Western Health and Social Care Trust

INFECTION PREVENTION AND CONTROL ANNUAL REPORT

OF THE

CHIEF EXECUTIVE HCAI ACCOUNTABILITY FORUM

FOR

APRIL 2016 TO MARCH 2017

PREPARED BY: The Infection Prevention and Control Team

CONTENTS

1.0 GLOSSARY OF TERMS

AMHDS	Adult Mental Health and Disability Services
AMT	Antimicrobial Management Team
AMU	Acute Medical Unit
ANTT	Aseptic Non-Touch Technique
Augmented Care Areas	Defined by DoHNI as ICU, NNICU, Renal and Oncology/ Haematology
CAUTI	Catheter-associated urinary tract infection
C. difficile	*Clostridium difficile*
CDI	*Clostridium difficile* Infection
CEC	Clinical Education Centre
CLABSI	Central line-associated blood stream infection
CMT	Corporate Management Team
C-section	Caesarean section
DDD	Defined Daily Dose
DoHNI	Department of Health Northern Ireland
ESP	Enhanced Support Programme
ESU	Emergency Surgical Unit
FM	Facilities Management
FY0	Foundation Year 0 (Final year medical students on placement)
FY1	Foundation Year 1 Junior Doctors
GDH	Glutamate Dehydrogenase
GP	General Practitioner
GUM	Genito-Urinary Medicine
HAI-SCRIBE	Healthcare-Associated Infection System for Controlling Risk In the Built Environment
HCAI	Healthcare-Associated Infection
HDU	High Dependency Unit
HSC	Health and Social Care
ICU	Intensive Care Unit
IP&C	Infection Prevention and Control
IPCD	Infection Prevention and Control Doctor
IPCLP	Infection Prevention and Control Link Personnel
IPCN	Infection Prevention and Control Nurse
IPCT	Infection Prevention and Control Team
IPS	Infection Prevention Society
IV	Intravenous
KPI	Key Performance Indicator
LRTI	Lower Respiratory Tract Infection
MDEC	Multidisciplinary Education Centre
MLA	Member of Local Assembly
MRSA	Meticillin-Resistant *Staphylococcus aureus*
MSAU	Medical and Surgical Assessment Unit
MSSA	Meticillin-Sensitive *Staphylococcus aureus*
NI	Northern Ireland
NIAS	Northern Ireland Ambulance Service
NICE	National Institute for Health and Care Excellence
NMC	Nursing and Midwifery Council
NNICU	Neonatal Intensive Care Unit

PCOPS	Primary Care and Older People's Services
PFI	Private Finance Initiative
PGD	Patient Group Direction
PHA	Public Health Agency
PPI	Proton Pump Inhibitor
PPS	Point Prevalence Survey
RCA	Root Cause Analysis
RQIA	Regulation and Quality Improvement Authority
SSI	Surgical Site Infection
SWAH	South West Acute Hospital
TB	Tuberculosis
TCH	Tyrone County Hospital
TOU	Trauma Orthopaedic Unit
UK	United Kingdom
VAP	Ventilator-Associated Pneumonia
W&C	Women's and Children's Services
WHO	World Health Organisation
WHSCT	Western Health and Social Care Trust
WSG	Water Safety Group
WTE	Whole Time Equivalent

2.0 FOREWORD

Healthcare-associated infections (HCAIs) continue to represent a threat to patient safety and to safe care, wherever that is delivered. Infection prevention and control (IP&C) clearly has an important role to play in ensuring that patients receive care that is safe, evidence-based and which will improve clinical outcomes. The Western Health and Social Care Trust (WHSCT) is committed to reducing preventable HCAIs and I am pleased to confirm that this is demonstrated in this annual report.

Regional surveillance commenced in 2008 and since then the WHSCT has realised a reduction of 77% for infection caused by Meticillin-Resistant *Staphylococcus aureus* (MRSA). All cases reported during 2016-17 were defined as community-associated, with the last hospital-associated MRSA bacteraemia being > 1½ years, > 1 year and > 2 years ago in Altnagelvin Hospital, South West Acute Hospital (SWAH) and Tyrone County Hospital (TCH) respectively.

Critical care device-associated infection surveillance commenced in June 2011. The most recent infection recorded was a ventilator-associated pneumonia diagnosed in the Intensive Care Unit (ICU), SWAH, in September 2016. This was the first device-related infection to have occurred in the Trust since April 2014. There have been no catheter-associated urinary tract infections (CAUTI) since the commencement of the surveillance and the last central line-associated blood stream infection (CLABSI) occurred in 2012.

Regional surveillance of orthopaedic post-operative infection has been continuous since 1st July 2002. The surgical site infection (SSI) rate in orthopaedic surgery has routinely been below 1% since the surveillance began.

Post-operative Caesarean section (C-section) SSI surveillance commenced across Northern Ireland (NI) in January 2008. The WHSCT has been contributing to this surveillance since February 2008, with the Trust demonstrating exceptional compliance and SSI rates. The WHSCT has a compliance rate of 100% and an SSI rate of 1.9% compared to a NI compliance rate of 85.2% and an SSI rate of 5.6%.

Despite the Trust achieving a reduction of 12.5% in the number of cases of *Clostridium difficile* (*C. difficile*) associated disease, the challenging reduction target of 25% for 2016-17 was not met. The overall reduction since surveillance began in 2008 is 60%.

The IP&C agenda continues to face many challenges, including the ever increasing threat from antimicrobial resistant micro-organisms, the emergence of new human pathogens, antimicrobial stewardship, growing enhanced surveillance programmes and demanding targets. This is also set against the wider health service challenges of increasing demand for clinical services, more complex clinical care needs, high bed occupancy, availability of appropriate isolation facilities and staff recruitment. Considerable Trust-wide effort is still required to sustain improvements and to maintain a zero tolerance approach to preventable HCAIs, thereby ensuring that effective prevention and control of HCAIs is embedded into everyday practice.

This report outlines the comprehensive and complex work which provides guidance and assurance to patients, the public and staff that all efforts are being taken to prevent HCAIs.

Dr Dermot Hughes
Medical Director

3.0 MANAGEMENT ARRANGEMENTS

3.1 Introduction

IP&C in the delivery of healthcare is widely recognised as an important component in the safety and quality of patients' experience.

In the year of this report the Trust achieved the regional reduction target for MRSA bacteraemia; one of only two trusts to do so. The Trust also recorded a reduction in the number of *C. difficile* associated disease cases, but this was not enough to meet the reduction target which had been set.

Predisposing factors for *C. difficile* continue to be antimicrobial prescribing in primary and secondary care and the use of proton pump inhibitors (PPIs). In addition, independent audit of compliance with the *C. difficile* care bundle remains a challenge; in particular, antimicrobial prescribing and environmental decontamination. Care bundle compliance is discussed monthly at the Safe and Effective Patient Care Meetings with Heads of Service/ Lead Nurses. Lead Nurses discuss findings with individual ward managers and escalate cumulative challenges with performance through their directorate governance structures. Issues are also raised via the IP&C Surveillance Sub-Group. In addition, ward managers whose wards consistently underperform are invited to the Chief Executive HCAI Accountability Forum to discuss their performance with regards infection reduction; although this was not deemed necessary during 2016-17.

MRSA bacteraemia risk factors are related to pre-existing colonisation and the insertion and ongoing care of peripheral intravenous (IV) lines. In late 2015 the IP&C Team (IPCT) undertook a re-audit of compliance with the MRSA Screening and Treatment Guidelines. The audit found good compliance with many aspects of the guidelines, but it also identified some areas that required further improvement. Consequently, an improvement programme of ward-based education and support was implemented by the IP&C Nurses (IPCNs). This took place between September 2016 and March 2017 at both acute hospitals. The work was designed to assist staff to address deficits in the identification, treatment and care of a patient with MRSA.

Clinical care related to water safety in augmented care areas continued to require significant scrutiny and monitoring by the IPCT at management, surveillance and clinical levels.

Planning and building work related to the development of the Radiotherapy Unit at Altnagelvin, the new Omagh Hospital and Primary Care Complex, and other smaller scale works throughout the Trust resulted in significant infection prevention input, scrutiny and monitoring.

The Trust's IP&C Service is overseen at a strategic level by the Chief Executive HCAI Accountability Forum, which reports to the Governance Committee. Accountability systems are in place through every management layer of the Trust from ward/ facility to Chief Executive and, in turn, on to the Trust Board. Executive level support is crucial to the success of the current infection prevention strategy.

The IPCT, IP&C Link Personnel (IPCLP) and every member of healthcare staff deliver the service at an operational level. This is achieved by a combination of the following:

- Adherence to and implementation of evidence based care bundles
- Antimicrobial stewardship
- Policy/ guideline production

- Training and education
- Environmental cleanliness audit
- Pre-outbreak/ increased incidence investigation and management
- Outbreak management
- Root cause analysis (RCA)
- Audit and improvement work related to clinical practice
- Surveillance
- Research
- Construction controls and input to the planning process
- Monitoring of water safety

As in previous years, the purpose of this report is to highlight the excellent work that has been undertaken in the Trust in the above areas and to identify risks, which remain and will require action within the next one to three years.

3.2 Role of the Chief Executive HCAI Accountability Forum

The main role of the Chief Executive HCAI Accountability Forum is to oversee the strategic planning for infection detection and management to ensure that there are effective arrangements for prevention and control throughout the Trust. It provides assurance to the Governance Committee that appropriate systems are in place to set and monitor the standards relating to infection prevention. The Chairperson of the Forum is its representative on the Governance Committee.

The Forum met six times during the year of this report. See *Appendix 1* for the Forum's current Terms of Reference and *Appendix 2* for the Governance Reporting Structure.

In addition to the Chief Executive HCAI Accountability Forum, the Trust monitors infection prevention arrangements through a variety of other fora, including:

- Trust Board
- Governance Committee
- Risk Management Sub-Committee
- Directorate Governance Committees
- Divisional Governance Committees
- IP&C Surveillance Sub-Group
- IP&C Policies and Guidelines Working Group
- Antimicrobial Management Team (AMT)
- Safe and Effective Patient Care Meetings
- Clinical Reference Group for Pandemic Flu (ad hoc)
- Seasonal Flu Group (ad hoc)

The Working Groups, Directorate/ Divisional Governance Committees and Safe and Effective Patient Care Meetings scrutinise the operational application and learning related to infection prevention. Key infection related issues not resolved are escalated through the Trust governance systems. Intractable issues, which require high level engagement, are referred to the Chief Executive HCAI Accountability Forum.

3.3 Membership of the Chief Executive HCAI Accountability Forum

The membership of the Forum is intended to reflect the diversity of services delivered within the Trust. Membership during the year 2016-17 included the following:

- Mrs Elaine Way, Chief Executive (Chairperson)
- Mr Joe Lusby, Deputy Chief Executive (until April 2016)
- Mrs Sally O'Kane, Non-Executive Director
- Dr Dermot Hughes, Medical Director/ Executive Director for IP&C
- Mrs Wendy Cross, Head of IP&C
- Mrs Clare Robertson, IPCN/ Surveillance Lead
- Dr Gerard Glynn, Consultant Microbiologist/ IP&C Doctor (IPCD)
- Dr Christopher Armstrong, Consultant Microbiologist/ IPCD
- Mrs Geraldine McKay, Director of Acute Services
- Ms Diane Brennan, Assistant Director of Emergency Care and Medicine (until July 2016)
- Dr Ying Kuan, Clinical Director, Emergency Care and Medicine
- Ms Maeve Brown, Service Manager, Emergency Care and Medicine
- Mrs Diane McCaffrey, Emergency Care Co-ordinator
- Mr Mark Gillespie, Assistant Director of Unscheduled Care and Service Development
- Mrs Karen Phelan, Assistant Director of Surgery and Anaesthetics
- Dr Paul McSorley, Clinical Director, Surgery and Anaesthetics
- Mrs Mary McCullagh, (Acting) Assistant Nursing Services Manager, Surgery and Anaesthetics
- Mrs Fiona Beattie, Assistant Director of Cancer Services
- Ms Donna Keenan, Assistant Director of Diagnostics
- Dr Charles Mullan, Clinical Director, Diagnostics and Cancer Services
- Ms Anne Friel, Head of Pharmacy and Medicines Management
- Mrs Cairine Gormley, Antimicrobial Pharmacist
- Mr Alan Corry Finn, Director of Primary Care and Older People's Services/ Executive Director of Nursing
- Mrs Anne Witherow, Assistant Director of Nursing
- Mr John McGarvey, Assistant Director of Intermediate Care and Rehabilitation
- Mrs Judy Houlahan, Head of Secondary Care Services
- Dr Jim Kelly, Consultant Physician, Care of the Elderly
- Mr Paul Rafferty, Head of Allied Health Professions
- Mr Kieran Downey, Director of Women's and Children's Services/ Executive Director of Social Work
- Mrs Mary McKenna, (Acting) Assistant Director of Healthcare
- Dr Michael Parker, Clinical Director, Obstetrics and Gynaecology (until June 2016)
- Dr Jim Moohan, Clinical Director, Obstetrics and Gynaecology (as of July 2016)
- Mr Trevor Millar, Director of Adult Mental Health and Disability Services
- Mr Will Doran, Assistant Director of Facilities Management (until May 2016)
- Mrs Maureen Kelly, Head of Patient and Client Support Services
- Ms Judith Boyle, (Acting) Manager, Occupational Health
- Dr Rodney Gamble, Consultant Physician, Occupational Health

3.4 Role and Composition of the Infection Prevention and Control Team

The IPCT provides expert advice, both verbal and written, surveillance of alert organisms and conditions, support for RCA, examination of potential pre-outbreak information in order to prevent actual outbreaks, education, auditing and production of policies, guidelines and protocols to support staff in the Trust to ensure patient/ client safety and minimise infection risks.

The Team consists of:

- Head of IP&C x 1 whole time equivalent (WTE)
- Consultant Microbiologists/ IPCDs x 2 WTE
- Antimicrobial Pharmacists x 1.7 WTE
- IPCNs Band 7 x 3 WTE
- IPCNs Band 6 x 6.36 WTE (one of whom is temporary)
- Surveillance Officer Band 5 x 0.93 WTE
- Administrative staff
    - Band 4 x 1 WTE
    - Band 3 x 1 WTE

During the year of this report the Nursing Team continued to experience high levels of short staffing due to long term sick leave and maternity leave. This equated to an average reduction of 2.33 WTE across the year, with the length of time staff were off work totalling approximately 2 years 4 months.

The short staffing led to a delay in the commencement of MRSA improvement work. In conjunction with the significant number of suspected/ confirmed Norovirus outbreaks and increased incidences, it also impacted on the timely review of some policies and guidelines. A substantial component of IPCT capacity was taken up in the management of these outbreaks and increased incidences.

Water Safety

The workforce resource to support water safety and associated surveillance and monitoring continues to present challenges. The business case to address this, which was previously tabled at the Medical Directorate Senior Management Team, remains outstanding. A full review of current surveillance and new surveillance programmes will be included in future business case development.

Planning

IPCN participation in planning remained significant during 2016-17, including the following:

- Participation on all planning teams for new builds and significant minor capital works
- Planning and inspection of existing premises for Aspergillus control whilst building/ refurbishment work was underway
- Planning and advice related to water safety

This input is essential if buildings and developments are to be planned safely and to ensure patients in existing facilities close to building works are protected from potential infection risks, such as Aspergillus and Legionella, during construction.

3.5 Controls Assurance

Controls Assurance remains a Department of Health NI (DoHNI) requirement. The Trust is required to achieve substantive compliance of 75% or above. The self-assessment score achieved by the IP&C Service for 2016-17 was 95%; a decrease of 2% on the previous year's performance. An action plan has been developed for 2017-18 to address the outstanding issues.

4.0 REVIEW OF PROGRAMME OF WORK FOR 2016-2017

4.1 Policies, Guidelines, Protocols, Leaflets and Care Pathways

(a) Infection Prevention and Control Guidance

Regional guidelines are available relating to IP&C issues, which can be accessed via a WHSCT intranet link and via www.niinfectioncontrolmanual.net

Where regional guidelines do not exist, or where the Trust's IPCT are of the opinion that more detail specific to the Trust is required, local guidance is developed.

To ensure that the views of as large a variety of staff as possible are taken into consideration, policies, guidelines, care pathways and leaflets are updated by the IPCNs and then circulated for comment to members of the Chief Executive HCAI Accountability Forum and other relevant staff depending on the subject covered. Following consultation, the guidance is amended and ratified by the Forum. Policies are forwarded to the Corporate Management Team (CMT) and Trust Board for final approval. Ratified policies, guidelines, protocols, leaflets and care pathways are then made available to staff on the Trust intranet.

The IP&C Policies and Guidelines Working Group continue to oversee the production of all guidance issued by the Forum. The current Terms of Reference for the Working Group are included in *Appendix 3*.

In the year of this report a total of 7 pieces of guidance were reviewed and updated. There follows a summary of the topics reviewed, circulated to the Forum, ratified and made available to staff.

Topics	Year Reviewed	To Be Reviewed Next
Dress Code Policy	May 2016	May 2019
Infection Prevention & Control Protocol for Peripheral Intravenous Cannulation and Access	July 2016	July 2019
Policy for the Control of Transmissible Spongiform Encephalopathy (TSE), Including Creutzfeldt Jakob Disease (CJD) and variant Creutzfeldt Jakob Disease (vCJD)	August 2016	August 2019
Infectious Incident/ Outbreak Control Plan	November 2016	November 2017
Infection Prevention & Control Risk Assessment Guidelines for the Isolation/ Placement of Patients	January 2017	January 2020

Invasive Group A Streptococcal (GAS) Infections: Information Leaflet for Staff in Contact with Healthcare-Acquired Group A Streptococcal Infection	January 2017	November 2017
Infection Prevention & Control Standard Precautions Policy	February 2017	February 2020

(b) Antimicrobial Guidance

In 2009-10 the Trust's Consultant Microbiologists and Antimicrobial Pharmacist worked with a regional group to develop a revised regional antimicrobial prescribing framework. This sought to harmonise antimicrobial prescribing across the region, but allowed local variance depending on resistance data. Within the WHSCT the Secondary Care Antimicrobial Guidelines are reviewed and updated every two years, or more frequently if necessary. During 2016-17 the following antimicrobial guidelines were updated:

- Permanent Cardiac Pacemaker Insertion Antibiotic Prophylaxis Guidelines
- Management of Pelvic Inflammatory Disease and Tubo-Ovarian Abscess
- Urology Antibiotic Prophylaxis Guideline

4.2 Audit and High Impact Interventions

(a) Environmental Cleanliness Audits

All areas where patient/ client care is delivered across the Trust have a managerial environmental cleanliness audit completed annually. Increased workloads and long term sick leave during the year of this report meant the IPCNs were unable to participate in as many of these audits as they might have wished. However, they did risk assess in relation to which areas most necessitated their participation and they focused on those that were high-risk or had limited IPCT input via other mechanisms.

(b) Hand Hygiene Audits

All wards and departments participate in hand hygiene compliance audits using a standardised tool. The normal audit frequency is two-monthly; although this can be increased or reduced depending on previous compliance and independent audit results conducted by the Lead Nurse or the IPCT. Areas scoring below 95% compliance must immediately implement improvement measures.

Scores are examined every month at the Safe and Effective Patient Care Meetings and any persistently poor scores are escalated to Directorate Governance meetings and the Chief Executive HCAI Accountability Forum. A traffic light system is used to monitor results. The range of scores are indicated by the colours Green (95-100%), Amber (90-94%), Red (80–89%) and Black (79% and below).

During 2016-17 scores for individual wards ranged from 0% (where scores are not submitted an automatic 0% score is applied) to 100%, and whole Trust average scores ranged from 87% to 97%. However, when the Trust average scores are adjusted to discount non-submission areas they improve to 99% - 100%. Average scores for the various hospital sites and directorates are shown in *Appendix 4*.

Lone workers and small teams use a variation of the audit tool, which enables them to be audited by another staff member or at staff meetings, and then signed off as competent.

The hand hygiene audit tool for augmented care areas differs from the standard audit tool by including the need for staff to decontaminate their hands using alcohol gel, following soap and water.

The IPCT conducts a small number of independent hand hygiene audits throughout the year. The average score attained during 2016-17 was 93%.

(c) High Impact Interventions (Evidence Based Care Bundles)

There are ten evidence based care bundles related to IP&C. They are:

- Ventilator associated pneumonia (VAP)
- Peripheral IV cannulae (insertion and ongoing care)
- *C. difficile*
- Renal dialysis catheters (insertion and ongoing care)
- Central venous catheters (insertion and ongoing care)
- SSI (pre-, intra- and post-operative)
- Urinary catheters (insertion and ongoing care)
- Cleaning and decontamination
- Chronic wounds (wound care and patient management)
- Enteral feeding

All elements of the decontamination care bundle are included in the Trust environmental cleanliness audit tool. The chronic wounds and enteral feeding care bundles were added during 2011 and according to monitoring report feedback from directorates have been implemented where applicable across the Trust. Care bundles for VAP, SSI (C-section and orthopaedic surgery) and central line care in the Trust ICUs are monitored at individual department level.

In December 2016 the IPCNs began using the *C. difficile* care bundle for Glutamate Dehydrogenase (GDH) cases. This improvement work regarding GDH is to reduce the likelihood of *C. difficile* bacteria starting to produce toxins, leading to *C. difficile* infection (CDI).

Care Bundle	Trust Areas Implemented
Hand hygiene	All areas
VAP	ICUs, Altnagelvin and SWAH
Peripheral IV cannulae	All applicable facilities
C. difficile	All applicable facilities
Renal dialysis catheters	Renal Units, Altnagelvin and TCH
Central venous catheters	Both ICUs, surgical wards, Interventional Radiology Altnagelvin
SSI	C-section and orthopaedic surgery

Urinary catheters	All wards in Altnagelvin, SWAH and Waterside Hospital, community facilities and district nursing teams
Cleaning and decontamination	Part of environmental cleanliness audits
Chronic wounds	Not yet implemented by IPCT
Enteral feeding	Not yet implemented by IPCT

Work to further embed the care bundles in everyday practice is ongoing and compliance with the evidence base has developed throughout the year. Consistent adherence to the *C. difficile* care bundle remains a challenge.

Independent audit of practice is completed by the IPCNs on a continuous basis as agreed with Lead Nurses at monthly IP&C Surveillance Sub-Group meetings and as part of the Enhanced Support Programme (ESP) and Augmented Care Monitoring Programme.

For the results of independent audits completed by the IPCNs, see *Appendix 5*.

(d) Antimicrobial Prescribing Audits

Multi-disciplinary Microbiologist-led ward rounds were carried out in several wards across the Trust, as follows:

- Acute Services Directorate
  - Ward 2 Trauma Orthopaedic Unit (TOU), Altnagelvin
  - Ward 20, Altnagelvin
  - Ward 31 and Ward 32 Emergency Surgical Unit (ESU), Altnagelvin
  - Ward 41 Acute Medical Unit (AMU), Altnagelvin
  - Ward 1 Medical and Surgical Assessment Unit (MSAU), SWAH
  - Ward 3, SWAH
- Primary Care & Older People's Services (PCOPS) Directorate
  - Ward 40, Altnagelvin
  - Ward 42, Altnagelvin

These involved the Antimicrobial Pharmacist and the ward teams. Antimicrobial prescribing audits were completed as part of the ward rounds. The audits comprised two elements; the first looking at adherence to guidelines and the second looking at whether there was a stop date or review date on the medicines kardex.

