

Infection Prevention & Control Report to Trust Board

Meeting Date – 6th December 2018

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 28th November 2018, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

Altnagelvin Hospital – 23 days	(Last recorded case was in Ward 42)
South West Acute Hospital (SWAH) – 1019 days	(Last recorded case was in Ward 8)
Tyrone County Hospital/ Omagh Hospital & Primary Care Complex (OHPCC) – 1408 days	(Last recorded case was in the Rehab Unit)

A root cause analysis (RCA) was carried out on the most recent hospital-associated MRSA bacteraemia. The RCA Review Team deemed that the MRSA bacteraemia was preventable with the source of infection being either the poor management of a urinary catheter or the insertion of a peripheral vascular disease on a known previously positive patient who did not have decolonisation therapy as per the Trust guidelines. The patient was receiving end of life care and passed away 48 hours following the blood culture being obtained. Learning has been identified by the ward staff and a number of actions are to be implemented. The case will be reviewed at the relevant Mortality and Morbidity meeting.

Current *C. difficile* Performance

So far this year 39 cases of *C. difficile* have been reported. 22 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 (17) are categorised as community-acquired as the patients presented with symptoms within a 72 hour period after admission.

Current GNB Performance

So far this year 32 healthcare-associated GNB cases have been reported. Therefore, the Trust is currently on track to meet the target, with a cumulative reduction of 3.99%.

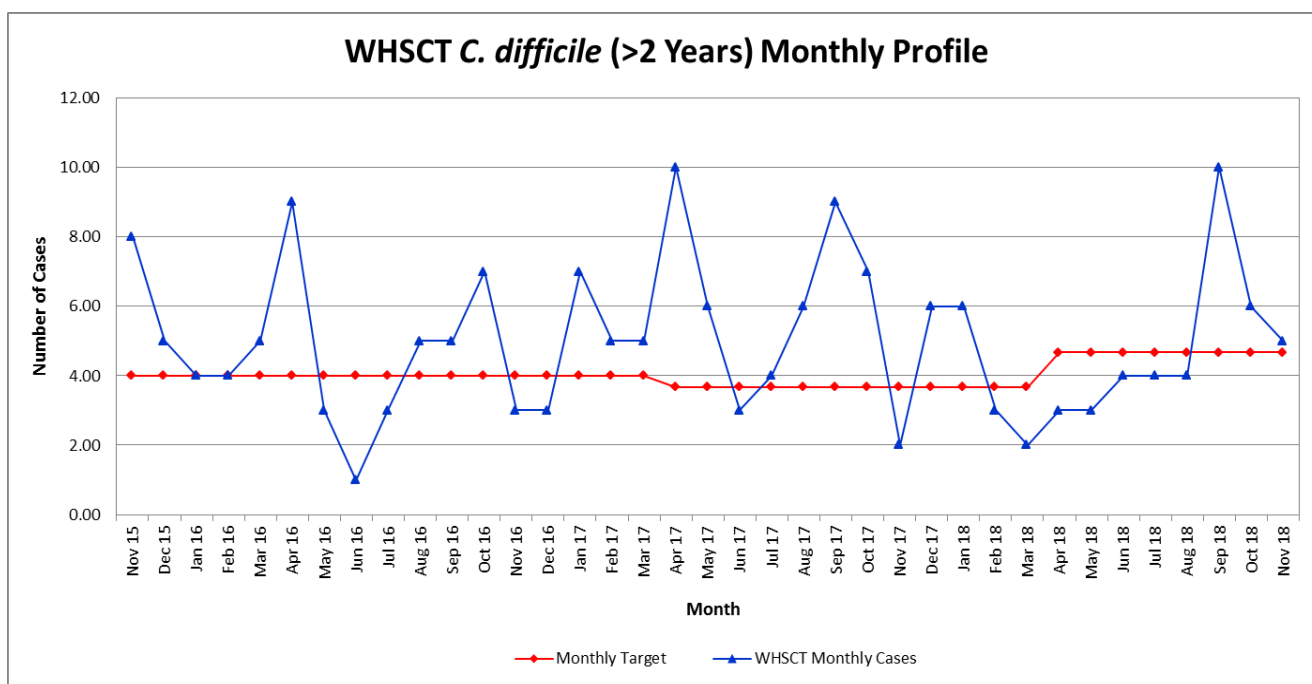
Norovirus Outbreak in Ward 42, Altnagelvin

Ward 42, Altnagelvin, was closed to new admissions for seven days and was partially closed for a further two days due to a confirmed outbreak of Norovirus. A total of fifteen patients and six staff reported symptoms of diarrhoea and/ or vomiting during the outbreak.

