1. **Executive Summary**

The Trust’s reduction target for *Clostridium difficile* associated disease in 2016/17 is 48; a reduction of 16 cases or 25% compared to last year. To date 39 cases have been reported. 22 of the cases are classified as healthcare-acquired or associated, as they occurred more than 48 hours after admission to hospital (definition used by the Public Health Agency). However, this is not always an accurate predictor of being healthcare-associated. The remainder are classified as community-acquired as the patients presented with symptoms within a 48 hour period after admission.

The MRSA bacteraemia target for 2016/17 is seven; a reduction of two cases or 22.22% on the previous year’s performance. There have been three cases reported so far this year, all of which have been categorised as community-associated. As such, the Trust is currently on track to achieve the target, with a decrease of 55.56% compared to last year.

As of 3rd January 2017, the total number of days since the last Trust hospital-associated MRSA bacteraemia is:

- Altnagelvin Hospital – 489 days (Last recorded case was in Ward 4)
- South West Acute Hospital (SWAH) – 325 days (Last recorded case was in Ward 8)
- Tyrone County Hospital (TCH) – 719 days (Last recorded case was in the Rehab Unit)

Pseudomonas is the name given to a bacteria that is commonly found in water. Pseudomonas rarely causes infection in people who are healthy, but it sometimes causes infection in people who are already unwell or who do not have a strong/fully developed immune system.

As a result of routine screening in NICU, Altnagelvin, *Pseudomonas aeruginosa* was isolated from a neonate groin swab. The neonate was well and had been discharged home. It was agreed this was a case of colonisation rather than infection. Following this incident, the Special Care Baby Unit (SCBU) and Neonatal High Dependency Unit (HDU) were closed for two days until all contacts were screened and results were available. All of the contact screens were negative. Water testing was also negative.

NICU staff are to be commended for their prompt response and immediate implementation of all infection control measures. All of the Infection Prevention & Control (IP&C) Team’s validation audits were 100%, with staff demonstrating high levels of compliance with IP&C standards. There was also a prompt response from Supports Services for enhanced cleans and evidencing compliance with cleaning standards. Estate Services responded immediately, ensuring that water testing was completed. It was identified during this investigation that the sinks in the Unit had some evidence of wear and tear, affecting the integrity of the surface, and these were changed by Estate Services. All sinks are to be monitored for this going forward as it could potentially be due to a disinfectant that is used within the Unit.

Ward 3, Waterside Hospital, was closed for a total of nine days following confirmed cases of Norovirus. This affected five patients and three staff, and caused some delays in patients going home with carers, transfers to nursing homes and affected patient flow from Altnagelvin. The ward re-opened on 30th November 2016. The index case was a patient who had been transferred from a room in Ward 42, Altnagelvin, where the previous occupant’s
A relative had vomited in the en-suite toilet during the night and had not informed staff. Consequently, the room had not been cleaned. Ward 42 then proceeded to have an outbreak of Norovirus. The index patient in Ward 3, Waterside, was transferred to a multi-bedded bay (before commencement of the Ward 42 outbreak). Ward 42 was closed for nine days, with 12 patients and 11 staff being affected by confirmed Norovirus. This had a significant impact on patient flow and placement.

During December 2016 there were an unprecedented number of wards on the Altnagelvin and Gransha sites with confirmed/suspected Norovirus outbreaks affecting both patients and staff. The wards affected by confirmed Norovirus in Altnagelvin were Ward 40, Ward 7, Ward 31 and Ward 32 ESU. In Waterside the affected wards were Ward 3 and Ward 4 (confirmed Norovirus). A number of other wards had no causative organism identified. These were Ward 2 TOU, CCU, Ward 20, Ward 8 AHAN, Ward 3 and Ward 41 AMU in Altnagelvin, plus Ralph’s Close, Lakeview. This situation had a significant impact on all service delivery across the Trust, affecting admissions, transfers and discharges. This was monitored and managed as part of the Trust’s Business Continuity Plan. The remaining affected wards re-opened fully on 30th -31st December 2016.

Norovirus continues to be prevalent within the general community, so continued vigilance is ongoing.

2. **C. difficile Performance**

The 2016/17 target for *C. difficile* (≥2 years) is 48 cases, which equates to a reduction of 25% on the baseline figure of 2015/16 (64 cases). So far this year the Trust has reported 39 cases, with 17 of those being categorised as community-associated. Therefore, reduction is currently off profile, with a decrease of just 18.75% compared to last year.

![WHSCT C. difficile (>2 Years) Monthly Profile](chart)

A breakdown of this year’s cases (as of 3rd January 2017) by hospital site and acquisition type is given in the chart below.