With regard to the adherence element, the categories available were adherence, appropriate non-adherence, indeterminate and no guideline exists. Examples of appropriate non-adherence are positive laboratory report, microbiology input, allergy to guideline antibiotics and patient history of resistant organism that would make guideline antibiotics ineffective. Indeterminate was recorded if the patient's infective diagnosis had not been finalised, e.g. urinary tract infection/ respiratory tract infection.

A summary of the audit results for Acute Services Directorate wards is given in *Appendix 6* and results for the PCOPS Directorate wards are included in *Appendix 7*.

A number of other antimicrobial prescribing audits were also performed during the year as follows:

- Audit of Gentamicin Prescribing, April 2016 (see *Appendix 8*)
- Lower Respiratory Tract Infection (LRTI) Re-Audit, April 2016 (*Appendix 9*)
- European Antibiotic Awareness Day Point Prevalence Survey (PPS) of Antimicrobial Consumption, November 2016 (*Appendix 10*)

(e) Study of MRSA Status of Frequent Attenders

One of the key learning points from RCA of previous MRSA cases is the importance of appropriate MRSA screening for frequent attenders. The current guidelines state that patients should be screened if they have had three or more admissions within one year. While this is included within the MRSA Screening and Treatment Guidelines, there was no local evidence regarding the MRSA status of frequent attenders. Therefore, a small study to support this recommendation was undertaken during the month of June 2016 in Ward 41 AMU, Altnagelvin, and Ward 1 MSAU, SWAH, to ascertain the number of frequent attenders who test positive.

There was a total of 712 admissions during this time period, with 20% (145) of these being defined as frequent attenders. Of the frequent attenders screened, 11% were positive for MRSA, thereby supporting the current recommendation for screening of frequent attenders. It is also important to note that MSAU had a higher number of admissions (448), a higher percentage of admissions defined as frequent attenders (23%) and also a higher percentage of frequent attenders who tested positive (12%) than AMU. AMU had 264 admissions, 15.9% defined as frequent attenders and 7% testing positive.

4.3 Antimicrobial Management Team

The AMT met four times during the period of this report. The current structure, membership and Terms of Reference for the AMT are set out in *Appendix 11.*

The AMT have overseen the audits described above at 4.2 (d), and also review the usage of antibiotics as described below.

Antibiotic Usage in the WHSCT in Terms of Defined Daily Dose/ Occupied Bed Days

Data on ward usage of antibiotics is obtained from the electronic pharmacy stock control system. This data includes all antibiotics issued to each ward as stock and any antibiotics issued to patients being discharged. It is assumed that all antibiotics supplied to the ward are administered to patients. The unit of measurement for antibiotic use is the defined daily dose (DDD), which is the assumed average maintenance dose per day for a drug used for its main indication in adults. The DDD is a unit of measurement and does not necessarily reflect the recommended or prescribed daily dose. Drug consumption expressed in numbers of DDDs will only give a rough estimate of consumption and not an exact indication of drug use. Additionally, drug use may change when the report is run at a later date due to drugs being returned to the pharmacy system and the record being amended retrospectively. However, it does allow comparison of antibiotic use across health and social care (HSC) trusts in NI and the rest of the United Kingdom (UK). In order to adjust for bed occupancy, antibiotic use is expressed as the number of DDDs per 100 occupied bed days. Bed occupancy data was obtained from the Information Department.

See *Appendix 12* for details of the WHSCT's antibiotic usage in 2016-17.

4.4 Education and Training

(a) Trust Induction Training

The IPCNs deliver a two-hour PowerPoint training session as part of the Trust Induction programme for new staff. This occurs five times per year in both the Northern and Southern Sectors. During the year of this report 630 staff were trained.

Induction Training covers staff for their first two years of employment. Thereafter, relevant staff must attend Mandatory Training every two years to have their knowledge refreshed and updated.

(b) Mandatory Training

The IPCNs continue to provide an opportunity for biennial update of all clinical staff using directly led sessions. Twice a year the IPCNs also contribute to the HSC Clinical Education Centre's (CEC) Combined Mandatory Training sessions, which include IP&C. A total of 107 sessions were delivered between April 2016 and March 2017. That is an average of 2 two-hour sessions per week within primary and secondary care settings across the Trust.

Mandatory Training sessions involve the use of a PowerPoint presentation, including video clips on hand hygiene and breaking the chain of infection, followed by a quiz on infection control principles. This format is designed to facilitate staff involvement and testing of knowledge with regard to IP&C. An evaluation form was used to measure and assess user feedback during September 2016. See *Appendix 13* for a summary of the findings.

As of the end of March, 3133 staff had attended Mandatory Training (1827 in the Northern Sector and 1306 in the Southern Sector). Attendance by nursing and midwifery staff is monitored through the accountability systems and non-attenders tend to be those on long term sick leave or maternity leave.

The level of attendance required each year, for Induction and Mandatory Training together, is 50% of the total number of staff who require training (12,690). Attendance for the year of this report was 24.69%, which is 25.31% less than required.

Given the decreasing numbers of staff attending IP&C Training, the IPCT began a process of exploring more flexible methods and platforms for delivery of training. This work includes the development of an e-learning programme, which would complement existing face-to-face teaching. The IPCT are also engaged in early exploratory work for the development of Virtual Reality Action Training in conjunction with the South West Regional College, which could transform Mandatory Training with huge educational, research and business potential.

(c) Aseptic Non-Touch Technique Training

Since the framework for aseptic non-touch technique (ANTT) was launched Trust-wide in October 2011, the IPCT have provided a number of training sessions each year for key trainers, whose responsibility it then becomes to cascade that training to the other staff in their ward and/ or in their clinical team.

In order to help build further capacity and provide cascade trainers for those areas where trainers were no longer on staff, 11 ANTT training sessions took place across both Sectors during 2016-17. The first half of each session consisted of an introduction to and overview of

the theory underpinning ANTT, while the second half focused on practical demonstration and learning using skills stations. A total of 83 attendees took part, including participants from a range of community and hospital specialties.

In addition, focused education and support took place to help improve junior doctors' and other medical staff's ANTT compliance.

Monitoring of compliance is carried out as indicated by clinical surveillance and as part of the ESP.

(d) Enhanced Support Programme/ MRSA Improvement Programme

Ward managers oversee an ongoing improvement programme related to infection control key performance indicators (KPI) and input self-reported audit findings via the Nursing KPI dashboards. In addition, Lead Nurses provide an ongoing independent audit function in conjunction with agreed improvement plans.

The ESP provides a targeted approach by the IPCT to specific clinical areas in need of additional help to achieve compliance with evidenced based practice. The areas are identified by a working partnership of Divisional Lead Nurses, Heads of Service, Consultant Microbiologists and the IPCT. The trigger to provide support is based on a combination of infection and colonisation surveillance data and self-reported audit compliance, accompanied in some cases by independent IPCT audit. It is a very dynamic process and is designed to be flexible and responsive to the particular challenges identified in a clinical area. Support may also be provided as part of a planned programme of education/ improvement work, such as the MRSA Improvement Programme.

Between September 2016 and March 2017 the IPCNs conducted an MRSA Improvement Programme at both Altnagelvin and the SWAH. This ward-based enhanced support was designed to assist staff to address deficits in the identification, treatment and care of patients with MRSA. The need for this was previously identified in audit work completed in late 2015. The Improvement Programme was also an opportunity for the IPCNs to engage specifically with band 5 nursing staff, since they are the ones providing direct patient care. It was believed that a one-to-one, companionship style of teaching would have a more lasting impact on practice going forward.

The MRSA Improvement Programme lasted approximately one month for each ward/ department and consisted of a short baseline audit phase, followed by educational input to address any short falls in best practice. Monitoring of MRSA screening and treatment practice took place throughout, along with post-intervention audits, to determine the level of improvement achieved. All audit findings were reported to the nurse in charge of the ward shortly after they took place and a short written report was provided to the ward manager and Lead Nurse following the intervention. Thereafter, the ward manager and her/ his senior team, with the support of the Lead Nurse and senior medical staff, were expected to increase/ sustain improvements.

In most cases this work has led to sustained application of the evidence base with a resultant reduction in the number of infections and colonisations monitored.

Wards and departments in which MRSA improvement work took place during 2016-17 are as follows:

Ward/ Department	Date Completed
Ward 2, SWAH	September 2016
Ward 3, Altnagelvin	September 2016
Ward 41 AMU, Altnagelvin	September 2016
Ward 5 Elective Orthopaedic Unit, Altnagelvin	October 2016
Ward 7, Altnagelvin	October 2016
Ward 7, SWAH	October 2016
Ward 8 Adult Head & Neck, Altnagelvin	October 2016
Ward 5, SWAH	October – November 2016
Ward 1, Altnagelvin	November 2016
Ward 8, SWAH	November 2016
Cardiac Unit, SWAH	November 2016
Ward 42, Altnagelvin	November 2016
Ward 1 MSAU, SWAH	December 2016 – January 2017
ICU, SWAH	December 2016 – January 2017
Ward 20, Altnagelvin	December 2016 – February 2017
Clinical Decisions Unit, Altnagelvin	January 2017
ICU/ High Dependency Unit (HDU), Altnagelvin	January – February 2017
Ward 9, SWAH	January – February 2017
Ward 31, Altnagelvin	February 2017
Ward 32 ESU, Altnagelvin	February – March 2017
Ward 2 TOU, Altnagelvin	March 2017
Ward 4, Altnagelvin	March 2017
Ward 50 Sperrin, Altnagelvin	March 2017

(e) Augmented Care Monitoring Programme

The IPCT continued to provide an additional monitoring programme for augmented care areas in response to the requirement for independent audit as part of the Troop Report recommendations.

The Regulation and Quality Improvement Authority (RQIA) conducted an announced inspection of the Trust in February 2015 to look at three criteria contained within the IP&C Governance Assessment Tool for Augmented Care Areas. The report of the inspection was issued to the Trust in June 2015 and a quality improvement plan was developed to action the recommendations made. The plan is monitored through the Chief Executive HCAI Accountability Forum. It has also been incorporated into the overall IP&C Strategic Plan. Current progress with the action plan as of 2016-17 is detailed in *Appendix 14*.

(f) Training for Infection Prevention and Control Link Personnel

IPCLP have an important role in supporting the IPCT in their position as expert advisors and facilitators. Staff who undertake the role are encouraged to participate in the Infection Control in Clinical Practice course. The course is organised by staff from the HSC CEC and IPCNs are involved with planning and facilitating the training, in particular the ANTT skills stations and RCA workshop. IPCNs also provide mentorship to course participants. The course was scheduled to take place in October-December 2016. Unfortunately, as a result of poor uptake, the course had to be cancelled. Preparation for the course had already been commenced by the IPCT.

In the year of this report the usual programme of meetings and education for Link Personnel was significantly reduced as a result of staffing constraints. Only four meetings took place; one each at Altnagelvin, Gransha, SWAH and TCH.

(g) Antimicrobial Stewardship Training

Training related to antimicrobial prescribing and stewardship was provided by the Antimicrobial Pharmacists and Consultant Microbiologists.

Date	Venue	Training	Speakers
28/04/2016	Pharmacy, SWAH	New Pharmacist	Edel Leonard
09/05/2016	Education Centre, SWAH	FY0 Training	Edel Leonard & Dr Armstrong
10/05/2016	MDEC, Altnagelvin	FY0 Training	Cairine Gormley & Dr Glynn
31/05/2016	Pharmacy, Altnagelvin	New Technician	Cairine Gormley
02/06/2016	MDEC, Altnagelvin	Postgraduate Forum	Cairine Gormley & Dr Armstrong
01/08/2016	Pharmacy, Altnagelvin	Induction 3 Staff	Cairine Gormley
02/08/2016	Education Centre, SWAH	FY1 Training	Edel Leonard
05/08/2016	Ward 16, Altnagelvin	Paediatric Doctor Training	Cairine Gormley
08/08/2016	GUM Clinic, Altnagelvin	PGD Update Training	Cairine Gormley
10/08/2016	Pharmacy, TCH	New Pharmacist	Cairine Gormley
15/08/2016	Pharmacy, Altnagelvin	New Support Worker	Cairine Gormley
25/08/2016	Education Centre, SWAH	Journal Club Antimicrobial Prescribing Training	Edel Leonard
30/08/2016	Pharmacy, Altnagelvin	New Support Worker and Pharmacist	Cairine Gormley
06/09/2016	Medical Education Centre, Altnagelvin	Postgraduate Forum	Cairine Gormley & Dr Armstrong
14/09/2016	Pharmacy, Altnagelvin	Restricted Antimicrobials and Rapid Response Prescriptions	Cairine Gormley & Fionnuala McCullagh
07/10/2016	Boardroom, Altnagelvin	PDG Training Occupational Health	Cairine Gormley
07/10/2016	Ward 19, Altnagelvin	Elderly Care Forum Training	Cairine Gormley
11/11/2016	Pharmacy, Altnagelvin	Induction Pharmacy Staff	Cairine Gormley
15/11/2016	Spruce Villa, Gransha	PCOP Governance	Cairine Gormley
16/11/2016	Queen's University Belfast	Advanced Pharmacy Practice	Cairine Gormley
17/11/2016	Pharmacy, Altnagelvin	Infection Management Workshop with Pharmacists	Cairine Gormley & Danielle O'Connor
01/12/2016	Ulster University	Infection Management Workshop with Undergraduate Pharmacists	Cairine Gormley
14/12/2016	Pharmacy, Altnagelvin	Induction Pharmacy Staff	Cairine Gormley
15/12/2016	Pharmacy, SWAH	Induction Pharmacy Staff	Edel Leonard
11/01/2017	Pharmacy, Altnagelvin	Induction Pharmacy Staff	Cairine Gormley
12/01/2017	Lecture Theatre, SWAH	Education Medical Staff Guidelines	Edel Leonard

12/01/2017	Pharmacy, SWAH	Induction Pharmacy Staff x 2	Edel Leonard
12/01/2017	Pharmacy, SWAH	Education Session New Pharmacist	Edel Leonard
19/01/2017	Pharmacy, SWAH	Education Technician Newly on Wards	Edel Leonard
24/01/2017	Pharmacy, Altnagelvin	Induction Pharmacy Staff	Cairine Gormley
26/01/2017	GUM Clinic, Altnagelvin	PGD Training	Cairine Gormley
31/01/2017	Head and Neck, Altnagelvin	Education regarding Antimicrobial Usage	Cairine Gormley
01/02/2017	Mossley Mill	OPHAT Workshop – Pharmacist Prescriber in OPHAT Team	Cairine Gormley
02/02/2017	Medical Education Centre, Altnagelvin	Induction New Medical Staff	Cairine Gormley & Dr Armstrong
08/02/2017	Ward 16, Altnagelvin	Paediatric Doctor Training	Cairine Gormley
09/02/2017	Medical Education Centre, Altnagelvin	Induction New Medical Staff	Edel Leonard
10/02/2017	Pharmacy, Altnagelvin	Induction Pharmacy Staff	Cairine Gormley
10/02/2017	Pharmacy, SWAH	Induction Pharmacy Staff	Edel Leonard
15/02/2017	Lecture Theatre, SWAH	Antimicrobial Consumption Data	Edel Leonard & Dr Sreenivasan
21/02/2017	Pharmacy, SWAH	Induction Pharmacist	Edel Leonard
08/03/2017	Everglades, Derry	GP Symposium – Antimicrobial Update	Cairine Gormley & Dr Armstrong
09/03/2017	Medical Education Centre, Altnagelvin	PPS Results – Way Forward	Cairine Gormley
10/03/2017	Medical Education Centre, SWAH	Antibiotic Sensitivities Session FY1s	Edel Leonard
15/03/2017	Medical Education Centre, Altnagelvin	Medical Leaders Group	Cairine Gormley
22/03/2017	Manor House, Enniskillen	GP Symposium – Antimicrobial Update	Cairine Gormley & Dr Armstrong
27/03/2017	Pharmacy, Altnagelvin	New Staff	Cairine Gormley
28/03/2017	PCOP Governance	Point Prevalence Survey 2016	Cairine Gormley
30/03/2017	Urology Level 5, Altnagelvin	Update on *C. difficile* Diagnosis and Treatment	Cairine Gormley & Clare Robertson

(h) Miscellaneous

The IPCNs also provide sessions on IP&C issues for the following education programmes:

- Ward-based lunchtime training
- Junior Doctors' Induction Programme
- Departmental Equipment Controllers
- Pre-Registration Nursing Students (Ulster University, Magee)
- Return to Nursing (Ulster University, Magee)

4.5 Hand Hygiene Campaign

The IPCT held a very successful World Health Organisation (WHO) "World Hand Hygiene Day" on the 5th May 2016. The aim was to highlight the importance of hand hygiene and, this year, the focus was on the prevention of SSIs. A hand hygiene relay by Trust staff took place across Altnagelvin and the SWAH, and surgical wards were visited by the IPCT with new posters and resources. All of the activities relating to the WHO "World Hand Hygiene Day" were available on all Trust social media platforms, as well as the Trust Intranet.

The Infection Prevention Society (IPS) organised a hand hygiene campaign to "spread the message, not the bugs" in the form of a torch tour around the UK and Ireland. The tour began on "World Hand Hygiene Day" and events took place in each of the five countries (Scotland, England, Ireland, NI and Wales) to coincide with the WHO's "Clean Your Hands - Call to Action".

The aims of the hand hygiene torch tour were to:

- Raise awareness of the importance of hand hygiene among the general public,
- Promote the IPS nationally and internationally,
- Partner with other healthcare, infection and patient organisations to highlight the annual WHO "Clean Your Hands - Call to Action" for healthcare workers.

The WHSCT participated in this campaign from 6th to 14th June 2016. During that time the IPCT took part in a number of events to get the public, patients, visitors and staff involved across community and hospital settings. The main highlights of the tour were:

- Hand-over of the torch on the Peace Bridge, Derry
- Local radio stations supporting the campaign via interviews with the IPCT (Drive 105, BBC Radio Foyle and the Mark Patterson Show)
- Engagement with the public at:
    - Foyle Street Translink Bus Centre, Derry, during Transport Week
    - Outside Foyleside Shopping Centre, Derry
    - Foyle Search and Rescue
    - Students and teachers at Lisneal College, Derry
    - Staff and customers of Tesco Express, Crescent Link, Derry
    - Foyle Hospice Women's Walk
    - Marble Arch Caves, Fermanagh
- Support and promotion of the campaign with the:
    - Trust Board
    - Mayor of Derry & Strabane District Council
    - Health Minister at Stormont
    - Foyle MLA

These events were all supported by the Trust Communications Department using all media platforms, including the local press, Facebook and Twitter. Details were also included on the IPS website.

In addition, hand hygiene is a fundamental component of all IP&C training programmes. Throughout the year the IPCT continued to promote the seven step hand hygiene technique and five moments for hand hygiene at Induction Training, Mandatory Training and as part of ward/ department-based Enhanced Support. They also provided individual on-the-spot education for any staff who failed an independent hand hygiene audit.

4.6 Surveillance

The IP&C Surveillance Sub-Group of the Chief Executive HCAI Accountability Forum examines both local and regional surveillance data to identify trends and areas for improvement. The Sub-Group meet on a monthly basis and include Divisional representatives and members of the IPCT. The Sub-Group examines a range of information and makes recommendations for action and support to specific wards/ facilities. Minutes from these meetings are circulated to members of the wider Chief Executive HCAI Accountability Forum, who can request more detailed information/ discussion at the Forum meetings should they feel this is required. Surveillance results causing concern are escalated for discussion by the Forum.

(a) Laboratory-Based Ward Liaison Surveillance

The IPCT carry out laboratory-based ward liaison surveillance on all alert organisms isolated from clinical specimens and on all alert conditions. Monday to Friday the IPCN will either visit or phone ward/ facility staff and give verbal advice, followed by written advice, on the precautions and control measures that are essential for the specific disease and infecting agent. At weekends key organisms are reported directly by laboratory personnel to ward staff. The IPCDs provide an on-call service for any urgent clinical enquiries.

As a result of Chief Medical Officer letters, various DoHNI reports and communications issued in previous years, the IPCT also provide additional or more detailed surveillance and/ or contact tracing related to the following organisms:

- Pertussis
- Invasive group A streptococcus
- Tuberculosis (TB)

Further Trust-based surveillance programmes are desirable; however, funding for such initiatives is difficult to access in the current financial climate.

(b) National and Regional Surveillance Initiatives

The Trust is required to participate in the DoHNI's mandatory regional programme for surveillance of HCAIs. Annual reports are produced by the Public Health Agency (PHA), which contain trust specific trends enabling trusts to examine their own results in comparison with others and take action where there are areas for concern.

The IPCT contribute to the following surveillance programmes:

National Surveillance

- Haemophilus Influenzae Type B
- Scalded Skin Syndrome
- Enhanced Pertussis surveillance
- Pneumocystis carinii
- Pneumococci
- Beta haemolytic streptococcus group A

Regional Surveillance

- Enhanced Meningococcal surveillance

- MRSA/ MSSA bacteraemia
- *C. difficile*
- TB
- Orthopaedic SSI
- C-section SSI
- Critical care device-associated infection
- *Pseudomonas aeruginosa* in augmented care areas

A pilot for breast SSI surveillance commenced in the WHSCT on 1st July 2016. So far results have been received for quarters three and four 2016. These show SSI rates of 7.14% and 4.76% respectively. Since the WHSCT is the only one undertaking this surveillance at present, there is no comparable data for the rest of NI. However, the literature states that an SSI rate of between 3% and 15% is standard.

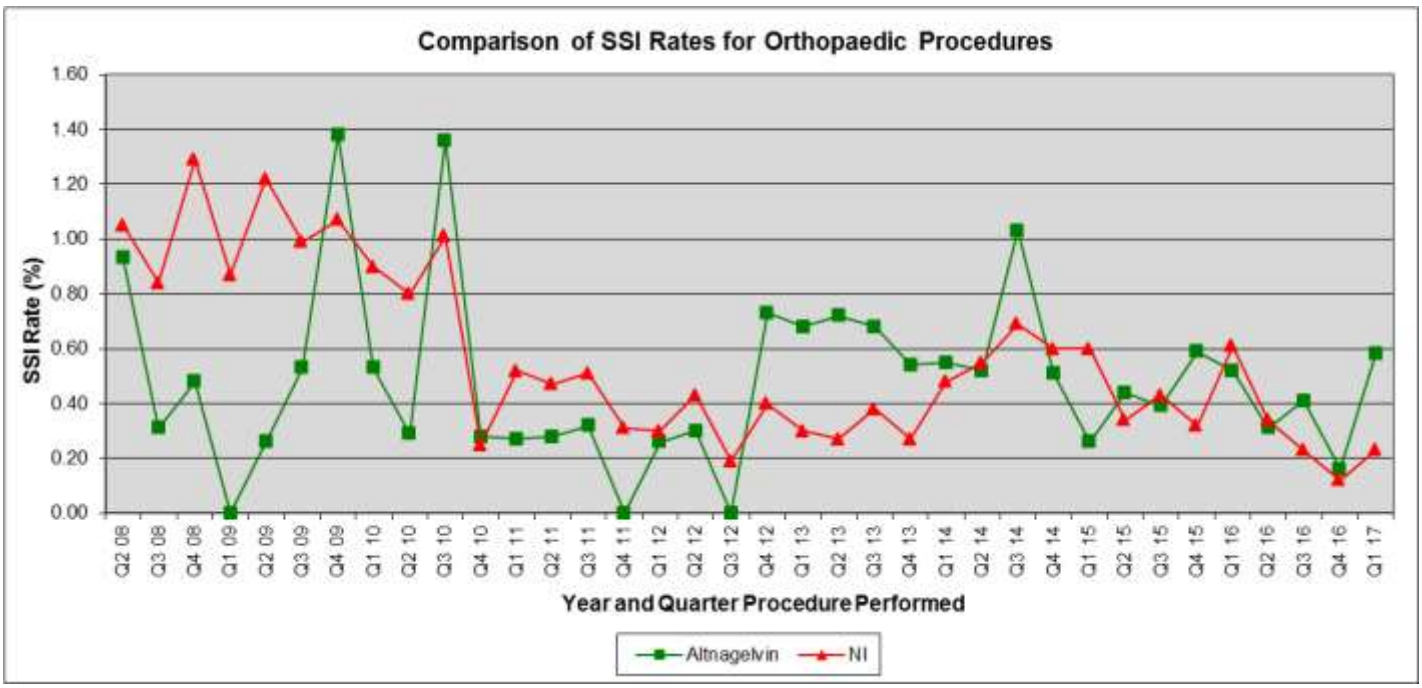
(c) Orthopaedic Surgical Site Infection Surveillance

Regional surveillance of orthopaedic post-operative infection has been continuous since 1st July 2002. The PHA provides data analysis and support. The SSI rate in orthopaedic surgery has routinely been below 1% since surveillance commenced. The chart below illustrates the SSI reductions achieved since surveillance began.