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).

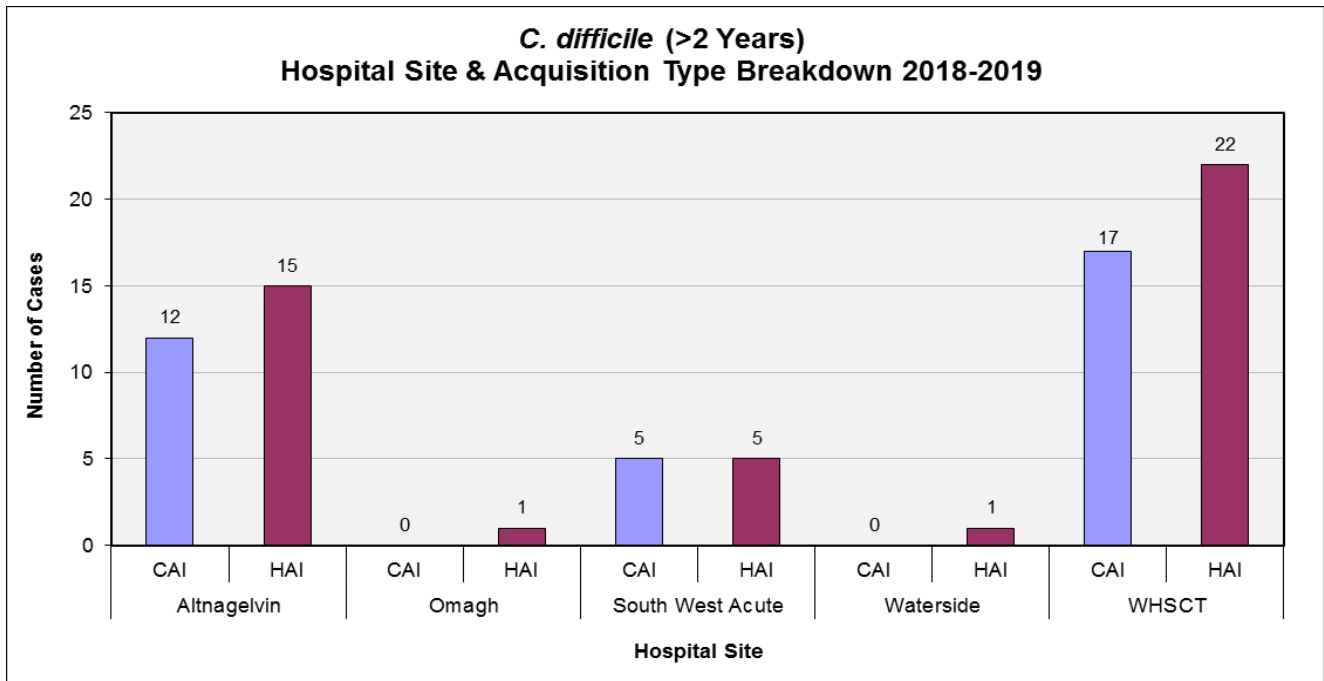
As of 28th November 2018, 39 cases have been reported, with 17 of those being categorised as community-associated. Therefore, the Trust is currently off profile, with a cumulative decrease of just 8.58% compared to 2017/18. This comprises a decrease in healthcare-associated infection cases of 8.33% versus a decrease in community-acquired infection cases of 8.90%.



* The value for Nov 18 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.

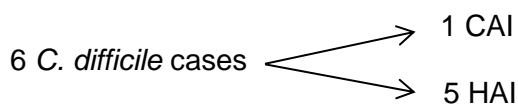
Key:
CAI Community-associated infection
HAI Hospital-associated infection



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	1
	Ward 5 EOU	1
	Ward 8 AHAN	1
	Ward 20	2
	Ward 31	1
	Ward 32 ESU	2
	Ward 50	2
	ICU	1
	SWAH	Ward 2
Ward 6		2
Ward 9		1
OHPCC	Palliative Care	1
Waterside	Ward 4	1

Since the last Report to Trust Board, which contained figures as at 25th October 2018, there have been six new cases of *C. difficile* (breakdown below). RCAs are pending for five of these cases.