**Key:**
- CAI  Community-associated infection
- HAI  Hospital-associated infection
C. difficile Care Bundle and C. difficile 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%). There is no differentiation between those achieving a very low score and those achieving 95%. This is done deliberately to highlight the importance of 100% compliance with the bundle as a whole.

The C. difficile care bundle and the C. difficile care pathway audit are undertaken by an IP&C Nurse twice weekly, whilst the patient remains an inpatient. This should also be supported by daily ward self-audits in relation to the same.

During the period November-December 2016, the following wards/ departments were found to be non-compliant with some elements of the C. difficile care bundle and/ or the C. difficile care pathway.

Altnagelvin
Ward 1
Ward 7
Ward 32 ESU
Ward 40
Ward 43
ICU/ HDU

The main trend for non-compliance with the C. difficile audits relates to prudent antibiotic prescribing. There is also inconsistent compliance with other elements, e.g. environmental decontamination and isolation/ cohort nursing.

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.
The Tower Block in Altnagelvin remains a particular challenge and is very closely monitored by the Trust’s Estate Services staff in conjunction with the Trust Water Safety Group (WSG). Replacement of the pipework has commenced in Wards 1-5. It is anticipated that this will be completed by April 2017.

A planned Legionella 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 WSG on an ongoing basis. Exceptions are discussed at the WSG meetings.

The Trust Water Safety Plan has been reviewed. This has resulted in changes to the risk assessment and subsequent control measures for all Trust facilities. This will be ratified through the WSG and the Risk Management Sub-Committee.

4. **Hand Hygiene Compliance**

The Trust’s overall self-reported hand hygiene scores are 89% when non-submission areas are included. These areas score an automatic 0%. 19 areas out of 193 applicable areas failed to submit scores for November 2016; they are as follows:

- Altnagelvin – Ward 43, Emergency Department, Outpatients, GUM Clinic and Roe Valley Outpatients
- SWAH – Ward 6, Ward 7, Children’s Ward, Outpatients and Women’s Health Centre
- TCH – Pre-Op Assessment and Outpatients
- RHEs – Rectory Field Residential Home and Thackeray Place Residential Home
- Day Care – Gortmore Day Centre, Drumhaw Day Centre and Foyleville Day Centre
- Other Community – The Cottages Children’s Respite and Avalon House

Altnagelvin Outpatients, Roe Valley Outpatients, Ward 6, Ward 7, SWAH Outpatients, Women’s Health Centre, TCH Outpatients and Thackeray Place Residential Home 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 independent audit scores conducted by the IP&C Team and Lead Nurses tend to be lower than self-reported scores.

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

The concept of ANTT for clinical procedures is now much more readily understood by staff, although audits carried out by the IP&C Team are not yet at the stage of showing consistent improvement. Cascade trainers for ANTT are in place across many areas of the Trust and further training sessions for these staff are planned in collaboration with the Clinical Education Centre.

The training of medical staff remains a challenge. The IP&C Team are currently working on a programme to train FY0, FY1 and FY2 staff across the Altnagelvin and SWAH sites.

To date the number of staff who have received one-to-one ANTT training is as follows:

**Altnagelvin**  
FY1s = 11 (all)  
FY2s = 10 (There are 17 members of staff who have yet to receive training, 3 of which are locums.)

**SWAH**  
FY1s = 1 member of staff has yet to receive training  
FY2s = All staff have received training

6. **IPCN Independent Audits**

The IP&C Team are currently carrying out MRSA improvement work at ward level. This work is across the Altnagelvin and SWAH sites. A component of this work is a hand hygiene audit at the commencement and end of the intervention period. It is anticipated that this work will be completed by the end of January 2017, but it is currently on hold due to the outbreak situation.
Further independent audits were requested by the Professional Lead for Ward 1, Altnagelvin, during the MRSA improvement work. Audits for hand hygiene, isolation and commodes all scored 100%. However, there were some issues with compliance related to the peripheral line ongoing care bundle and urinary catheter ongoing care bundle, scoring 60% and 0% respectively. Education and support have been given to assist staff in achieving the required standards of practice and this is to be monitored by the Professional Lead Nurse.

A hand hygiene audit conducted in Ward 3, Altnagelvin, scored 60%. Four out of the ten staff observed were non-compliant. Three of these four were not core ward staff and they failed due to non-adherence to the bare below the elbow policy.

Three hand hygiene audits were carried out in Ward 42, Altnagelvin, during November 2016. These scored an average of 93%, with one of the audits failing (80%) on compliance by medical staff to complete the 7 step hand hygiene technique.

All staff are made aware of the issues identified at the time of the audits and on-the-spot education is provided to the staff concerned.