The Trust has been commended for its high compliance rate for completion of both orthopaedic and C-section surveillance data.

Evidence based care bundles are in place for orthopaedic surgery.

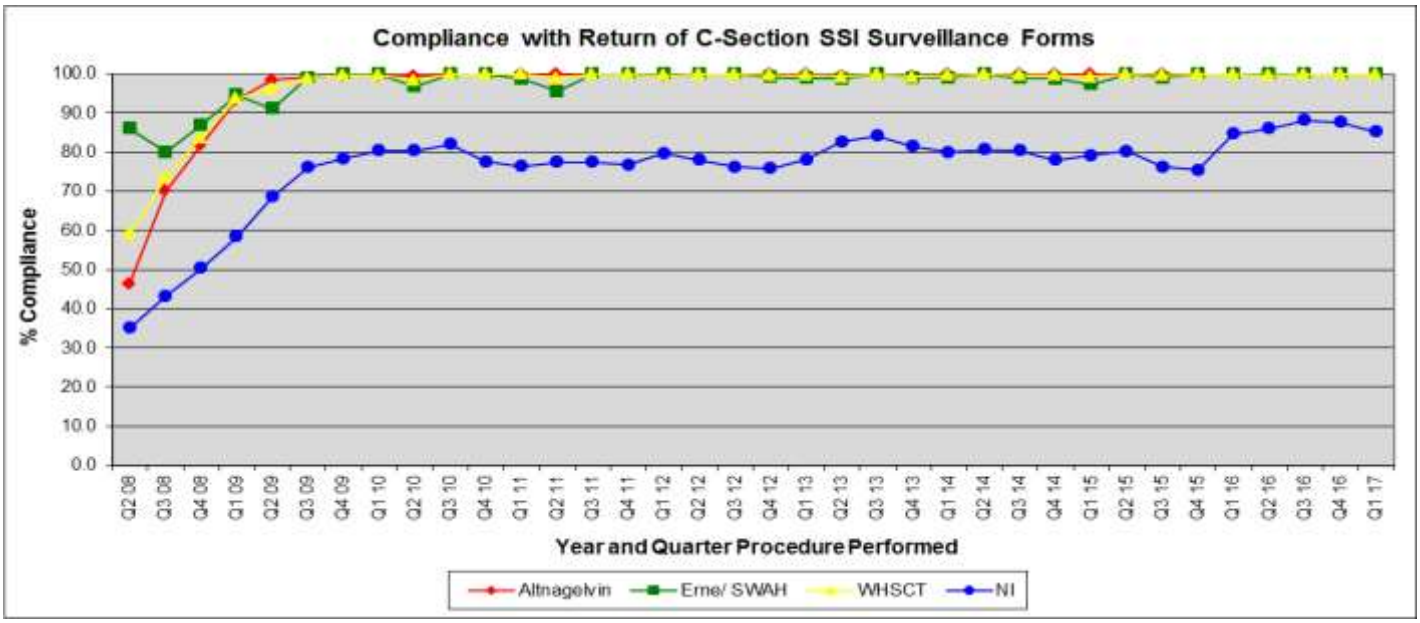
		Year and Quarter Procedure Performed															
		Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17
Number of Procedures/ SSI Rate	Altnagelvin	279	293	371	365	387	292	392	379	689	515	505	574	651	490	613	519
		0.72	*0.68*	*0.54*	*0.55*	*0.52*	*1.03*	*0.51*	*0.26*	*0.44*	*0.39*	*0.59*	*0.52*	*0.31*	*0.41*	*0.16*	*0.58*
	NI	2202	2127	2211	2098	2011	2161	2003	2180	2954	3015	3131	3284	3243	3010	3331	3554
		0.27	*0.38*	*0.27*	*0.48*	*0.55*	*0.69*	*0.60*	*0.60*	*0.34*	*0.43*	*0.32*	*0.61*	*0.34*	*0.23*	*0.12*	*0.23*



(d) Caesarean Section Surgical Site Infection Surveillance

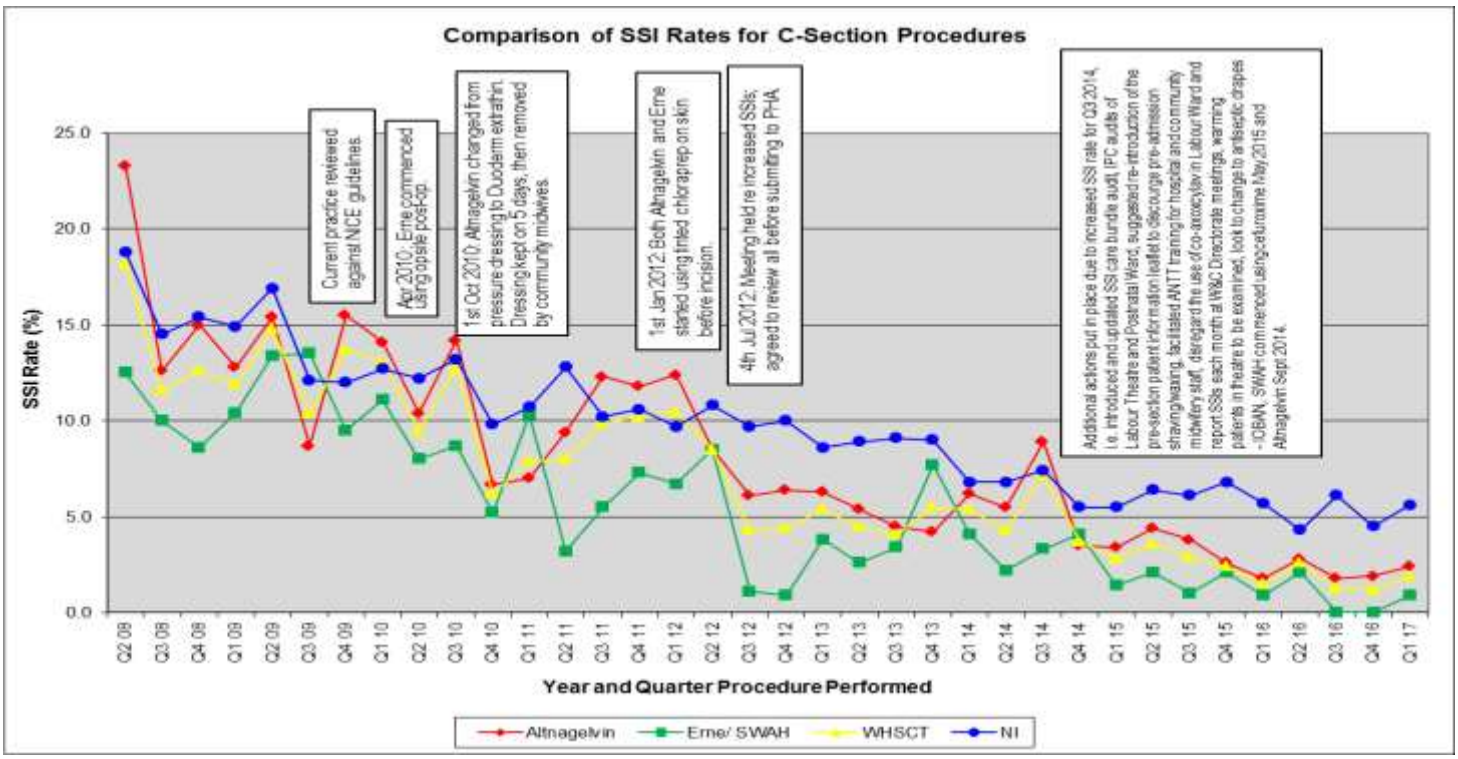
Post-operative C-section SSI surveillance commenced across NI in January 2008. The WHSCT has been contributing to this surveillance since February 2008. The Trust performs well compared with the NI average.

		Year and Quarter Procedure Performed															
		Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17
% Compliance with Return of Forms	Altnagelvin	99.4	100.0	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Erne/ SWAH	98.7	100.0	99.0	99.0	100.0	98.9	98.7	97.3	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0
	WHSCT	99.2	100.0	99.3	99.6	100.0	99.7	99.6	99.2	100.0	99.7	100.0	100.0	99.6	100.0	100.0	100.0
	NI	82.6	84.1	81.4	79.9	80.6	80.3	77.9	79.1	80.2	76.2	75.4	84.6	86.0	88.2	87.6	85.2



The compliance rate for submission of data remains 99%-100% compared with a NI average of between 75% and 88%. This gives the data real reliability.

		Year and Quarter Procedure Performed															
		Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17
Number of Procedures/ SSI Rate (%)	Altnagelvin	167	200	167	162	165	226	198	179	182	212	193	165	177	220	216	207
		5.4	*4.5*	*4.2*	*6.2*	*5.5*	*8.9*	*3.5*	*3.4*	*4.4*	*3.8*	*2.6*	*1.8*	*2.8*	*1.8*	*1.9*	*2.4*
	Erne/ SWAH	77	119	104	98	90	92	74	73	96	99	97	111	97	101	111	108
		2.6	*3.4*	*7.7*	*4.1*	*2.2*	*3.3*	*4.1*	*1.4*	*2.1*	*1.0*	*2.1*	*0.9*	*2.1*	*0.0*	*0.0*	*0.9*
	WHSCT	244	319	271	260	255	318	272	252	278	311	290	276	274	321	327	315
		4.5	*4.1*	*5.5*	*5.4*	*4.3*	*7.2*	*3.7*	*2.8*	*3.6*	*2.9*	*2.4*	*1.5*	*2.6*	*1.3*	*1.2*	*1.9*
	NI	1461	1590	1377	1333	1393	1546	1409	1316	1407	1479	1376	1395	1507	1627	1646	1550
		8.9	*9.1*	*9.0*	*6.8*	*6.8*	*7.4*	*5.5*	*5.5*	*6.4*	*6.1*	*6.8*	*5.7*	*4.3*	*6.1*	*4.5*	*5.6*

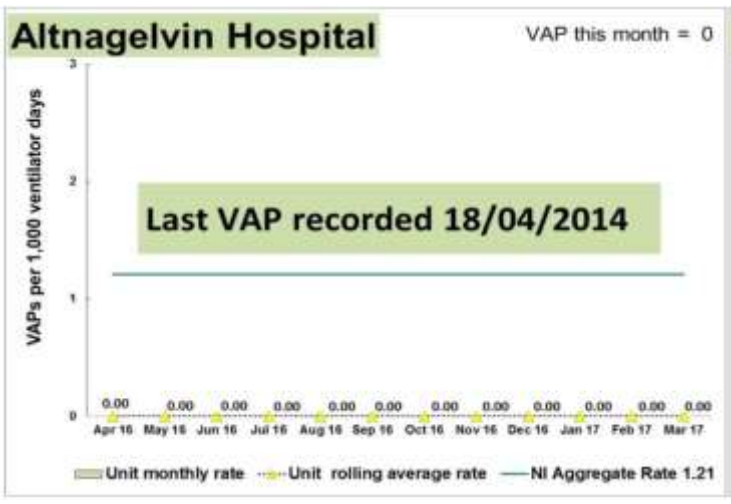


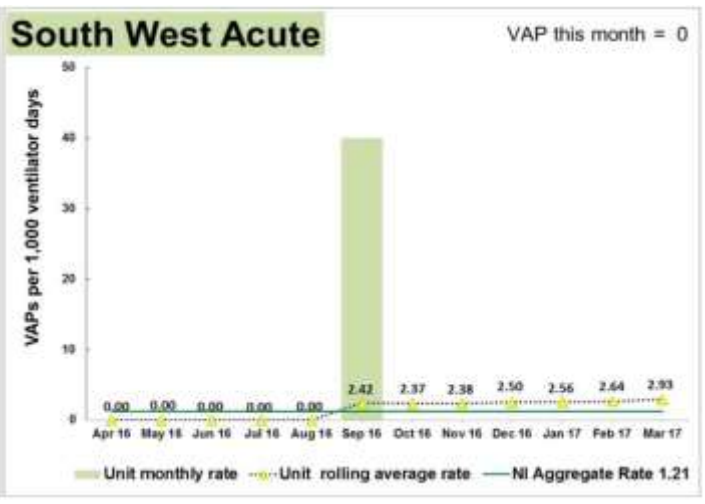
Evidence based care bundles to reduce SSIs are in place for C-section surgery.

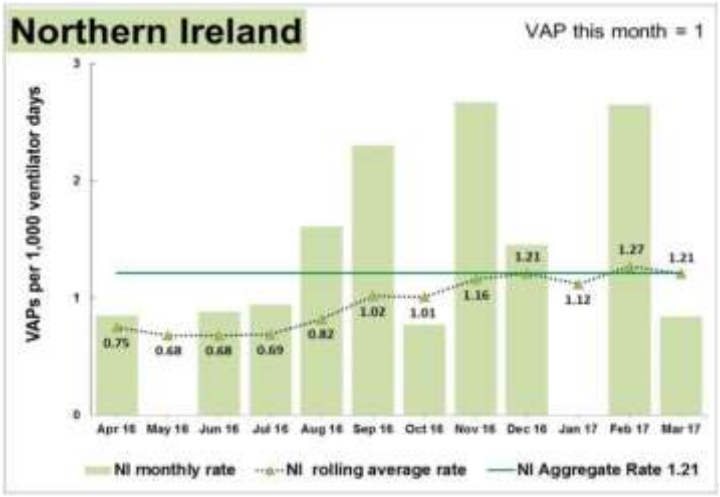
(e) Critical Care Device-Associated Infection Surveillance

Critical care device-associated infection surveillance commenced in June 2011. The most recent infection recorded was a VAP diagnosed in ICU, SWAH, in September 2016. This was the first device-related infection to have occurred in the Trust since April 2014.

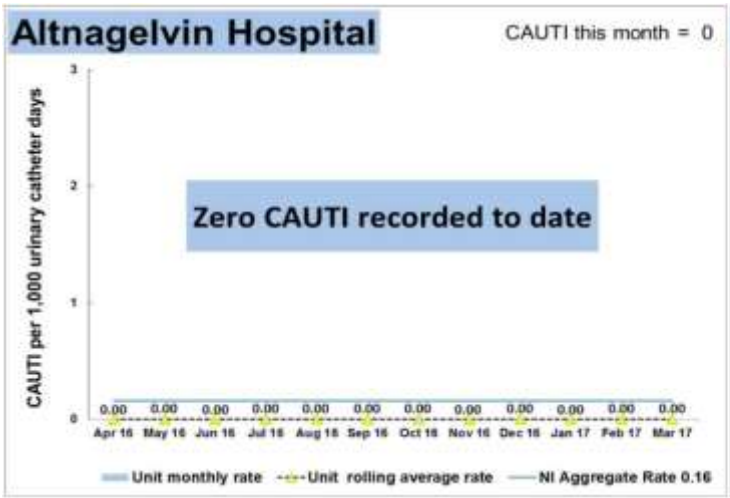
<u>VAP</u>

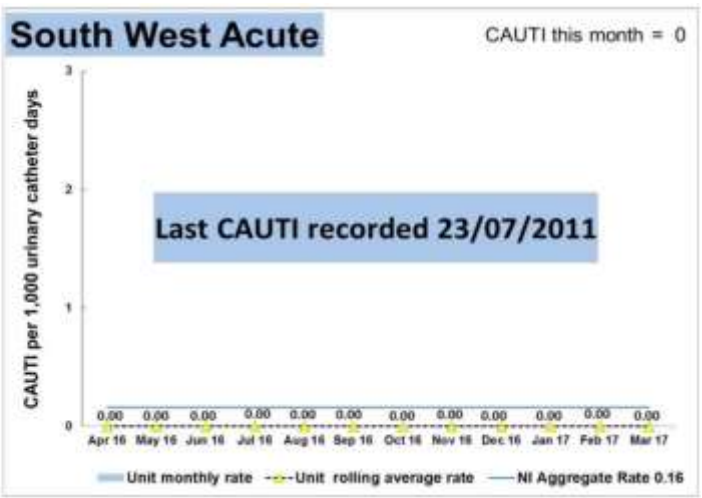


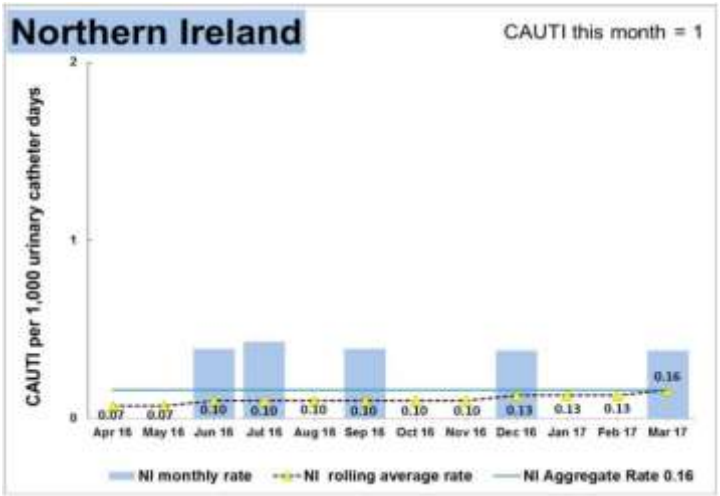



Northern Ireland
VAP this month = 1
VAPs per 1,000 ventilator days
0.75
0.68
0.68
0.69
0.82
1.02
1.01
1.16
1.21
1.12
1.27
1.21
Apr 16 May 16 Jun 16 Jul 16 Aug 16 Sep 16 Oct 16 Nov 16 Dec 16 Jan 17 Feb 17 Mar 17
NI monthly rate
NI rolling average rate
NI Aggregate Rate 1.21

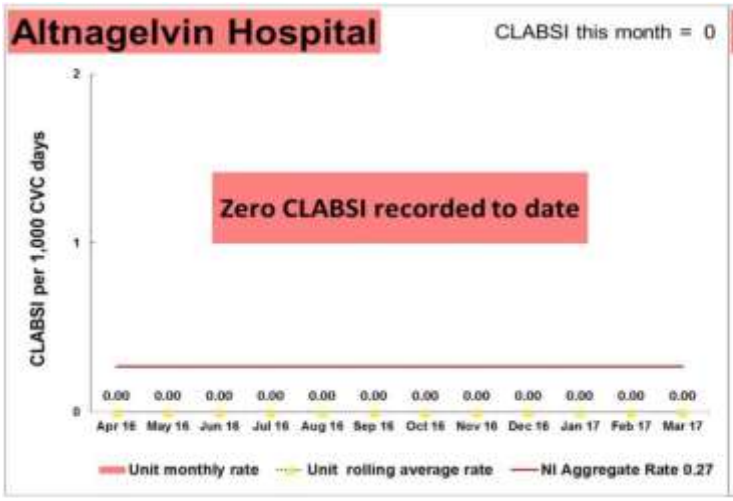
CAUTI

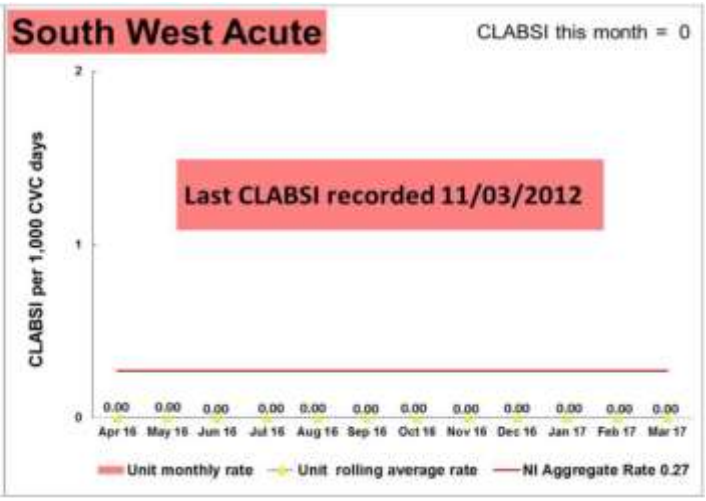

Altnagelvin Hospital
CAUTI this month = 0
CAUTI per 1,000 urinary catheter days
Zero CAUTI recorded to date
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Apr 16 May 16 Jun 16 Jul 16 Aug 16 Sep 16 Oct 16 Nov 16 Dec 16 Jan 17 Feb 17 Mar 17
Unit monthly rate
Unit rolling average rate
NI Aggregate Rate 0.16

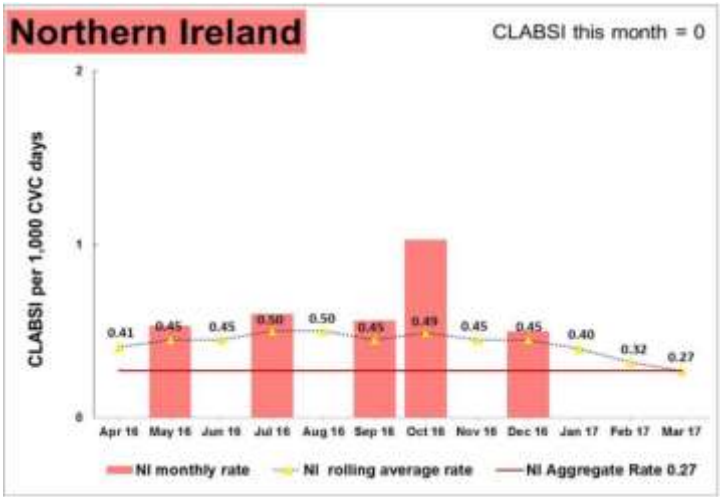

South West Acute
CAUTI this month = 0
CAUTI per 1,000 urinary catheter days
Last CAUTI recorded 23/07/2011
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Apr 16 May 16 Jun 16 Jul 16 Aug 16 Sep 16 Oct 16 Nov 16 Dec 16 Jan 17 Feb 17 Mar 17
Unit monthly rate
Unit rolling average rate
NI Aggregate Rate 0.16


Northern Ireland
CAUTI this month = 1
CAUTI per 1,000 urinary catheter days
0.07 0.07 0.10 0.10 0.10 0.10 0.10 0.10 0.13 0.13 0.13 0.16
Apr 16 May 16 Jun 16 Jul 16 Aug 16 Sep 16 Oct 16 Nov 16 Dec 16 Jan 17 Feb 17 Mar 17
NI monthly rate
NI rolling average rate
NI Aggregate Rate 0.16

CLABSI







(f) Pseudomonas Surveillance

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.