Preventable/ Non-Preventable

Since the beginning of April 2018 a total of 21 RCAs have been conducted regarding *C. difficile*. The RCAs determined that four of the cases were preventable and 17 were non-preventable.

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%).

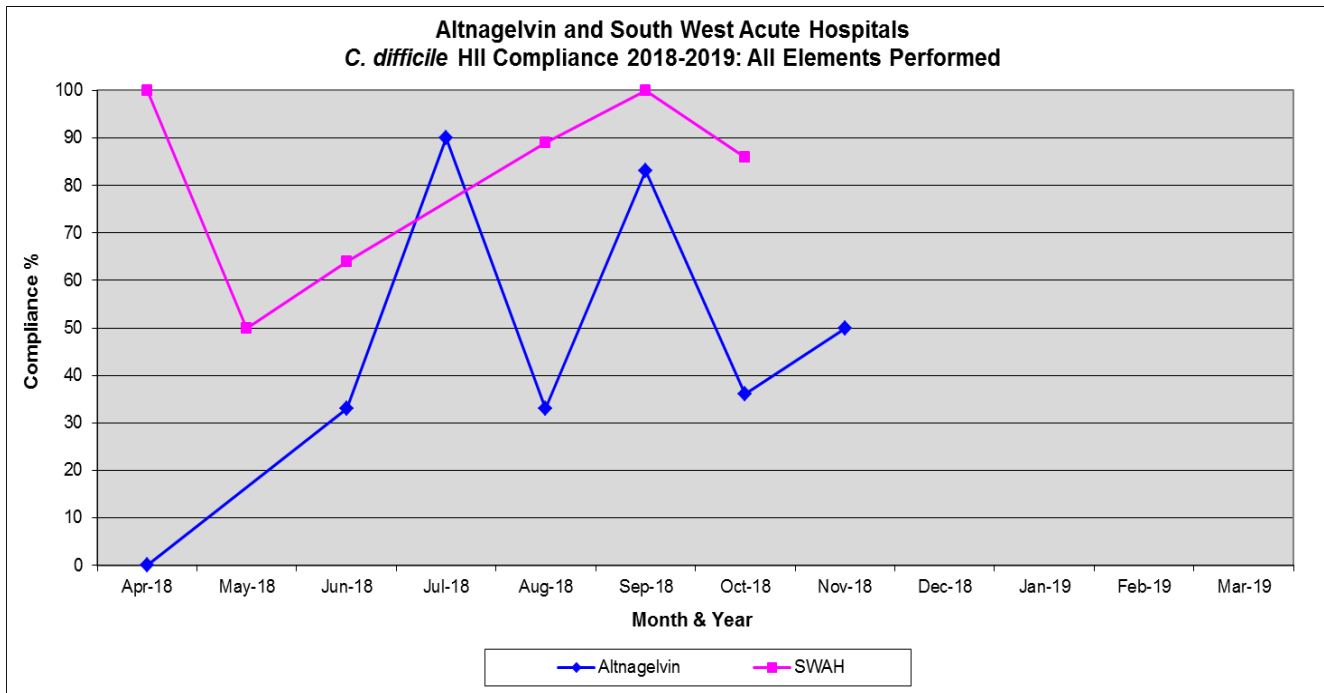
The dashboard below summarises the performance of wards/ departments audited by the IP&C Team since April 2018. On occasion more than one audit may be completed during the month for a particular ward/ department and an average score is shown below, marked (A).

Consistent compliance with the *C. difficile* care bundle remains a challenge. The findings indicate issues around hand hygiene, environmental decontamination and use of personal protective equipment.

		Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Ward 1, Alt	Care Bundle			50%	50%		50%	100%	
	Care Pathway						Pass	Pass	
Ward 2 TOU, Alt	Care Bundle								50%
	Care Pathway								Pass
Ward 3, Alt	Care Bundle			50%					
	Care Pathway								
Ward 5 EOU, Alt	Care Bundle							67%	
	Care Pathway							Fail	
Ward 8 AHAN, Alt	Care Bundle							33%	
	Care Pathway							Pass	
Ward 20, Alt	Care Bundle					0%			
	Care Pathway					Pass			
Ward 31, Alt	Care Bundle			0%		100%		50%	
	Care Pathway					Pass		Fail	
Ward 32 ESU, Alt	Care Bundle	0%				33%		0%	
	Care Pathway	Pass			Fail			Pass	
Ward 41 AMU, Alt	Care Bundle				100%		100%		
	Care Pathway								
Ward 42, Alt	Care Bundle					0%			
	Care Pathway								
ICU/ HDU, Alt	Care Bundle				100% (A)		100%	0% (A)	
	Care Pathway						Pass	Pass x 2	
Ward 1 MSAU, SWAH	Care Bundle			0%				100%	
	Care Pathway			Pass				Pass	
Ward 2, SWAH	Care Bundle	100%		80%			100%		
	Care Pathway	Pass		Pass			Pass		
Ward 5, SWAH	Care Bundle			100%					
	Care Pathway			Pass					
Ward 6, SWAH	Care Bundle			75%		67%		71% (A)	
	Care Pathway			Fail		Pass		Pass x 2	
Ward 7, SWAH	Care Bundle					100%			
	Care Pathway					Pass			
Ward 8, SWAH	Care Bundle					100%			

	Care Pathway					Pass		
Ward 9, SWAH	Care Bundle		50% (A)				100%	
	Care Pathway		Pass x 2				Pass	
Rehabilitation Unit, OHPCC	Care Bundle					75%		
	Care Pathway					Pass		
Ward 3, Waterside	Care Bundle	50%						
	Care Pathway	Pass						

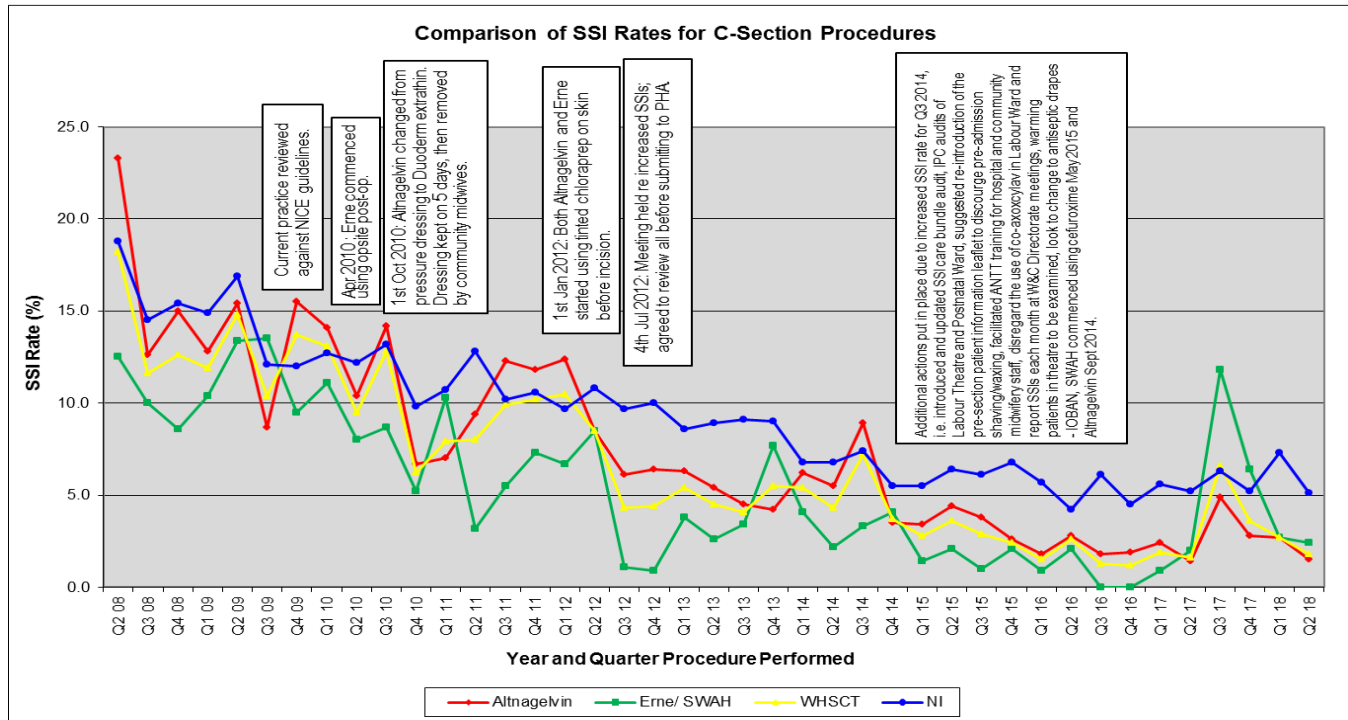
The graph below illustrates the overall compliance with all of the elements of the *C. difficile* high impact intervention (HII) care bundle for Altnagelvin and the SWAH.



