (MSSA) Bacteraemia

There was no reduction target associated with MSSA bacteraemia for 2020/21, 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 2021 a total of 47 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

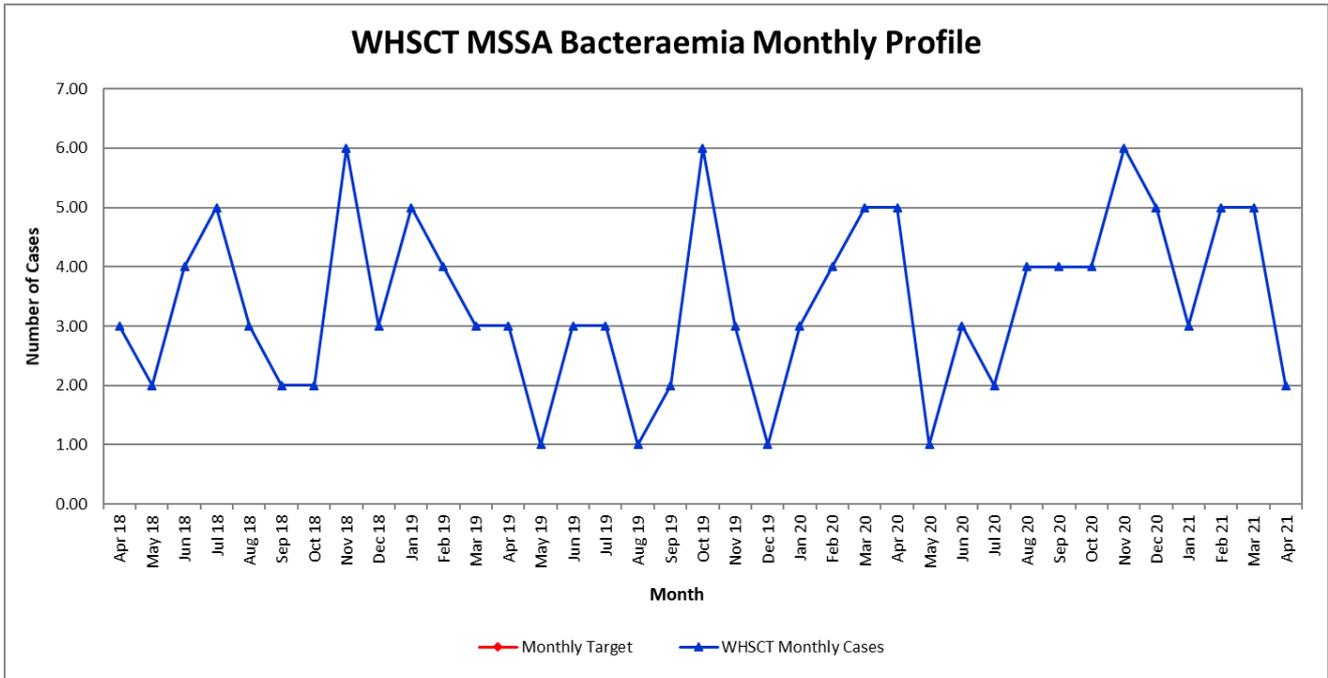


Since the beginning of April 2021 two new cases have been reported. Both cases are categorised as community-associated.

As of 28th April 2021, the total number of days since the last Trust hospital-associated MSSA bacteraemia is as follows:

Altnagelvin – 85 days
SWAH – 175 days
OHPCC – 1290 days

(Last recorded case was in Ward 50)
(Last recorded case was in Ward 2)
(Last recorded case was in the Rehab Unit)



* The value for Apr 21 is subject to change as the report was compiled prior to the end of the month.

5. 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
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	2	0	0	0	0	1	0	1	0	4

2021/22	0 [†]												0 [†]
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* 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 2021 no new *Pseudomonas* cases have been reported. There have been no healthcare-associated positive blood cultures in augmented care areas since December 2020.

6. Critical Care Device-Associated Infection Surveillance

Critical care device-associated infection surveillance commenced in June 2011. There have been no infections in the Trust for more than two years. The most recent infection recorded was a ventilator-associated pneumonia, which occurred in ICU, Altnagelvin, in October 2018.

Results, as of March 2021, 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	0.00	0.00	0.89
Catheter-Associated Urinary Tract Infection	Zero to date	23/07/2011	0.00	0.00	0.30
Central Line Associated Blood Stream Infection	Zero to date	11/03/2012	0.00	0.00	1.30