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2013-14	2	0	2	1	0	0	0	1	0	0	2	0	8
2014-15	0	1	0	0	0	1	3	0	1	0	0	0	6
2015-16	0	0	0	0	0	0	0	0	0	1	0	0	1
2016-17	0	0	0	0	0	0	0	1	1	1	0	0	3

All three cases reported during 2016-17 were categorised as healthcare-associated. The most recent healthcare-associated positive blood culture in an augmented care area occurred in ICU, Altnagelvin, in December 2016. Prior to that, there had been none since March 2014.

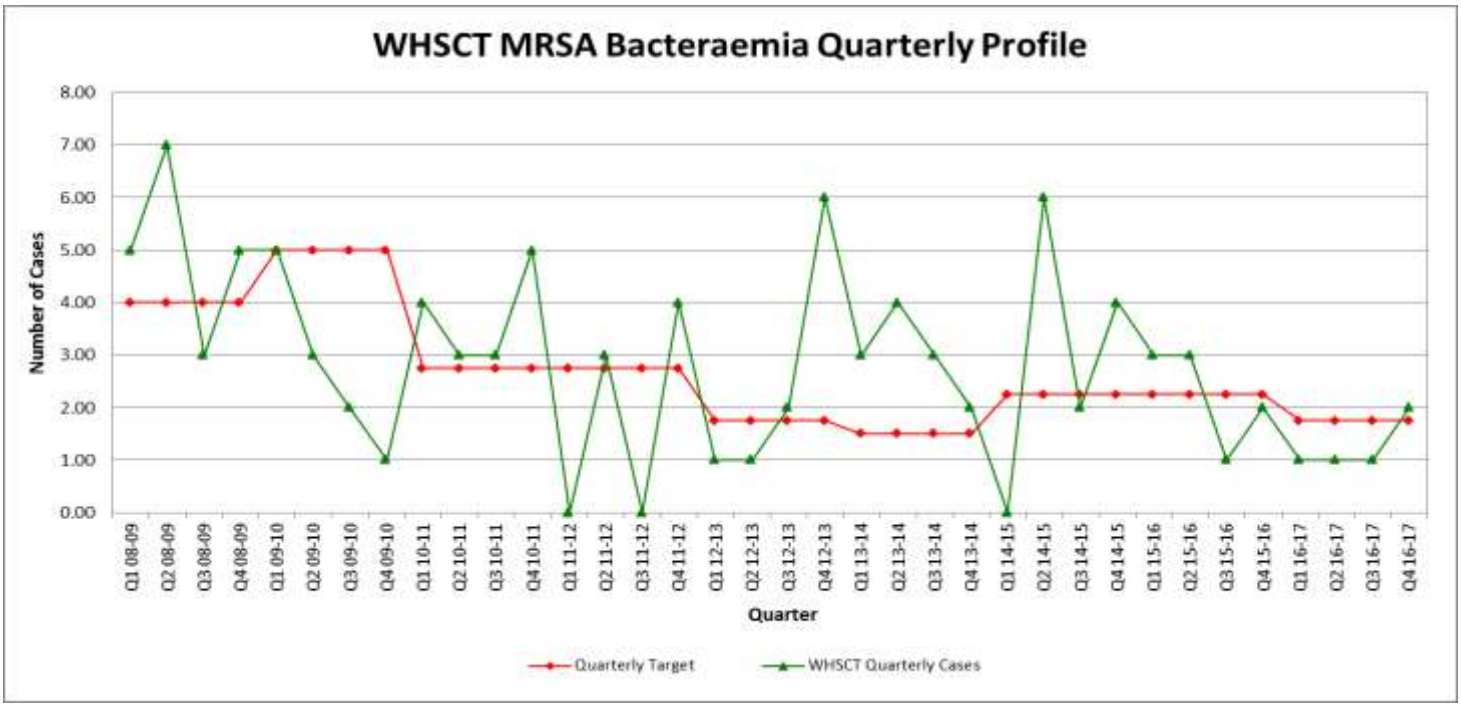
(g) MRSA/ MSSA Bacteraemia and *Clostridium difficile* Surveillance

Reduction targets for HCAIs came into effect from 1st April 2008. Performance is reported monthly and circulated to:

- The Chief Executive
- Chief Executive HCAI Accountability Forum
- IP&C Surveillance Sub-Group
- All consultants
- Ward managers
- Risk Management

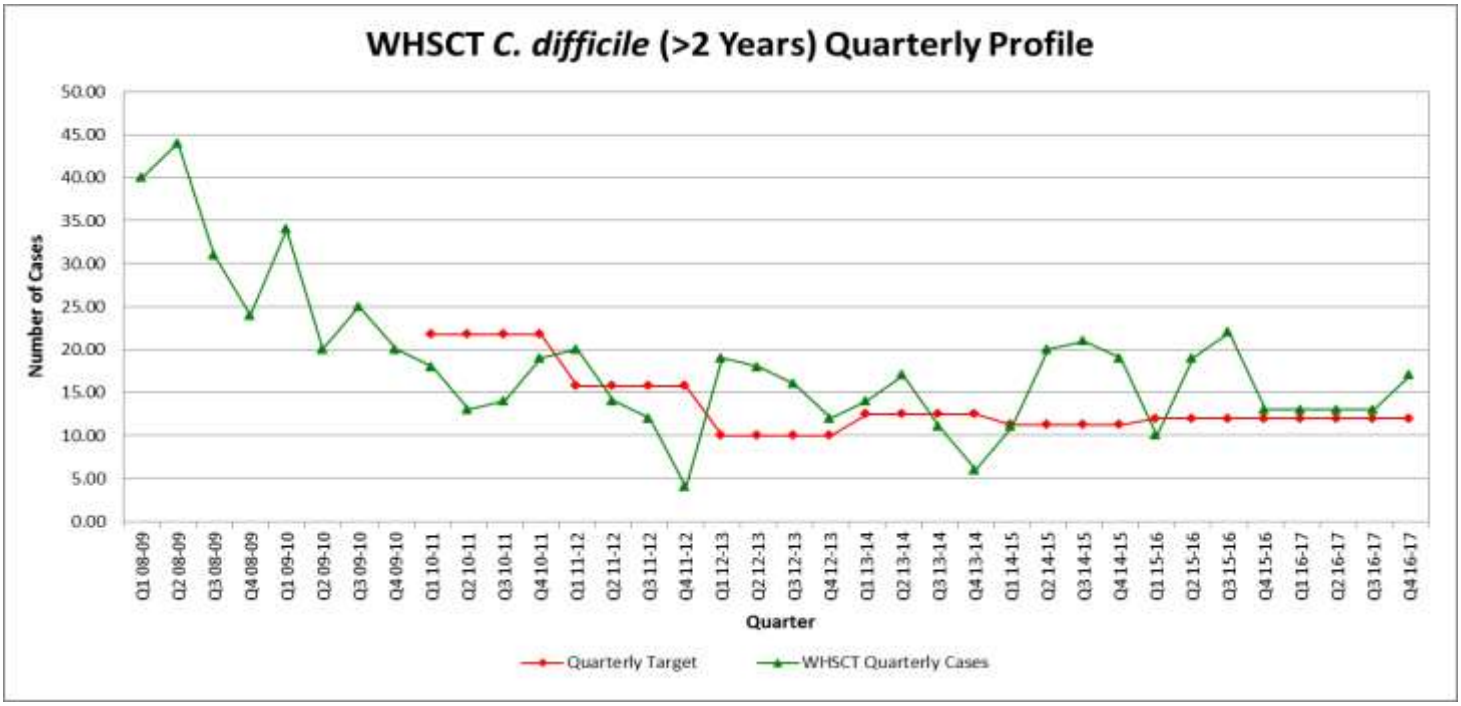
The Minister for Health has set reduction targets for HCAIs based on the surveillance data reported to the PHA. The baseline for MRSA bacteraemias is the number of infections reported during the period 1st April 2015 to 31st March 2016 (9 cases). The Trust was expected to achieve a reduction of two cases (22.22%) compared to the baseline, giving a target of seven. This target was met and in the year to the end of March 2017 five MRSA bacteraemias were reported, a reduction of 44.44%. It should also be noted that the proportion of those cases which can be attributed to the Trust decreased from three to zero. The Trust's performance is the best placed within the region and must be commended.

The reports include positive results from patients who were already infected prior to admission to the Trust. All community-acquired cases are reviewed to ensure there has not been any healthcare intervention within the previous two weeks, e.g. district nursing, podiatry, Rapid Response, etc.

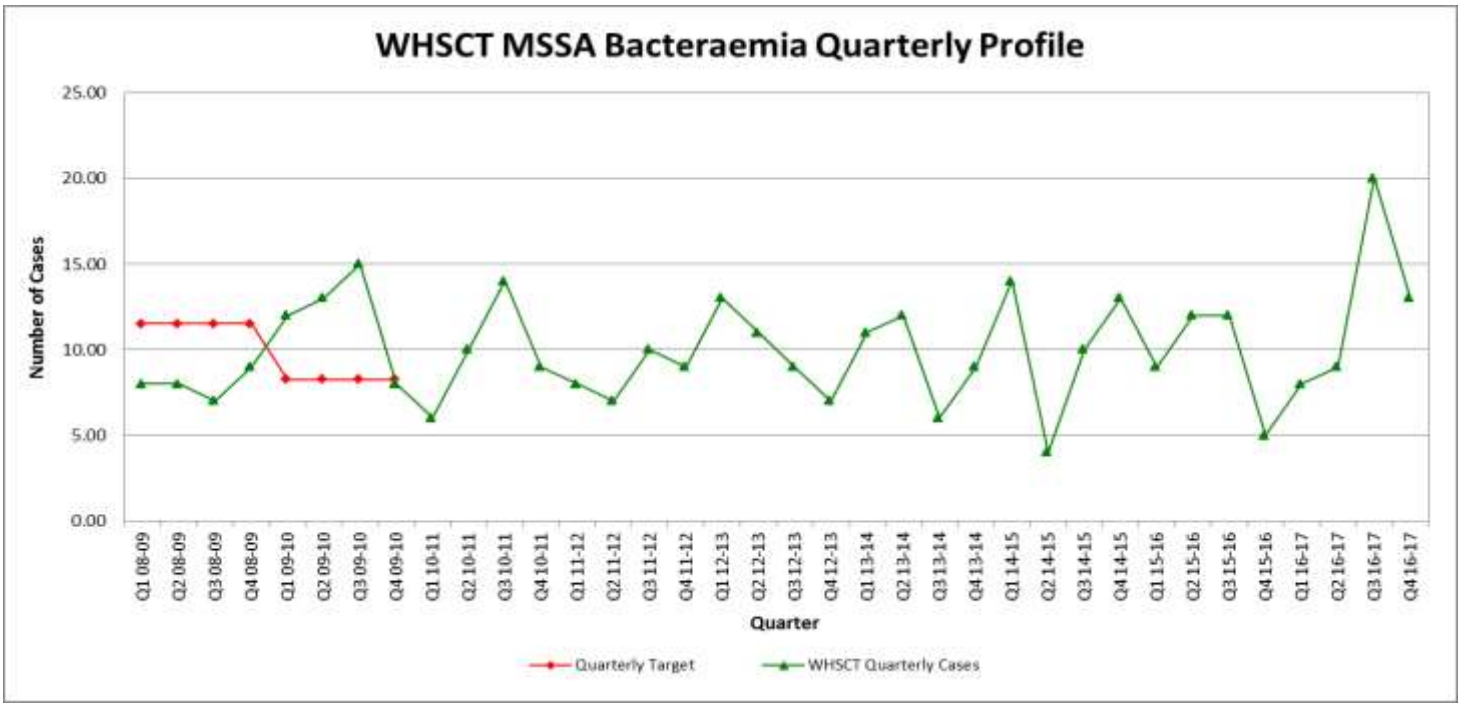


The baseline for *C. difficile* was the number of infections reported during the period 1st April 2015 to 31st March 2016 for inpatients aged 2 years and over (64 cases). In the year to the end

of March 2017, the Trust was expected to achieve a 25% reduction on the previous year (48 cases). This target was not met as the Trust actually reported 56 cases. Across the province only two trusts achieved their target, while three, including the WHSCT, did not.



Although no reduction target was set for the year of this report, surveillance of Meticillin-Sensitive *Staphylococcus aureus* (MSSA) bacteraemias also remained mandatory. The number of cases rose by 12, from 38 in 2015-16 to 50 in 2016-17.



(h) Root Cause Analysis

The Trust has aimed to carry out RCAs on all healthcare-associated *C. difficile* positive patients and those with healthcare-associated MRSA and MSSA bacteraemia (with the exception of

relapse cases) since February 2009. This involves a meeting with relevant staff who review where, when, how and why the patient developed an infection to identify areas for improvement. Recommendations and sustainable solutions are agreed to minimise the risk of recurrence of a similar incident in the future. The process to date has provided invaluable information to inform clinical teams and the IPCT where to target resources for improvement.

Key Trends 2016-17

HCAI	Key Trends Identified
MSSA Bacteraemia (healthcare-associated)	12 cases were investigated through the RCA process and 6 were deemed to be avoidable HCAIs. 9 of the cases cited poor compliance with the insertion or ongoing care of a medical device/ IV line as the root cause.
MRSA Bacteraemia (healthcare-associated)	One case was investigated via RCA due to healthcare interventions having occurred prior to the bacteraemia. It was not thought to be preventable as the patient had MRSA in their urine and a nephrostomy tube. There was, however, some non-compliance with the checking of a peripheral IV cannula.
C. difficile associated disease (healthcare-associated)	A total of 48 cases were investigated through the RCA process. The main cause in all cases was antibiotic use, with 7 cases identifying off-guideline prescription in hospital and 9 in primary care. It was decided that 9 cases were preventable. Also, 58% of the patients were prescribed PPIs.

4.7 Planning and Water Safety

(a) Risk Assessment Prior to Strategic/ New Build/ Refurbishment Planning

An IPCN is involved in all aspects of planning across the Trust. The main objective is to ensure that all WHSCT premises are designed and built to facilitate the prevention and control of infection. This involves a review of the risk assessment process used during planning and renovation/ construction. The emphasis is on establishing a timely collaboration between clinical staff, Estates and the IPCT with regard to any new build, renovation or maintenance repairs of any Trust building.

In each situation where there is to be construction, refurbishment or repair work the Infection Control Risk Assessment Form is completed and forwarded to the IPCT. This provides information regarding the following:

- New building work to be undertaken
- Refurbishment work to be carried out
- Alterations to the use of rooms/ premises
- Maintenance requests
- Any IPCT monitoring required

On receipt of this information, depending on the size and complexity of the project, controls are agreed with clinical staff, Estates and, where applicable, private contractors.

As a means of enhancing the IP&C input into planning in the WHSCT, a strategy/ framework developed by Health Facilities Scotland is being adapted for use in all planning projects. This will be gradually introduced to replace the current Infection Control Risk Assessment Form. The

new documents all relate to HAI-SCRIBE, which is an acronym for **H**ealthcare **A**ssociated **I**nfection **S**ystem for **C**ontrolling **R**isk **I**n the **B**uilt **E**nvironment. The procedures contained within HAI-SCRIBE have been developed as a framework for all groups to work together to identify, manage and mitigate issues in the built environment impacting on IP&C risks, ultimately reducing the risks to patients whilst any works are underway.

During the year of this report IPCT involvement included:

- Radiotherapy Unit, Altnagelvin
- Butterfly Lodge (Transitional Care Unit), Altnagelvin
- Ward 5, Waterside
- Ward 1, Waterside
- Omagh Hospital and Primary Care Complex
- Emergency Department, SWAH
- Emergency Department, Altnagelvin
- Strule and Brooke, Lakeview Hospital
- Ward 9, SWAH
- Endoscopy, Altnagelvin
- Old Endoscopy, Altnagelvin
- Clinical Decisions Unit, Altnagelvin
- Removal of Asbestos from the Tower Block, Altnagelvin
- North Wing, Altnagelvin
- Grangewood, Gransha
- Ward 43, Altnagelvin
- Ward 42, Altnagelvin
- Ward 6, Altnagelvin
- Plumbing works in the Tower Block, Altnagelvin
- Antenatal, Altnagelvin
- Review of all submitted Infection Control Risk Assessment Forms and scheduling IPCT input, including dust monitoring for Aspergillus control
- Available for advice and/ or consultation throughout any Trust projects

(b) Water Safety

Water testing continues throughout key Trust owned facilities. A range of mitigating actions are in place to deal with any positive results, 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 Estate Services staff in conjunction with the Trust Water Safety Group (WSG). Essential work to replace the pipework in Wards 1 to 5, Altnagelvin, began in early 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.

An Independent Water Safety Audit was carried out in October 2016. The report returned very favourable findings and any recommendations are to be addressed in the coming year.

The Trust Water Safety Plan was also reviewed during the year of this report. This resulted in changes to the risk assessment and subsequent control measures for all Trust facilities. The

updated document was ratified through the WSG and the Risk Management Sub-Committee.

4.8 Research

The IPCT ensure all up to date available evidence is used when writing and reviewing Trust guidelines, policies, protocols, patient leaflets and care pathways. They have also contributed to evidence-based guideline production at a regional level, e.g. the NI Regional IP&C Manual and a regional study of local MRSA screening practices which is to inform the development of a regional screening policy.

4.9 Infection Prevention and Control Link Personnel

IPCLP provide a link between their own clinical areas and the IPCT. Their role is to increase awareness of relevant new policies, procedures, guidelines and protocols and motivate staff to improve practice. Furthermore, they participate in the audit of infection-related clinical practices and, where appropriate, instigate improvement programmes.

In April 2016 the IPCT launched an IPCLP SharePoint Site available via the Trust Intranet. While this was primarily aimed at IPCLP, it was accessible to all Trust staff. The site will be a key resource to help support staff in both hospital and community settings. It includes the following features:

- A Discussion Board for staff to make non-urgent enquires that an IPCN will respond to a minimum of twice a week. Also an area for staff to share ideas and give examples of what they are doing to protect patients and prevent HCAIs.
- Access to all the IP&C audit tools.
- Links to useful websites, e.g. PHA, Start Smart Then Focus initiative.
- Access to any relevant IP&C posters.
- Information on any past and upcoming Link Personnel meetings (including minutes).
- A Meet the Team section. This is a list of all the IPCT members throughout the Trust and their contact details.
- Interesting and up-to-date journal articles.
- Surveys that staff can participate in to let the IPCT know what staff want to hear about.

4.10 Patient and Public Involvement/ Experience

Work to examine patients' and clients' experience of healthcare services is conducted using a three-way process, which includes survey, observation and patient stories, i.e. 10,000 Voices. The process is completed as part of a quarterly rolling programme. The Trust is advised by the PHA which service areas are to be targeted. Elements examined relate to the five regional patient standards which are privacy, dignity, communication, attitude and behaviour. The Trust reports its findings to the PHA. In addition, the Trust uses this opportunity to include questions related to infection prevention and environmental cleanliness. Where concerns were expressed, measures have been taken to improve practice and to ensure the best possible experience for patients and clients.

The IPCT continue to participate in bi-weekly ward rounds of symptomatic patients who are positive for *C. difficile*. Part of the visit includes a direct interaction with the patient (and carers, if in attendance) to ensure they understand their condition and to allow them to question the Team.

International Infection Prevention Week 2016 took place from 16th to 22nd October. The IPCT co-ordinated a number of activities during this week aimed at highlighting important infection prevention information for patients, the general public and staff on how to "Break the Chain of Infection". These included:

- Use of various media platforms to share information
- IP&C information stand
- IP&C word search staff competition
- Children's colouring competition
- Visits to wards and departments
- Visit to a residential home
- Promotion of the Flu vaccination

A component of the MRSA improvement work described in section 4.4 (d) was engagement with patients regarding their experience and understanding of having MRSA carriage. The questionnaire included the following questions:

- Were you told that you had tested positive for MRSA and did the staff member explain what this meant?
- Were you informed regarding the difference between being infected with MRSA or being colonised, i.e. it's presence on your skin or in your nasal passages?
- Do you understand how MRSA can spread from one person to another? Were you given an information leaflet about MRSA?
- Do you understand why you need to be looked after in a single room?

The results of this work can be seen in *Appendix 15*. Following completion of the improvement programme an action plan will be developed to address any issues identified.

There was widespread communication with the general public using different media platforms sharing key IP&C messages during the winter 2016-17 period. A communication plan is to be developed for next year to engage with the public much earlier in the Norovirus season.

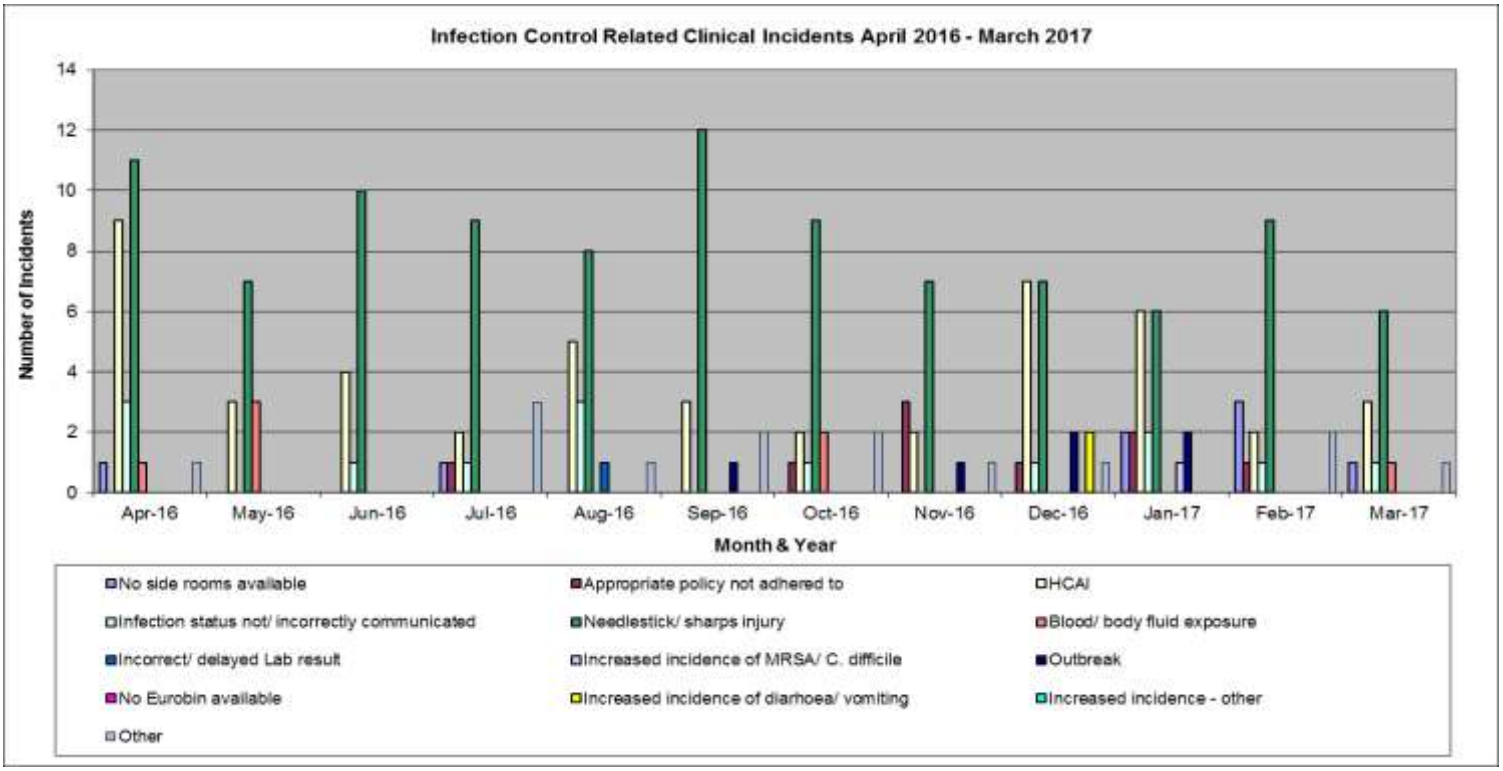
The IPCT attended a Trust Patient & Client Experience Forum meeting at the end of March 2017 to share the work that has been undertaken and to discuss future proposals.