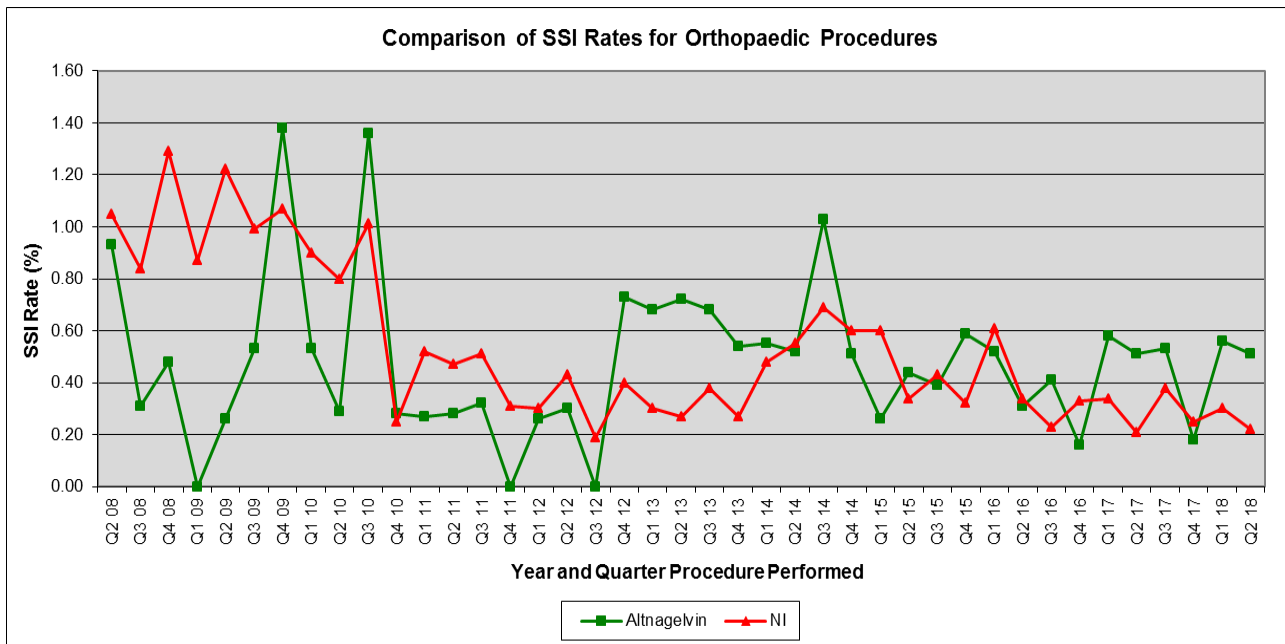
3. Caesarean Section Surgical Site Infection (SSI) Surveillance

The Trust continues to achieve high compliance with surveillance related documentation (91.2%), compared to an 80.6% average compliance rate in NI as a whole.

The surveillance information below demonstrates an ongoing reduction in infection rates over time and a lower rate for the Trust than the rest of the region; 1.8% and 5.1% respectively.



4. Orthopaedic Surgical Site Infection Surveillance



The SSI rate remains less than 1% of all surgery.

There has been an increase in the SSI rate for quarter 2 of 2018; seven reported in total. A meeting has taken place to review the cases and actions have been put in place in order to reduce the rate. Risk factors have been identified for some specific patient groups. A further follow-up meeting is planned to discuss additional actions and progress to date.

Evidence based care bundles are in place for orthopaedic surgery.

5. New and Updated Infection Prevention & Control Guidance

The following guidance was approved by the Chief Executive HCAI Accountability Forum in November 2018. It was a newly developed guideline for the Trust.

- Infection Control Precautions to Minimise Transmission of Influenza (Flu)/ Flu-Like Illness (FLI) in Healthcare Settings