5.0 CLINICAL INCIDENTS

A total of 211 infection prevention and control related incidents were reported through the Trust's clinical incident reporting system, Datix, during the year 2016-17. This equates to 1.92% of all incidents reported. The following table and graph illustrate the number and type of incidents reported broken down by month.

Reporting of HCAIs has improved. The most prevalent incidents relate to needlestick/ sharps injuries and actions to address this are overseen by the Sharps Group and the Health and Safety Committee, both of which have an IPCN as part of the membership.

	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Total
No side rooms available	1	0	0	1	0	0	0	0	0	2	3	1	8
Appropriate policy not adhered to	0	0	0	1	0	0	1	3	1	2	1	0	9
HCAI	9	3	4	2	5	3	2	2	7	6	2	3	48
Infection status not/ incorrectly communicated	3	0	1	1	3	0	1	0	1	2	1	1	14
Needlestick/ sharps injury	11	7	10	9	8	12	9	7	7	6	9	6	101
Blood/ body fluid exposure	1	3	0	0	0	0	2	0	0	0	0	1	7
Incorrect/ delayed Lab result	0	0	0	0	1	0	0	0	0	0	0	0	1
Increased incidence of MRSA/ C. difficile	0	0	0	0	0	0	0	0	0	1	0	0	1
Outbreak	0	0	0	0	0	1	0	1	2	2	0	0	6
No Eurobin available	0	0	0	0	0	0	0	0	0	0	0	0	0
Increased incidence of diarhoea/ vomiting	0	0	0	0	0	0	0	0	2	0	0	0	2
Increased incidence - other	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	0	0	3	1	2	2	1	1	0	2	1	14
Total	26	13	15	17	18	18	17	14	21	21	18	13	211



6.0 INCIDENTS, OUTBREAKS AND CONTACT TRACING

6.1 Acute Facilities (Including Elderly Care and Paediatrics)

Type of Incident	Organism	Facility	Ward	Date	Patients and Staff Affected
Increased incidence	*C. difficile*	Altnagelvin	Ward 7	18/04/2016 – 17/06/2016	3 patients
Outbreak	Norovirus	SWAH	Ward 7	03/05/2016 – 19/05/2016	6 patients 11 staff
Contact tracing/ investigation	Pertussis	Altnagelvin	Ward 6 (while temporarily located to 9th Floor)	15/07/2016 – 16/07/2016	1 index patient 3 contact patients

Increased incidence	GDH	Altnagelvin	HDU	24/09/2016 – 08/11/2016	2 patients
Outbreak	Diarrhoea and Vomiting – causative organism not identified	SWAH	Ward 6	30/10/2016 – 15/11/2016	7 patients 6 staff
Outbreak	Diarrhoea and Vomiting – causative organism not identified	Altnagelvin	Ward 3	14/11/2016 – 22/11/2016	7 patients 1 staff
Outbreak	Norovirus	Altnagelvin	Ward 42	15/11/2016 – 24/11/2016	12 patients 11 staff
Investigation of clinical isolate	*Pseudomonas aeruginosa*	Altnagelvin	NNICU	21/11/2016 – 25/11/2016	1 patient
Outbreak	Diarrhoea and Vomiting – causative organism not identified	Altnagelvin	Ward 3	27/11/2016 – 01/12/2016	4 patients 1 staff
Outbreak	Norovirus	Altnagelvin	Ward 7	09/12/2016 – 27/12/2016	10 patients 2 staff
Outbreak	Norovirus	Altnagelvin	Ward 40	13/12/2016 – 19/12/2016	9 patients 2 staff
Outbreak	Norovirus	Altnagelvin	Ward 31	14/12/2016 – 23/12/2016	9 patients 6 staff
Outbreak	Norovirus	Altnagelvin	Ward 32 ESU	14/12/2016 – 23/12/2016	9 patients 13 staff
Outbreak	Norovirus	Altnagelvin	Ward 3	16/12/2016 – 29/12/2016	10 patients 1 staff
Outbreak	Diarrhoea and Vomiting – causative organism not identified	Altnagelvin	Ward 2 TOU	17/12/2016 – 29/12/2016	20 patients 4 staff
Outbreak	Diarrhoea and Vomiting – causative organism not identified	Altnagelvin	Ward 20	25/12/2016 – 29/12/2016	2 patients
Outbreak	Norovirus	Altnagelvin	Ward 8 AHAN	26/12/2016 – 30/12/2016	3 patients
Increased incidence	Diarrhoea and Vomiting – causative organism not identified	Altnagelvin	Ward 7	17/01/2017 – 24/01/2017	6 patients
Investigation of clinical isolate	*Pseudomonas putida*	Altnagelvin	NNICU	23/01/2017 – 27/01/2017	1 patient

Outbreak	Norovirus	SWAH	Ward 3	08/02/2017 – 20/02/2017	7 patients 1 staff
Contact tracing/ investigation	TB	Altnagelvin	Emergency Department, ICU, Ward 3 & Radiology (Plus Radiology at Belfast City Hospital & NIAS)	20/02/2017 – 10/05/2017	1 index patient 6 family contacts 15 patient contacts 214 staff contacts

6.2 Community Facilities (PCOPS and AMHDS)

Type of Incident	Organism	Facility	Date	Patients and Staff Affected
Outbreak	Norovirus	Seymour Gardens Residential Home, Derry	12/08/2016 – 27/08/2016	16 residents 7 staff
Increased incidence	Diarrhoea and Vomiting – causative organism not identified	Ballyclose Hostel, Limavady	11/11/2016 – 29/11/2016	5 residents 3 staff
Outbreak	Norovirus	Ward 3, Waterside	17/11/2016 – 30/11/2016	5 patients 3 staff
Outbreak	Norovirus	Thackeray Place Residential Home, Limavady	22/11/2016 – 08/12/2016	20 residents 7 staff
Outbreak	Norovirus	Ward 4, Waterside	19/12/2016 – 23/12/2016	4 patients 3 staff
Increased incidence	Diarrhoea and Vomiting – causative organism not identified	Ralph's Close, Lakeview	25/12/2016 – 03/01/2017	4 clients 3 staff
Increased incidence	Diarrhoea and Vomiting – causative organism not identified	Rehabilitation Unit, TCH	17/01/2017 – 02/02/2017	16 patients 15 staff

7.0 PROPOSED ANNUAL INFECTION PREVENTION AND CONTROL PROGRAMME 2017-2018

The IP&C Strategic Plan has been developed to support the work taken forward in previous years and to maintain the Trust's focus on preventing and reducing avoidable HCAIs, as well as to achieve/ sustain compliance with all best practice IP&C standards across the organisation.

The plan is derived from root cause analysis findings, regional requirements, local surveillance,

implementation of evidence based care bundles and experience with existing assurance mechanisms.

The objectives set for the next three years identify the ways in which the Trust will continue to prioritise reducing HCAIs by informing, promoting and sustaining expert IP&C policy and practice in the pursuit of service user and staff safety wherever care is delivered. Existing initiatives will be further enhanced and new projects introduced in order to reduce avoidable infections, to share learning and improve the quality of patient care. The Trust will work with other agencies and key stakeholders to contribute to reducing trends in antimicrobial resistance. As part of the commitment to improving the quality of Trust services, the Trust will continue to monitor compliance and will enhance surveillance systems within available resources.

The overall aims of the strategy are:

- To ensure that IP&C is embedded at every level of the organisation. All staff, visitors, patients, service users and the public will be aware of their responsibility and the part that they need to play in preventing avoidable HCAIs.
- The Trust Board, CMT and senior leaders will have assurance that all efforts are being taken to prevent HCAIs.

The plan is in the first year of a three-year cycle and will undergo adaptations and changes to ensure emerging priorities and issues are incorporated.

Key:

ALL	All Directorates
ACUTE	Acute Services Directorate
PCOP	Primary Care and Older People's Services Directorate
W&C	Women's and Children's Services Directorate
AMHD	Adult Mental Health and Disability Services Directorate
IPCT	Infection Prevention & Control Team

1. Zero tolerance to preventable healthcare-associated infections (HCAIs)

- Meet Department of Health (DoHNI) reduction targets (adopt zero tolerance to avoidable MRSA infections and contribute to reducing *C. difficile* rates) **(ALL)**
- Monitor surgical site infections in Orthopaedics and Breast Surgery **(ACUTE/ IPCT)**
- Monitor Caesarean section site infections **(W&C/ IPCT)**
- Continue with Critical Care infection surveillance **(ACUTE/ IPCT)**
- Work with the Public Health Agency (PHA) and trusts regionally to agree any additional surveillance initiatives **(ALL/ Patient Safety/ IPCT)**
- Staff are fully aware of the Policy on Zero Tolerance to Preventable HCAIs **(ALL)**

2. Review and improve internal processes and systems to enhance surveillance of infection to efficiently monitor microbiologically significant bacteria and emerging resistance patterns

Surveillance data will be available at ward/ department level to use in conjunction with a variety of audit findings to inform and improve practice

- Work with the PHA in the development of regional Electronic Alert/ Surveillance Systems **(ICT/ IPCT)**
- Electronic and timely sharing of surveillance data with clinical teams **(ICT/ IPCT)**
  - Short Term: Enhance IPC related information within NIECR and Patient "Flow" Board
  - Long Term: Contribute to regional surveillance/ alert system to monitor emerging resistance/ prescribing patterns
    - Meticillin-Resistant *Staphylococcus aureus* (MRSA)/ Extended-spectrum beta-

lactamases (ESBLs)
    - Carbapenemase-Producing Enterobacteriaceae (CPE)
- Continue with mandatory reporting of specific micro-organisms **(ALL/ IPCT)**
    - Beta Haemolytic Streptococcus Group B infections in newborns **(W&C)**
    - *Pseudomonas aeruginosa* in augmented care settings **(ACUTE/ W&C/ IPCT)**
    - Invasive Group A Streptococcal (GAS) infections (**All/ IPCT)**
- Implement the Strategy for Tackling Antimicrobial Resistance (STAR) recommendations. Antimicrobial audit of adherence to guidelines target **(ALL)**
- Continue to provide antimicrobial resistance trends feedback **(Consultant Microbiologists/ Antimicrobial Pharmacists)**

3. Review and agree IPC key performance indicators across the organisation

- Hand hygiene compliance with standards **(ALL/ IPCT)**
- Review methods used to monitor High Impact Interventions (HIIs) for urinary catheter, peripheral venous cannulae and other vascular devices as relevant **(ALL/ IPCT)**
- Aseptic non-touch technique (ANTT) compliance with standards **(ALL)**
- Environmental cleanliness scores **(ALL/ Executive Director of Nursing)**
- Blood culture contamination rates **(ACUTE/ W&C/ Consultant Microbiologists)**
- Antimicrobial prescribing audits **(ALL/ Consultant Microbiologists/ Antimicrobial Pharmacists)**
- *Clostridium difficile* HII audits **(ALL/ IPCT)**
- Staff uptake of seasonal flu vaccine **(ALL)**
- Attendance at IPC Mandatory Training **(ALL)**

4. Governance and continuous improvement

Continued commitment to an approach whereby IPC is considered as an integral part of service delivery and development, taking account of all best practice guidelines. Continue to monitor gaps in assurance and work towards achieving and sustaining compliance in the following:

- Controls Assurance Standard **(IPCT)**
- Continue compliance with the recommendations within the Troop Report for NICU **(W&C/ IPCT)**
- Ensure that the Trust NNICU Escalation Plan incorporates the content of the Regional Neonatal Network Escalation Plan **(W&C)**
- Ensure compliance against the Regulation and Quality Improvement Authority's (RQIA) IPC Governance Tool for management and hospitals (linked to the National Institute for Health and Care Excellence (NICE) Standards PH 36 Hospital: Prevention and Control of Healthcare-Associated Infections Quality Improvement Guide) **(ALL/ IPCT)**
- Ensure compliance with RQIA inspections (Infection Prevention and Hygiene, Augmented Care and the new Hospital Inspection Programmes) **(ALL)**
- Focus on achieving compliance with NICE Clinical Guidelines 139 Infection: Prevention and Control of Healthcare-Associated Infections in Primary and Community Care **(All Directorates across Community/ IPCT)**
- Ensure compliance with NICE (NG 33) Tuberculosis **(ACUTE/ PCOP/ W&C/ IPCT)**
- Compliance with RCA Guidelines and evidence shared learning **(ALL)**

5. Practice development and IPC

Develop a programme of quality improvement and research to underpin the delivery of high quality IPC practice with the potential to make improvements in experience, safety and effectiveness of patient care

- Embedding of existing evidence based care bundles (HIIs), including ANTT, and introduction

of further applicable bundles **(ALL)**
- Develop an improvement plan in conjunction with the Trust Quality Improvement Programme **(ALL)**
- Continue to further develop and implement enhanced support programmes to make improvements in experience, safety and effectiveness of patient care **(IPCT)**
- Collaborative involvement in research/ evaluation of products/ equipment to support tendering processes and ensure quality and value for money **(ALL)**
- Continue to undertake IPC trials of new product initiatives and evaluate before tenders are awarded **(ALL)**
- Participate in the 2017 Point Prevalence Survey of Healthcare-Associated Infections and Antimicrobial Use in Trust Hospitals in Northern Ireland **(ALL)**
- Participate in the 2017 Point Prevalence Survey of Healthcare-Associated Infections and Antimicrobial Use in Long Term Care Facilities (HALT) in Northern Ireland **(PCOP/ IPCT)**
- Review evidence base and consider the implementation of Luer lok syringes and pre-filled saline flushes **(IPCT/ ALL)**
- Shared learning mechanisms across augmented care areas **(ACUTE/ W&C)**
- Review and measure compliance with the MRSA Screening and Treatment Guidelines **(ACUTE/ PCOP/ IPCT)**
- Review the protocol for MRSA tagging of neonates **(W&C/ IPCT)**
- The ongoing audit of compliance with Trust policies/ guidelines in relation to IPC **(ALL)**

6. Ensure multidisciplinary collaborative working within the Trust to maintain a clean and appropriate environment across Trust managed facilities

- Implement the Trust Cleanliness Strategy and continue to enhance cleanliness within Trust facilities **(PCOP/ ALL)**
- Participate in the development and review of Trust Cleaning Plans **(IPCT)**
- Participate in environmental cleanliness managerial audits using a risk-based approach **(IPCT)**

7. Ensure building risks are managed appropriately, protecting the most vulnerable by the active involvement of Directorates, Estates, Capital Development and the IPCT in all aspects of capital development and renovation of buildings within Trust facilities, ensuring that buildings, fixtures and fittings are fit for purpose and that IPC is considered from design to commissioning stages

- Continue to implement Estates plans and Capital Development programmes, including:
  - New building design/ commissioning
  - Improving isolation capacity
  - Refurbishments
  - Water safety
  - Aspergillus controls

  (Estates/ Capital Development/ IPCT)

8. Medical devices will be managed to reduce infection risks to an absolute minimum

- Continue to review decontamination processes with the vision of centralising all decontamination services across the Trust **(ALL/ PCOP [Decontamination Lead]/ IPCT)**
- Review decontamination processes for community equipment **(PCOP)**

9. Promote the key message that 'Infection Prevention and Control is everyone's business'

a. Continued commitment to working with other healthcare providers and stakeholders
b. Enhance patient and public involvement in IPC in order to improve the patient experience
c. Continued delivery of education and training on IPC and prudent antimicrobial prescribing so that

staff understand their responsibilities

- Ensure appropriate information relating to infection risks is communicated to relevant parties as follows:
  - Public – internet/ media, etc.
  - GPs – developing liaison re IPC
  - Other Health and Social Care (HSC) trusts
  - PHA/ DoH/ HSC Board
- Ensure Trust representation on regional groups which shape IPC initiatives across the province **(Communications/ Directors/ Clinical Teams/ IPCT)**
- Engage/ communicate with the public/ patients **(IPCT/ Communications)**
- Participate in public awareness initiatives such as World Hand Hygiene Day, International Infection Prevention Week, etc. **(IPCT/ Communications)**
- Review patient access to IPC information via technology at the bedside and patient information leaflets **(IPCT)**
- Continue to provide updates on HCAIs and IPC for the Trust Board **(IPCT)**

10. Staff

Continued delivery of education and training on IPC and prudent antimicrobial prescribing so that staff understand their responsibilities and will take appropriate action to minimise the risk of infection to service users, themselves and other staff

- Ensure policies/ guidelines are in place and are reviewed when required (develop guidance with key elements contained, the 'one page policy' concept) **(IPCT/ ALL)**
- Work with key Trust personnel and outside agencies to review and enhance Escalation and Emergency Plans **(ALL)**
- Work to develop education material, e-learning materials, virtual reality training, etc. **(IPCT/ ALL)**
- Review methods of delivering training and education to staff across the organisation **(IPCT)**
- Development of antimicrobial education programme **(Consultant Microbiologists/ Antimicrobial Pharmacists)**
- Continue to provide timely and up to date IPC advice to staff and colleagues across the organisation and other agencies as necessary **(IPCT)**
- All staff will have an annual appraisal which will include an appropriate level of IPC **(ALL)**
- IPC link staff will be able to avail of protected time **(ALL)**
- Continue with the programme of Leadership walk-arounds (Directors/ Senior Managers) to collate staff views on IPC and patient safety issues **(CMT)**
- A review of IPC staffing will be completed and business cases for IPC and Surveillance staff will be further developed **(IPCT)**

Appendix 1

CHIEF EXECUTIVE (CE) HEALTHCARE-ASSOCIATED INFECTION (HCAI) ACCOUNTABILITY FORUM
INCORPORATING THE INFECTION PREVENTION & CONTROL COMMITTEE (IPCC)

Prepared June 2014
Reviewed July 2016
Next review July 2017

TERMS OF REFERENCE

1. OVERALL OBJECTIVE

1.1 The overall objective of the CE HCAI Accountability Forum is to oversee the strategic planning for infection detection and management to ensure that there are effective arrangements for prevention and control throughout the Trust and provide an assurance to the Governance Committee that appropriate systems are in place to set and monitor the standards relating to infection prevention.

2. CONSTITUTION

2.1 The CE HCAI Accountability Forum is responsible for:

- Production and monitoring of the Infection Prevention & Control Three-Year Strategic Plan
- Overseeing a variety of infection prevention related action plans
- Endorsing all infection prevention and control policies, guidelines, procedures, protocols and care plans
- Providing support on the implementation of written guidance
- Collaborating with the Infection Prevention & Control Team to develop the annual infection control programme and monitoring its progress
- Identifying and prioritising significant infection risks to the Trust's clients, patients, visitors and staff for inclusion in the Trust Risk Register and bringing them to the attention of the Corporate Management Team (CMT), Risk Management Sub-Committee and Trust Board
- Overseeing the implementation and monitoring of an evidence based programme of infection prevention interventions and audits
- Reporting on the lessons learned from root cause analysis of infections
- Promotion of training and education for all appropriate grades of Trust staff in infection prevention and control guidelines, policies and procedures
- Promotion of prudent antimicrobial prescribing and stewardship
- Monitoring the Trust's progress against the "Changing the Culture 2010: Strategic Regional Action Plan for the Prevention and Control of Healthcare-Associated Infections in Northern Ireland".

2.2 Sub-groups reporting to the CE HCAI Accountability Forum are:

- IP&C Surveillance Sub-Group
- IP&C Policies and Guidelines Working Group
- Antimicrobial Management Team

2.3 Committees/ Groups closely associated with and providing information to the CE HCAI Accountability Forum are:

- Safe and Effective Patient Care meetings
- Clinical Reference Group for Pandemic Flu
- Water Safety Group

2.4 Reports to be circulated other than those already generated from the above named Groups/ Committees:

- Monthly IP&C Report to Trust Board

3. MEMBERSHIP

3.1 The membership of the CE HCAI Accountability Forum is intended to reflect the diversity of services delivered within the Trust and will include the following:

- Chief Executive (Chairperson)
- Non-Executive Director with infection prevention and control remit
- Medical Director/ Infection Prevention & Control Director
- Divisional Clinical Directors
- Director of Acute Services
- Director of Primary Care & Older People's Services/ Executive Director of Nursing
- Director of Adult Mental Health & Disability Services
- Director of Women's & Children's Services/ Executive Director of Social Work
- Divisional Assistant Directors
- Assistant Director of Nursing
- Assistant Director of Facilities Management
- Head of Infection Prevention & Control
- Surveillance Lead
- Consultant Microbiologists/ Infection Prevention & Control Doctors
- Head of Pharmacy
- Antimicrobial Pharmacists
- Head of Support Services
- Occupational Health Physician

3.2 The Forum may invite any employee to attend the meetings.

3.3 Attendance of a representative is required should a member be unable to attend.

3.4 Non-Executive Directors have an open invitation to attend.

4. FREQUENCY OF MEETINGS

4.1 The Forum will meet every two months.

5. QUORUM

5.1 A quorum will consist of the following:

- Chief Executive (or a representative)

- Medical Director/ Infection Prevention & Control Director (or a representative)
- Directors (or their respective representatives)
- Divisional Clinical Directors (or their respective representatives)
- Head of Infection Prevention & Control
- One Consultant Microbiologist/ IPCD
- Head of Pharmacy (or a representative)

6. AUTHORITY

6.1 The Forum is authorised by the Trust Board/ CMT to investigate any activity within its Terms of Reference. It is authorised to seek any information it requires from any employee of the Trust.

6.2 The Forum will oversee the Trust's compliance against the relevant risk management and safety standards of external bodies.

7. REPORTING MECHANISM

7.1 The minutes of each meeting of the Forum will be formally recorded and submitted to the Governance Committee. The Chief Executive/ Chairperson is responsible for reporting key issues to the Risk Management Sub-Committee, which in turn will escalate any relevant information to the Governance Committee.

7.2 IP&C Reports will be provided to the Trust Board each time Trust Board meet.

7.3 An Annual Report will be produced and approved by the CMT and Trust Board.

8. PROCESS

8.1 The Forum is responsible for the coordination and prioritisation of infection related risk and safety issues, enabling recommendations to be made and reported as necessary to the CMT and Trust Board (Trust Board Priority Risk Assessment).

8.2 Oversees the development of local prevention and control of infection guidelines/ policies and their implementation.

8.3 Has the authority to challenge a lack of evidence base for elements of care and antimicrobial prescribing decisions.

8.4 Considers the implications of root cause analysis, risk assessments and performance data informing infection prevention action plans and guidance.

8.5 Assesses the impact of all existing and new guidance and plans on infection and makes recommendations for change.

8.6 Produces regular reports on the state of healthcare-associated infection in the Trust and progress against the objectives of the Infection Prevention & Control Three-Year Strategic Plan and releases it publicly.

8.7 Brings significant risk issues to the attention of the Risk Management Sub-Committee for inclusion in the Trust's Risk Register and Assurance Framework and where appropriate escalates to the Governance Committee.

8.8 Monitors Trust surveillance rates via the Surveillance Sub-Group and provides statistical information on infection rates to directorates.

8.9 Monitors other significant infection issues reported through other fora.

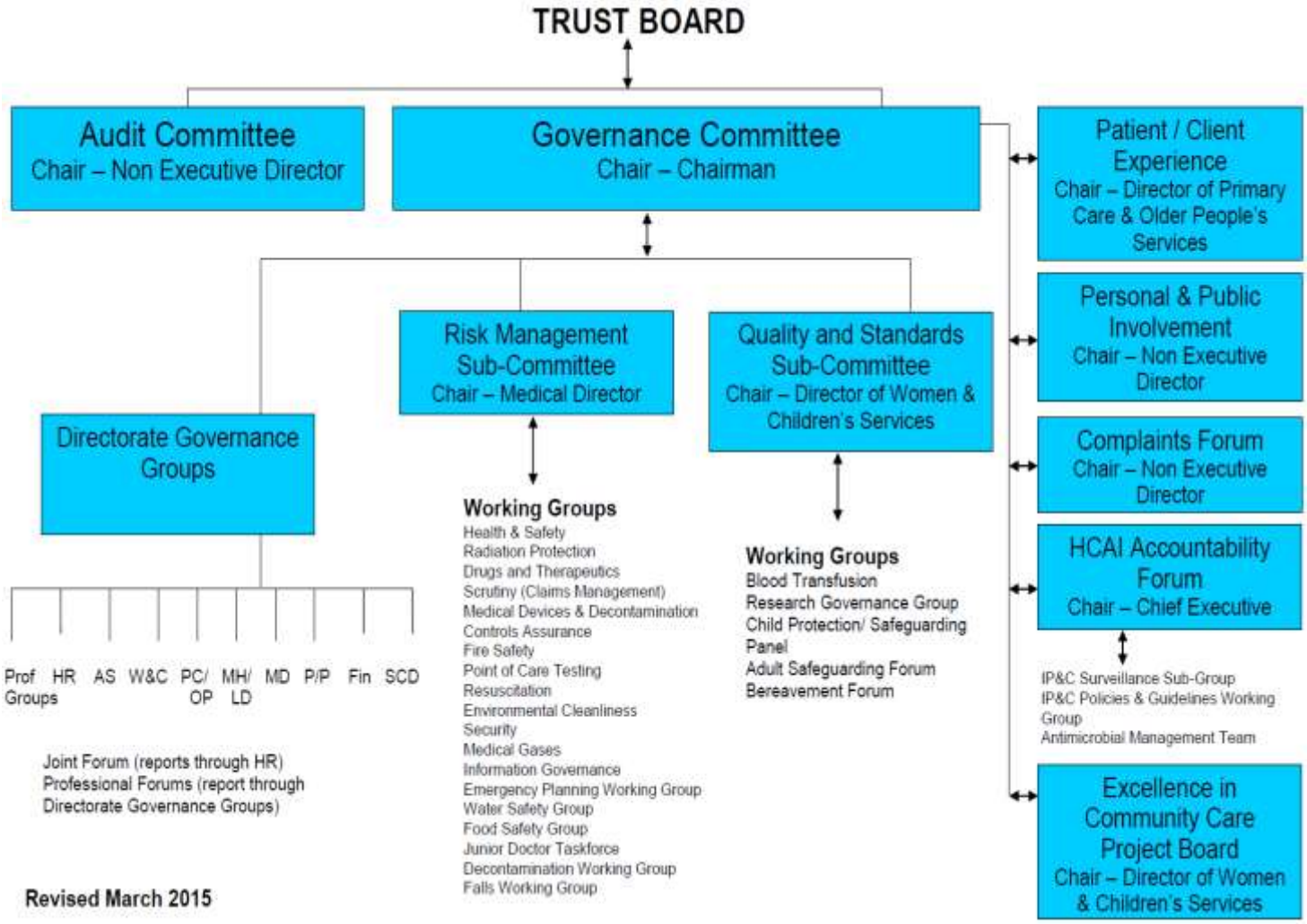
8.10 Monitors directorate and divisional infection prevention related action plans.

9. REVIEW

9.1 These Terms of Reference will be reviewed annually.

Appendix 2

GOVERNANCE REPORTING STRUCTURE



Appendix 3

INFECTION PREVENTION & CONTROL POLICIES & GUIDELINES WORKING GROUP

Prepared: March 2010
Previously reviewed: November 2013 & March 2016
Next review due: March 2018

TERMS OF REFERENCE

1. OVERALL OBJECTIVE

1.1 It is the responsibility of the Chief Executive (CE) Healthcare-Associated Infection (HCAI) Accountability Forum to ensure the provision and implementation of relevant and up to date guidance related to infection prevention and control (IP&C). The process to achieve this is outlined in *Appendix A*.

1.2 The overall objective of the IP&C Policies & Guidelines Working Group is to oversee the production and approval of up to date relevant guidance on behalf of the CE HCAI Accountability Forum.

2. CONSTITUTION

2.1 The IP&C Policies & Guidelines Working Group is responsible for:

- Ensuring that all key IP&C policies and guidelines are in place as per the Controls Assurance Standard for Infection Control;
- The development of new IP&C guidance as need arises, e.g. in relation to new and emergent organisms;
- The regular reviewing and updating of existing IP&C guidance;
- Ensuring that new/ updated guidance takes account of regional and national requirements, regulations and guidance, including the most up to date information available;
- Ensuring that new/ updated guidance is widely consulted upon and that there is input and buy-in by clinical staff;
- Ensuring that equality screening is carried out on all IP&C guidance, and that remedial action is taken to address any guidance deemed to have an adverse impact on service users and/ or staff;
- Ensuring the final ratification of all new/ updated IP&C guidance at the appropriate authority level, i.e. the CE HCAI Accountability Forum or Trust Board.

3. MEMBERSHIP

3.1 The membership of the Working Group is intended to reflect the diversity of services delivered within the Trust and will include the following:

- Infection Prevention & Control Nurse (IPCN) with lead responsibility for policy/ guideline production (Chairperson)
- Medical Director
- Head of IP&C
- Consultant Microbiologists/ IP&C Doctors
- Antimicrobial Pharmacist

- Assistant Nursing Service Manager, General & Specialist Medicine
- Assistant Nursing Service Manager, Anaesthetics, Theatres & Intensive Care
- Lead Nurse, Cancer Services
- Head of Secondary Care Services
- Head of Midwifery & Gynaecology
- Assistant Director of Adult Mental Health & Disability Services (Physical & Sensory Disability & Autism)
- Ward Manager, Physical & Sensory Disability Division
- Consultant Physician
- Consultant Surgeon
- Education Manager, HSC Clinical Education Centre

3.2 Attendance of a substitute representative is required should a member be unable to attend.

3.3 Ad hoc attendance at meetings is required by the IPCNs responsible for the writing/ review of any guidance due for discussion.

4. FREQUENCY OF MEETINGS

4.1 The Working Group will meet three times per year at four-monthly intervals.

4.2 Meetings will take place approximately three weeks prior to alternate CE HCAI Accountability Forum meetings.

5. QUORUM

5.1 A quorum will consist of at least four members of the Working Group, to include two clinical representatives and two others. One of the two clinical representatives must be a doctor.

5.2 Where a quorum is not reached, the Working Group meeting will be cancelled and all guidance will be referred directly to the CE HCAI Accountability Forum for agreement and ratification.

6. AUTHORITY

6.1 The Working Group is authorised by the CE HCAI Accountability Forum to carry out any activity within its Terms of Reference.

7. REPORTING MECHANISM

7.1 The minutes of each meeting of the Working Group will be formally recorded and submitted to the CE HCAI Accountability Forum for information.

7.2 The Head of IP&C is responsible for reporting any key issues to the CE HCAI Accountability Forum, which in turn will escalate any relevant information to the Governance Committee.

7.3 A list of guidance approved each quarter will be submitted to the Quality & Standards Sub-Committee.

7.4 Details of guidance approved will be included, at regular intervals, in the monthly IP&C Report provided to the Trust Board.

7.5 Details of guidance approved each year will be included in the Annual IP&C Report. This will be approved by the CE HCAI Accountability Forum, and subsequently by the Corporate Management Team (CMT) and Trust Board.

8. PROCESS

8.1 All existing IP&C guidance is reviewed on an annual basis to ensure it is dated and to determine when an update is required. This informs the planning process for the IP&C Team (see *Appendix B* for the 2016/17 review).

8.2 All draft guidance will be circulated to members of the Working Group and the CE HCAI Accountability Forum (plus any relevant others) for comment prior to discussion and approval at a Working Group meeting (*Appendix A*).

8.3 The Working Group will make the final decision on any contentious issues. Where an issue cannot be agreed by the Working Group it will be referred back to the CE HCAI Accountability Forum for final agreement.

8.4 The Working Group will make a decision as to whether a piece of guidance will be called a Guideline, Policy, Protocol or Procedure. In the event of a disagreement, the decision will be escalated to the CE HCAI Accountability Forum.

8.5 The Working Group will agree when each piece of guidance will next be due for review. This will range between one and five years depending upon the particular guidance involved.

8.6 The Chairperson of the Working Group will be responsible for submitting equality screening in relation to all guidance produced by the IP&C Team.

8.7 All finalised guidance will be circulated to the CE HCAI Accountability Forum for final ratification at the next Forum meeting. Where a member of the CE HCAI Accountability Forum is unhappy with the contents or categorisation of a particular piece of guidance this must be raised for discussion when the guidance is about to be ratified.

8.8 Where it has been agreed that a piece of guidance should become a Policy, the Working Group will ensure referral to the CMT and Trust Board for ultimate approval.

9. REVIEW

9.1 These Terms of Reference will be reviewed every two years.

Appendix A (of Policies & Guidelines Working Group ToR)

Guidance on Writing Policies, Guidelines and Protocols for Infection Prevention & Control Nurses

Previously reviewed: November 2013 & March 2016
Next review due: March 2018

Writing new guidelines, policies, protocols and procedures may be necessary for a variety of reasons; for example, updating of existing information and incorporation of newly published evidence or Department of Health, Social Services & Public Safety (DHSSPS) guidance.

Production or review of Infection Prevention & Control (IP&C) guidance can be requested by any of the following:

- Chairperson of the Chief Executive (CE) Healthcare-Associated Infection (HCAI) Accountability Forum
- Medical Director/ Director of IP&C
- Head of IP&C
- Consultant Microbiologists/ IP&C Doctors
- Trust Directors

The following steps are required:

1) Review the regional web-based IP&C guidelines to ensure that they are sufficient support for WHSCT staff. If, following consultation with the Head of IP&C, the regional guidelines are considered insufficient for clinical staff, local WHSCT guidance must be developed to support the regional guideline.
2) If there is no regional guidance on a specific topic a WHSCT guideline, policy, protocol or procedure must be produced.
3) All IP&C guidance must be produced following the standard WHSCT format and using the WHSCT template.
4) Conduct a literature review using reliable medical/ nursing databases (e.g. med-line, etc.) and key infection control guidance and texts (e.g. EPIC Guidelines, etc.). Ensure that literature used is the most recent evidence available.
5) Review the current DHSSPS and Department of Health (DoH) guidance.
6) First produce a draft and circulate to the other IPCNs and IPCDs for comment.
7) Review the suggested amendments. If there continues to be queries with regards to the guidance, discuss these with the person/s concerned and agree changes.
8) If significant changes in practice are required or the use of new products are likely to occur as a result of the update, consult with all appropriate staff quickly to allow discussion with regards to the changes. For example:
    - Pharmacy
    - Support Services
    - HSDU
    - Clinical staff
9) Following incorporation of the suggested amendments, circulate the final draft to members of the IP&C Policies & Guidelines Working Group and CE HCAI Accountability Forum for comment, via the Senior Support Assistant for IP&C. In addition, circulate to any other key staff if the particular guidance for review requires supplementary expertise.
10) Consider the suggested amendments and incorporate as appropriate.
11) Ensure that references to page numbers, appendices, etc. are correct and consistent throughout the guidance. Check the alignment of all text, tables and headings.

12) A briefing note should be prepared to accompany guidance for approval by the IP&C Policies & Guidelines Working Group.
13) The IP&C Policies & Guidelines Working Group will make the decision on whether the document should be named a guideline, policy, protocol or procedure.
14) The IP&C Policies & Guidelines Working Group will agree a review date for the particular guidance.
15) Attend the IP&C Policies & Guidelines Working Group meeting to discuss the guidance and receive any final amendments.
16) The IP&C Nurse with lead responsibility for policy/ guideline production will submit equality screening for all guidance on behalf of the IP&C Team. S/he will liaise with the Equality & Involvement Team and other IPCNs regarding any actions arising from this.
17) Next all guidance must be ratified by the CE HCAI Accountability Forum and policies must be signed off by the author and responsible officer/ owner of the document (usually the Head of IP&C).
18) In addition, policies must also be approved by the Corporate Management Team and Trust Board.
19) Completed policies should then be forwarded to the Chief Executive's Office by the Senior Support Assistant so that a reference number can be issued.
20) Finished and approved guidance can be forwarded to the Communications Department for inclusion on the Trust intranet site. If there is previous out of date guidance on the intranet, request its replacement with the updated version.
21) A Trust Communication email must be issued (via the Communications Department) to alert all relevant staff that the updated guidance is now available and that a signature list should be completed as evidence that staff have read and understand the guidance (to be retained at clinical level for audit purposes). The email should also explain how to access the guidance on the Trust intranet. This can be actioned by the Senior Support Assistant.
22) A copy of the finalised guidance must be stored in a central repository within the IP&C Department.

Whilst some elements of this protocol are delegated to clerical and support staff it is the responsibility of the IPCN producing the guidance to ensure that all the above steps are complete and to check the Trust intranet to ensure that it is accessible and that all out of date materials have actually been removed.

Appendix 4

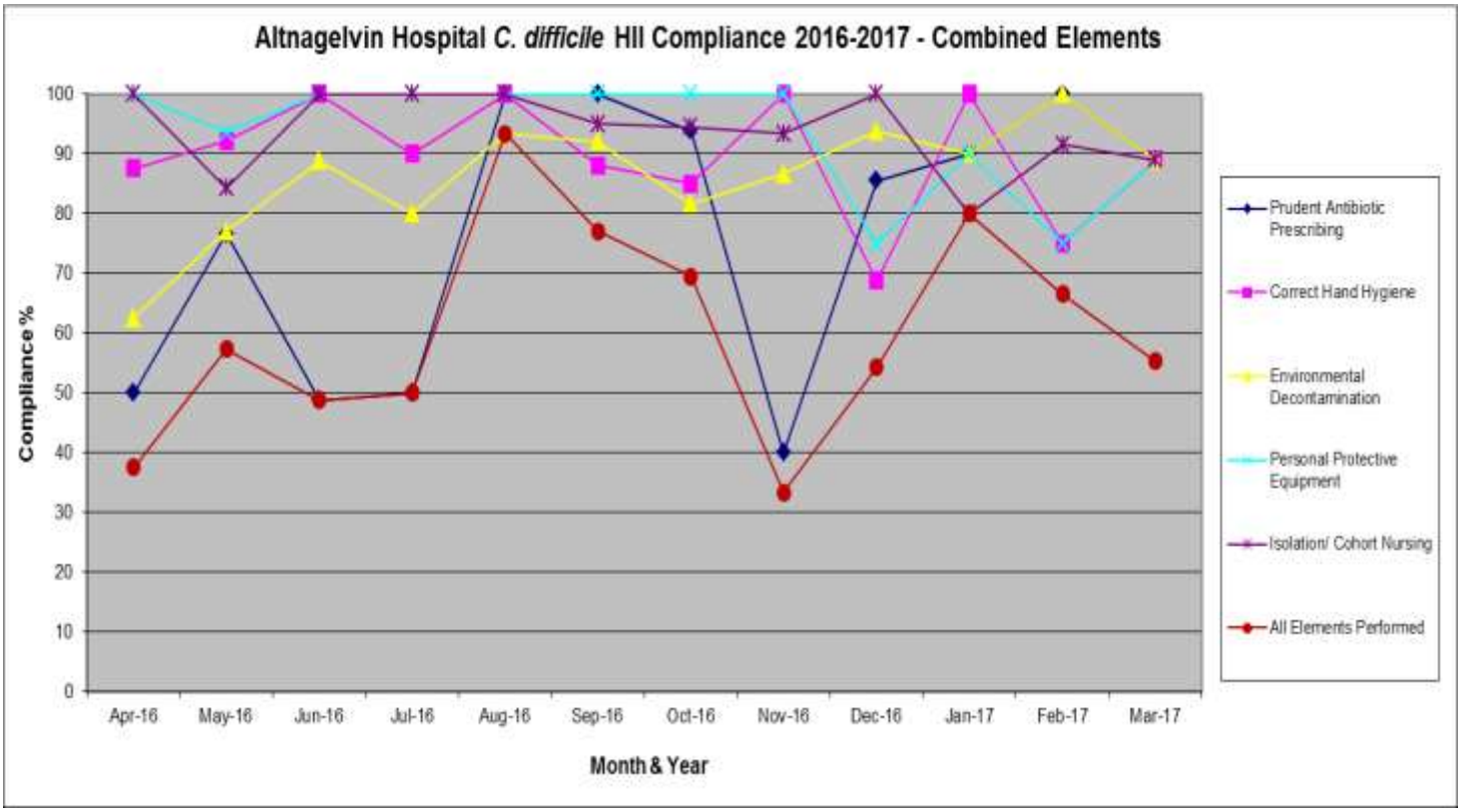
RESULTS OF HAND HYGIENE AUDITS

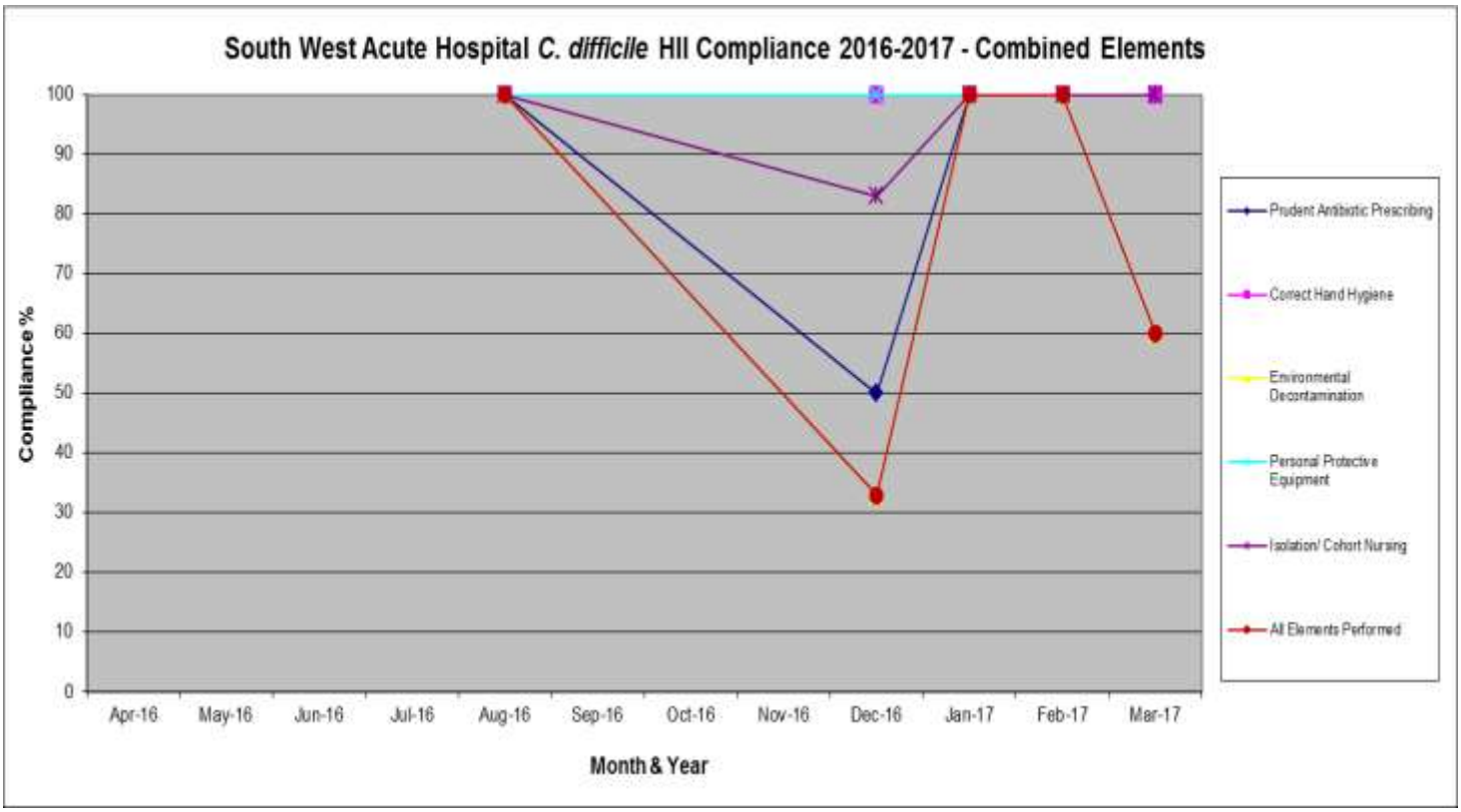
Hospital/ Directorate	Apr 16		May 16		Jun 16		Jul 16		Aug 16		Sep 16		Oct 16		Nov 16		Dec 16		Jan 17		Feb 17		Mar 17	
	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3
ALT Average (%)	95	95	99	97	100	100	99	91	93	99	96	97	93	99	98	91	98	93	94	92	100	97	96	97
ALT IPCN Average (%)	*100*					*86*	*86*				*100*	*85*	*87*	*100*	*92*	77	*97*		*93*	*100*	*85*	*100*	*83*	*50*
SWAH Average (%)	100	93	95	88	94	92	100	95	100	92	95	88	82	86	91	79	83	87	90	75	100	100	95	94
SWAH IPCN Average (%)	*100*	*86*									*100*	*100*	*80*		*98*	*100*	*96*		*100*	*100*	*100*	*94*	*100*	
TCH Average (%)	100	88	92	100	90	100	100	90	100	87	86	77	100	88	92	83	81	87	87	92	100	100	62	55
TCH IPCN Average (%)																								
T&F Average (%)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	75	83	33	100	80	100	50	66
T&F IPCN Average (%)																								
WATERSIDE Average (%)	100	75	100	100	100	75	100	100	99	100	100	100	100	75	100	100	100	100	100	100	100	100	100	100
Waterside IPCN Average (%)																*100*								
LAKEVIEW Average (%)	99	99	98	99	98	100	98	100	98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Lakeview IPCN Average (%)																								
GRANSHA Average (%)		100		100		100		100		100		100		100		100		100		100		100		100
Gransha IPCN Average (%)																								
RHEs Average (%)	79	100	80	100	80	99	40	60	80	100	80	100	80	100	60	80	80	100	79	100	80	100	80	100
RHEs IPCN Average (%)																								
TREATMENT ROOMS Average (%)									100	100											100			
Treatment Rooms IPCN Average (%)																								
DAY CARE Average (%)	100	100	100	100	95	95	81	81	90	90	81	81	100	100	86	86	100	100	86	86	86	86	95	95
Day Care IPCN Average (%)																								
OTHER COMMUNITY Average (%)	100	100	100	100	100	100	100	100	100	100	50	33	100	100	50	60	100	100	50	33	100	100	100	100
Other Community IPCN Average (%)																								
AS Average (%)	98	93	97	98	98	100	100	91	94	97	94	93	92	97	95	92	96	95	91	86	100	97	88	88
AS IPCN Average (%)	*100*					*86*	*86*				*100*	*90*	*87*	*100*	*94*	*80*	*97*		*95*	*100*	*88*	*97*	*83*	*50*
WCS Average (%)	100	100	100	92	100	93	100	100	100	100	88	81	94	92	81	58	100	92	89	86	100	100	100	100
WCS IPCN Average (%)															*91*	*100*							*100*	
PCOPS Average (%)	93	93	96	97	90	93	71	73	96	93	77	79	93	93	81	78	84	90	78	86	93	95	91	88
PCOPS IPCN Average (%)	*100*	*86*											*80*		*96*	*98*	*96*					*100*	*100*	
AMHDS Average (%)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	94	95	94	100	94	100	88	100
AMHDS IPCN Average (%)																								
WHSCT Average (%)	97	95	97	97	96	97	94	89	96	96	90	89	93	96	91	87	93	93	88	89	96	97	90	91
WHSCT IPCN Average (%)	*100*	*86*				*86*	*86*				*100*	*90*	*85*	*100*	*95*	*91*	*97*		*95*	*100*	*88*	*98*	*90*	*50*

Appendix 5

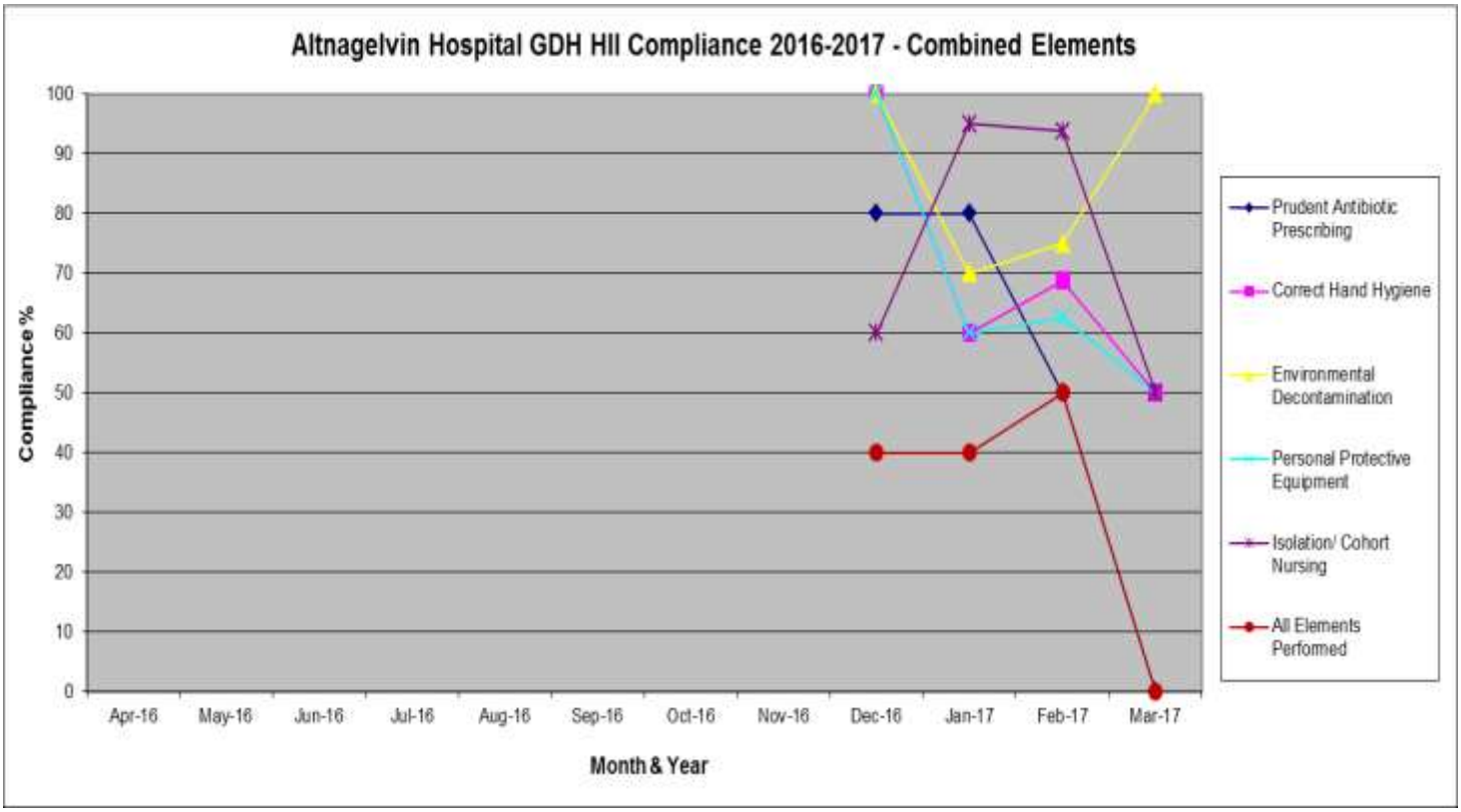
RESULTS OF HIGH IMPACT INTERVENTIONS

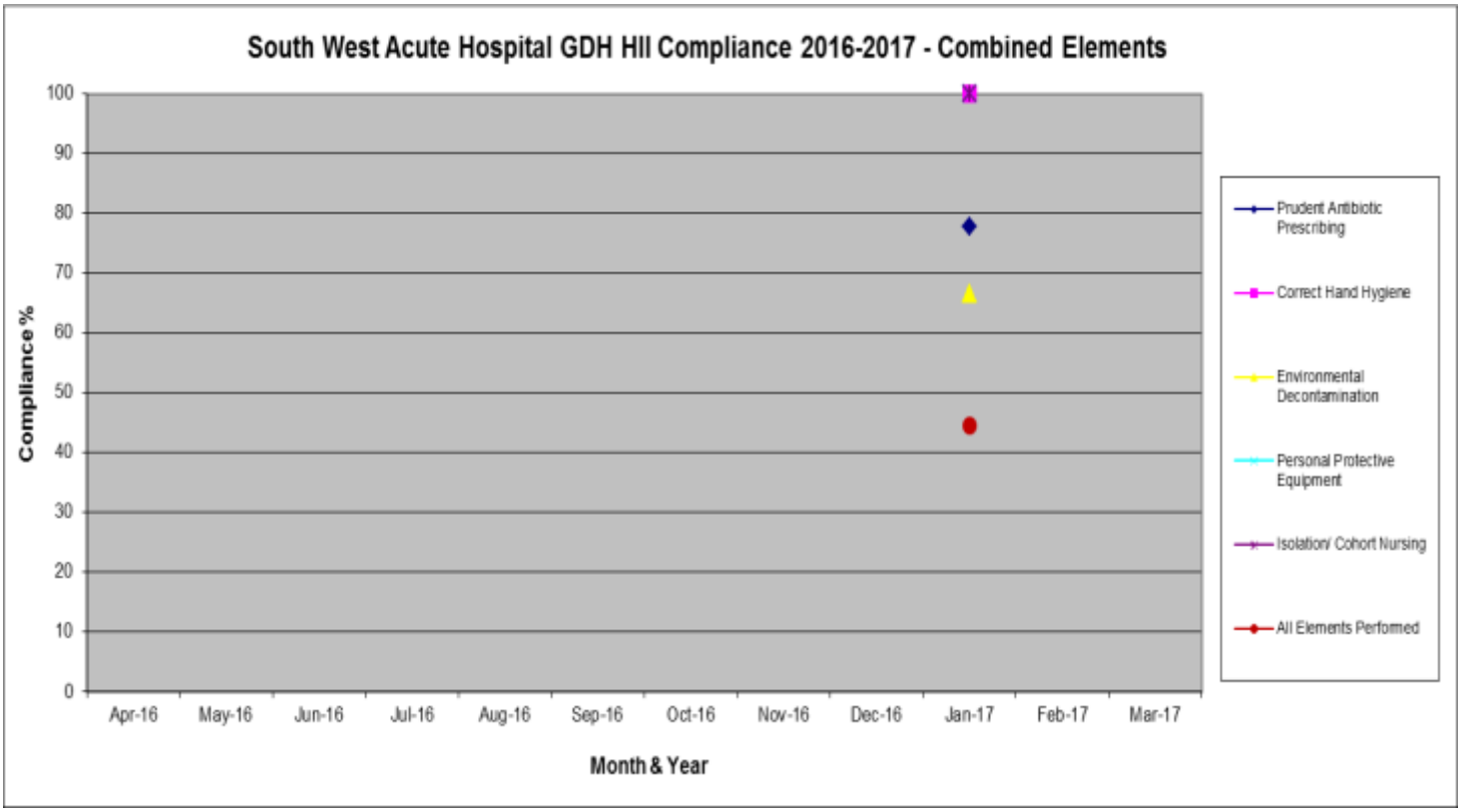
Clostridium difficile





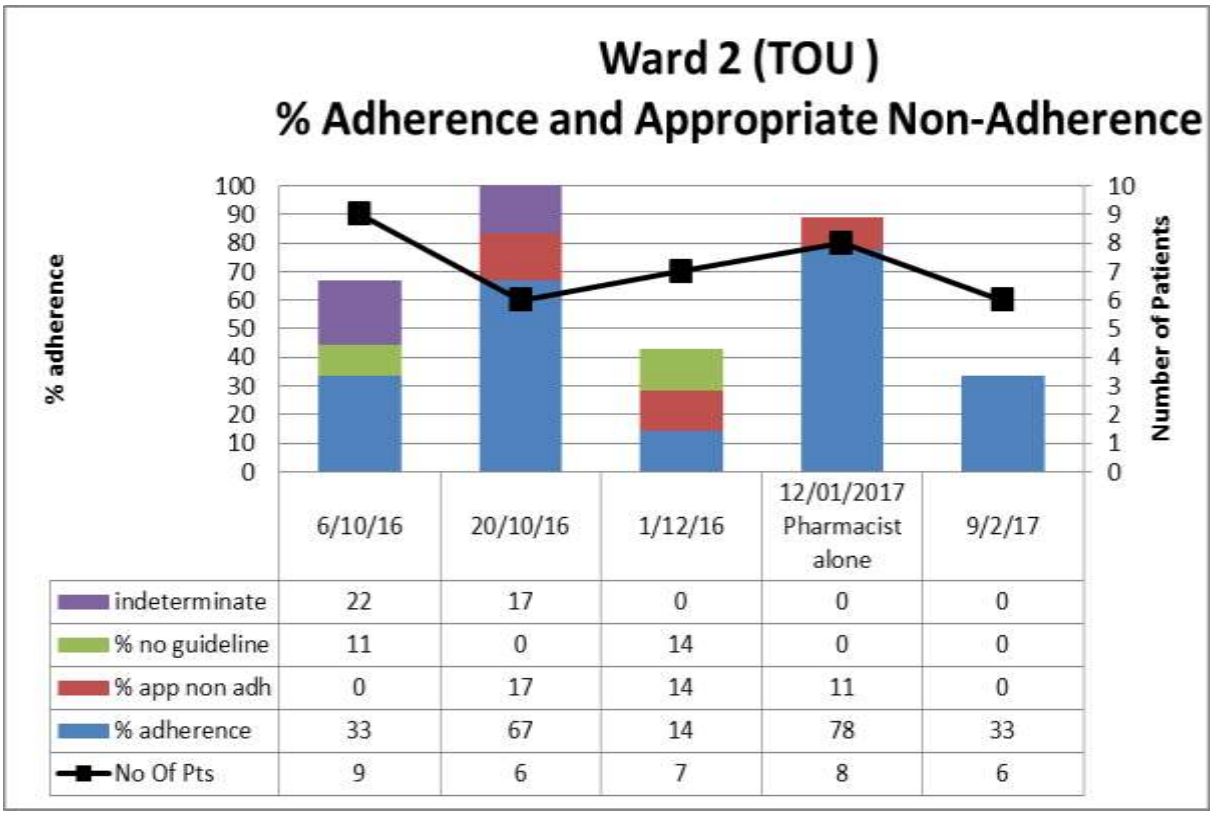
GDH


Altnagelvin Hospital GDH HII Compliance 2016-2017 - Combined Elements
Compliance %
100
90
80
70
60
50
40
30
20
10
0
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Month & Year
Prudent Antibiotic Prescribing
Correct Hand Hygiene
Environmental Decontamination
Personal Protective Equipment
Isolation/ Cohort Nursing
All Elements Performed

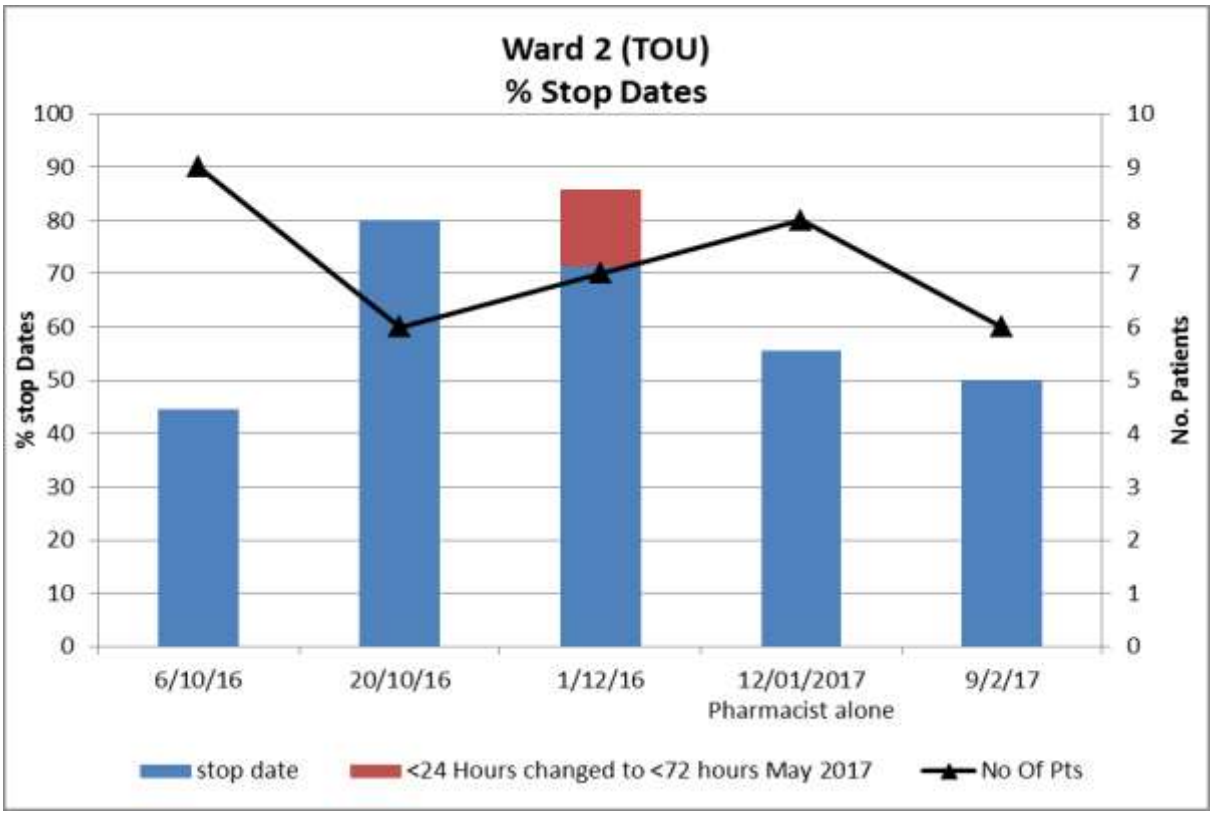

South West Acute Hospital GDH HII Compliance 2016-2017 - Combined Elements
Compliance %
100
90
80
70
60
50
40
30
20
10
0
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Month & Year
Prudent Antibiotic Prescribing
Correct Hand Hygiene
Environmental Decontamination
Personal Protective Equipment
Isolation/ Cohort Nursing
All Elements Performed

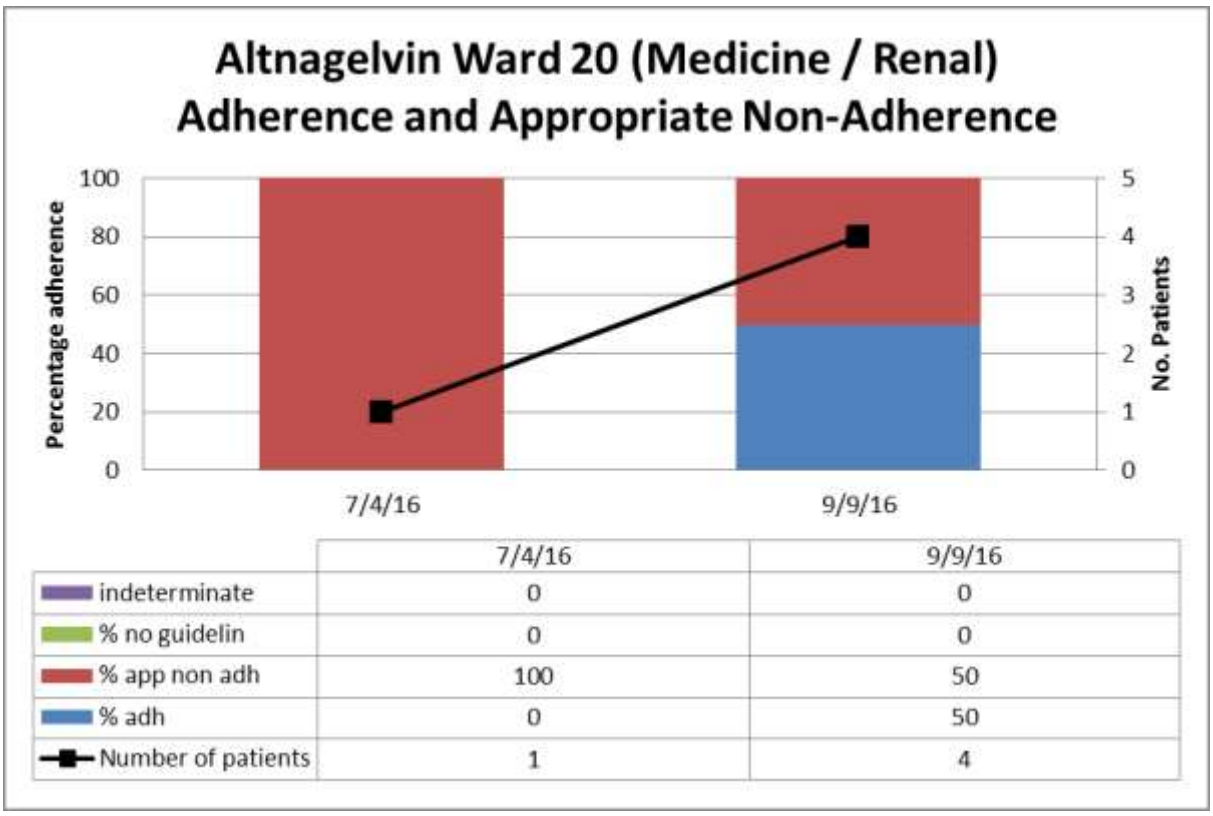
Appendix 6

RESULTS OF ANTIMICROBIAL PRESCRIBING AUDITS IN ACUTE SERVICES WARDS ALONGSIDE THE MICROBIOLOGIST WARD ROUNDS

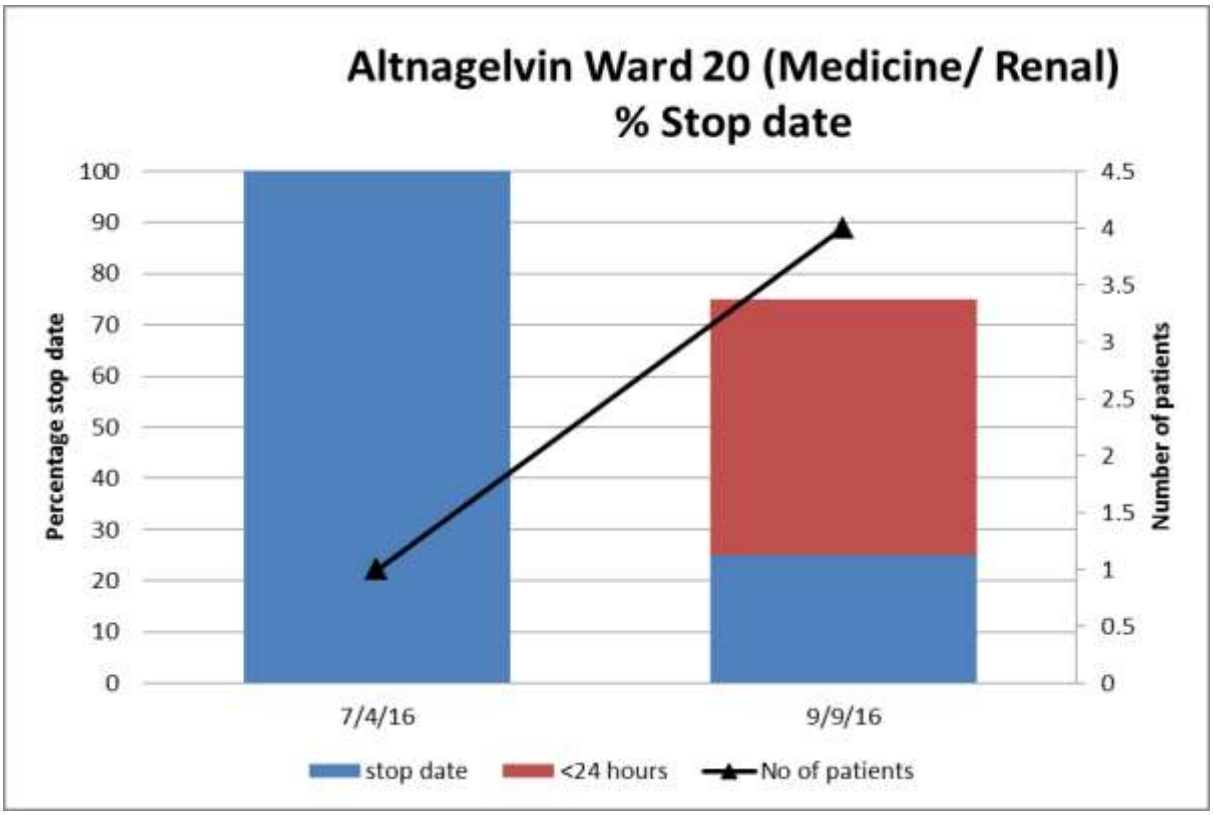


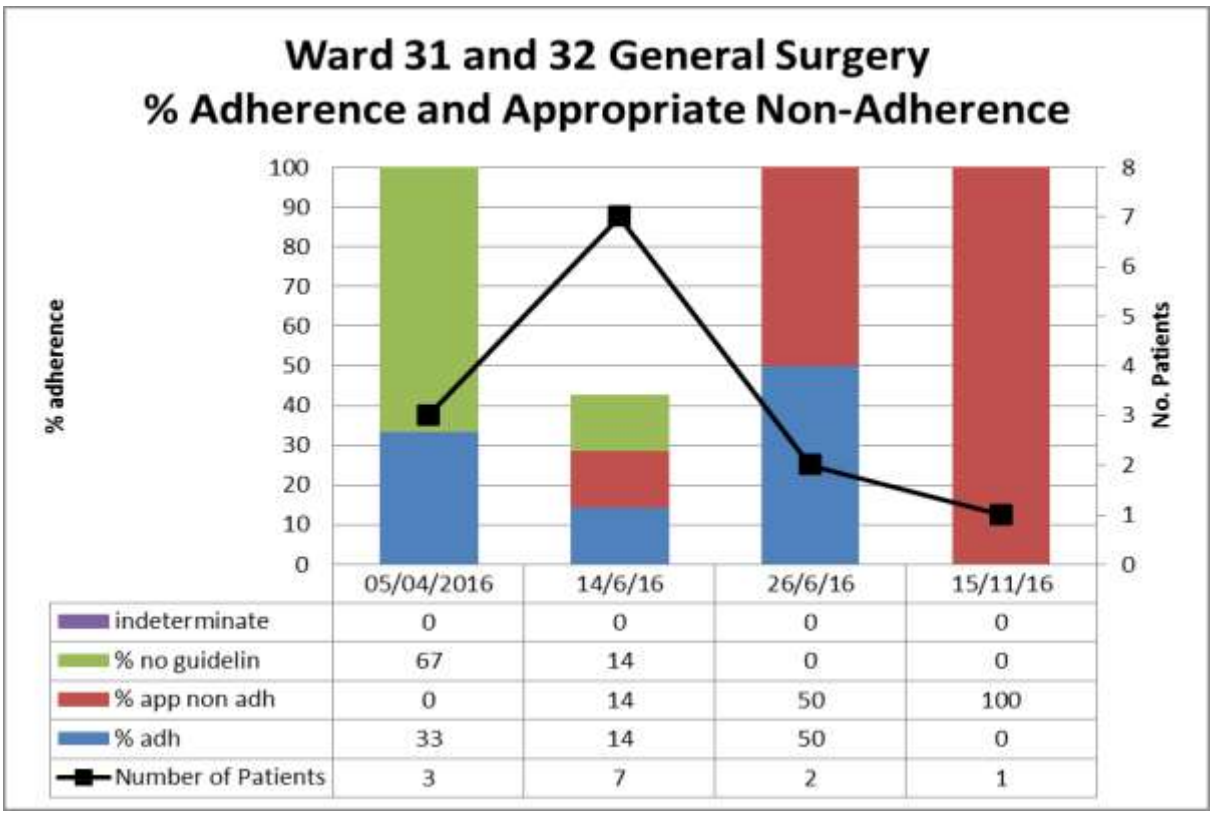
	6/10/16	20/10/16	1/12/16	12/01/2017 Pharmacist alone	9/2/17
indeterminate	22	17	0	0	0
% no guideline	11	0	14	0	0
% app non adh	0	17	14	11	0
% adherence	33	67	14	78	33
No Of Pts	9	6	7	8	6



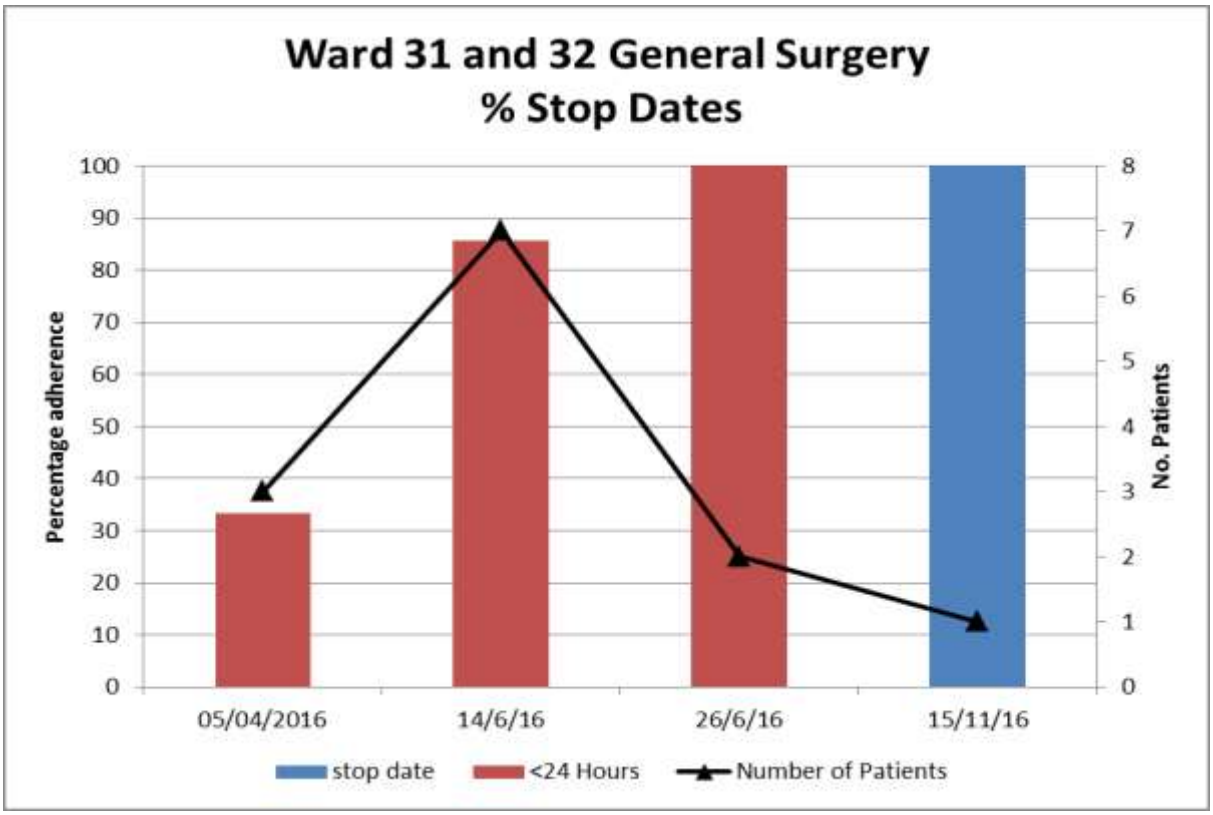


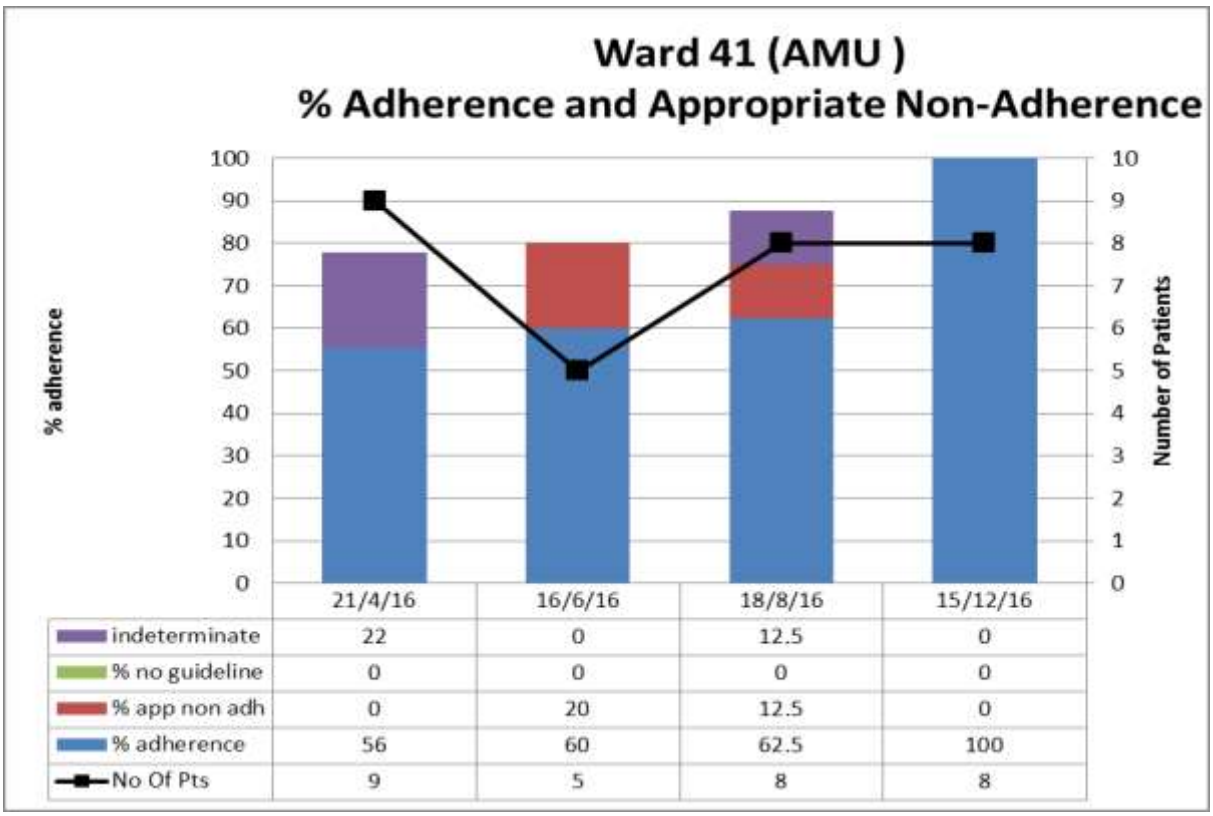
	7/4/16	9/9/16
indeterminate	0	0
% no guidelin	0	0
% app non adh	100	50
% adh	0	50
Number of patients	1	4



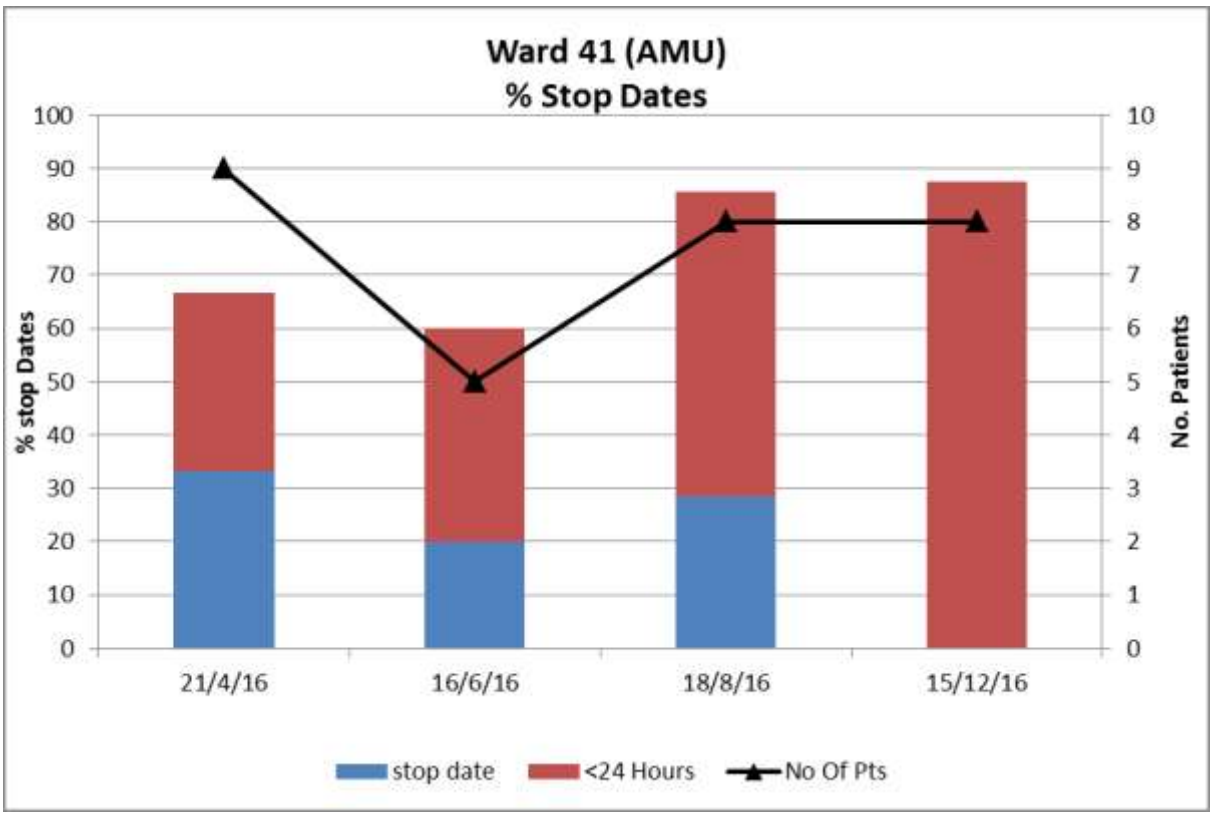


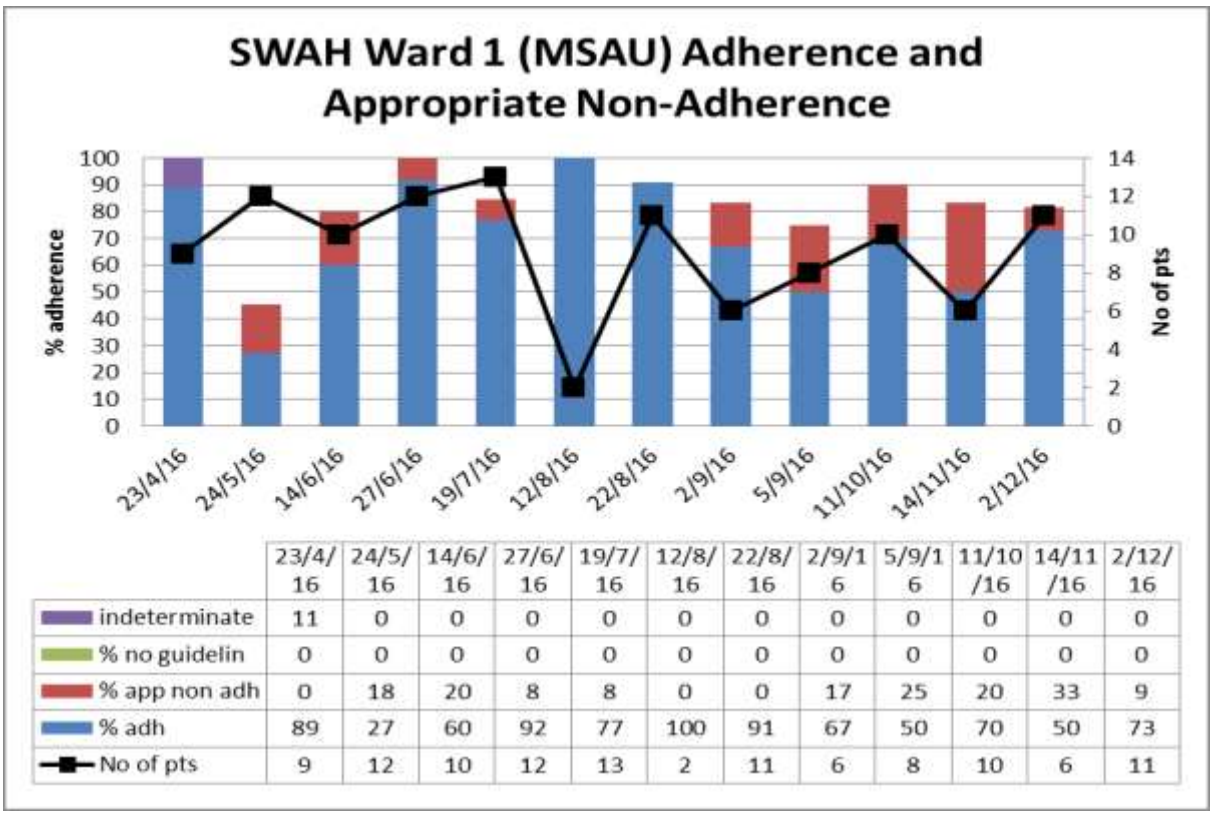
	05/04/2016	14/6/16	26/6/16	15/11/16
indeterminate	0	0	0	0
% no guidelin	67	14	0	0
% app non adh	0	14	50	100
% adh	33	14	50	0
Number of Patients	3	7	2	1



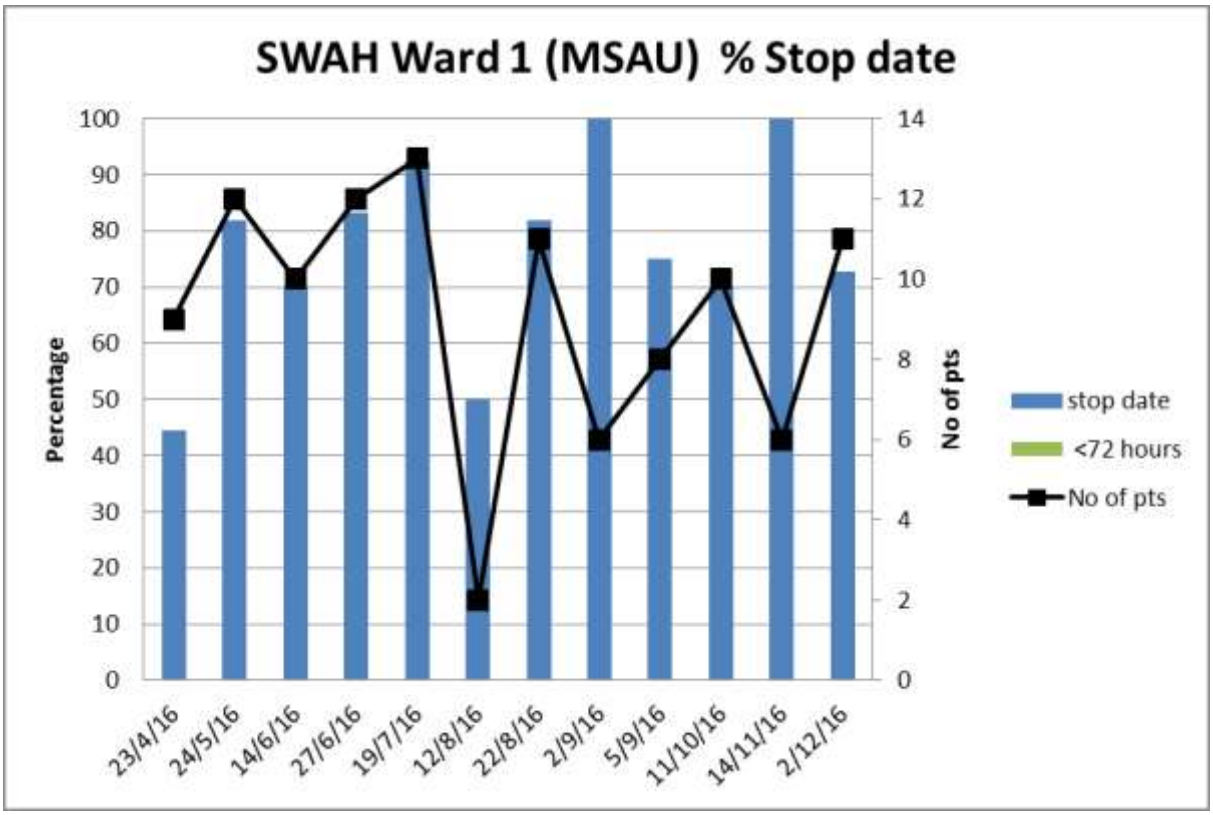


	21/4/16	16/6/16	18/8/16	15/12/16
indeterminate	22	0	12.5	0
% no guideline	0	0	0	0
% app non adh	0	20	12.5	0
% adherence	56	60	62.5	100
No Of Pts	9	5	8	8

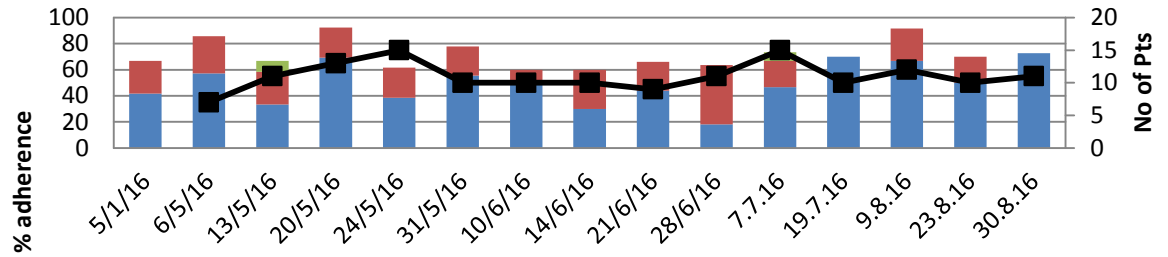




	23/4/16	24/5/16	14/6/16	27/6/16	19/7/16	12/8/16	22/8/16	2/9/16	5/9/16	11/10/16	14/11/16	2/12/16
indeterminate	11	0	0	0	0	0	0	0	0	0	0	0
% no guidelin	0	0	0	0	0	0	0	0	0	0	0	0
% app non adh	0	18	20	8	8	0	0	17	25	20	33	9
% adh	89	27	60	92	77	100	91	67	50	70	50	73
No of pts	9	12	10	12	13	2	11	6	8	10	6	11

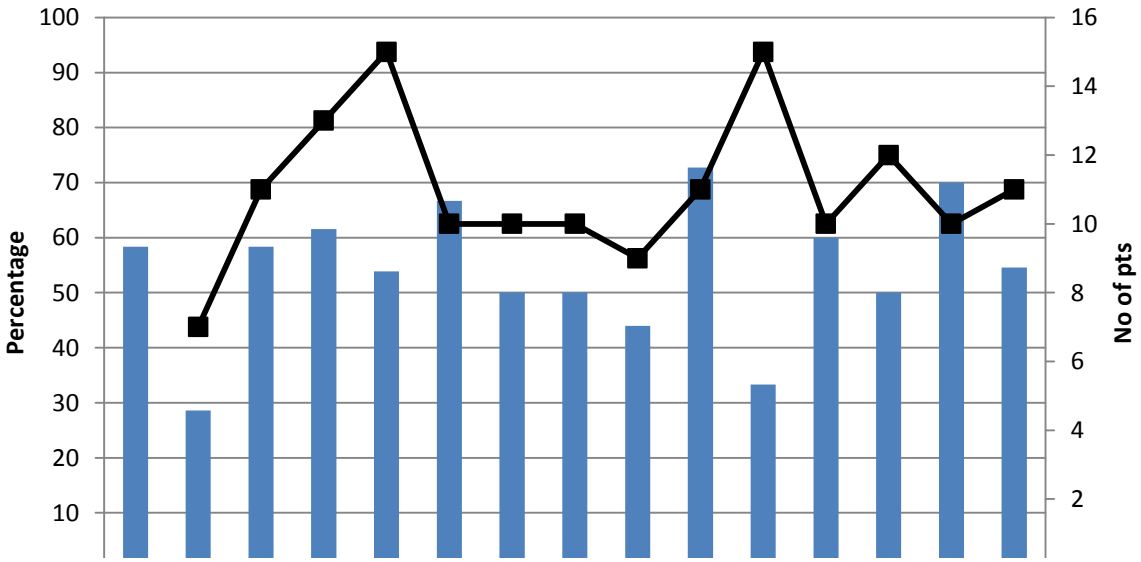


SWAH Ward 3 (Medicine / Respiratory Step down)
Adherence and Appropriate Non-Adherence



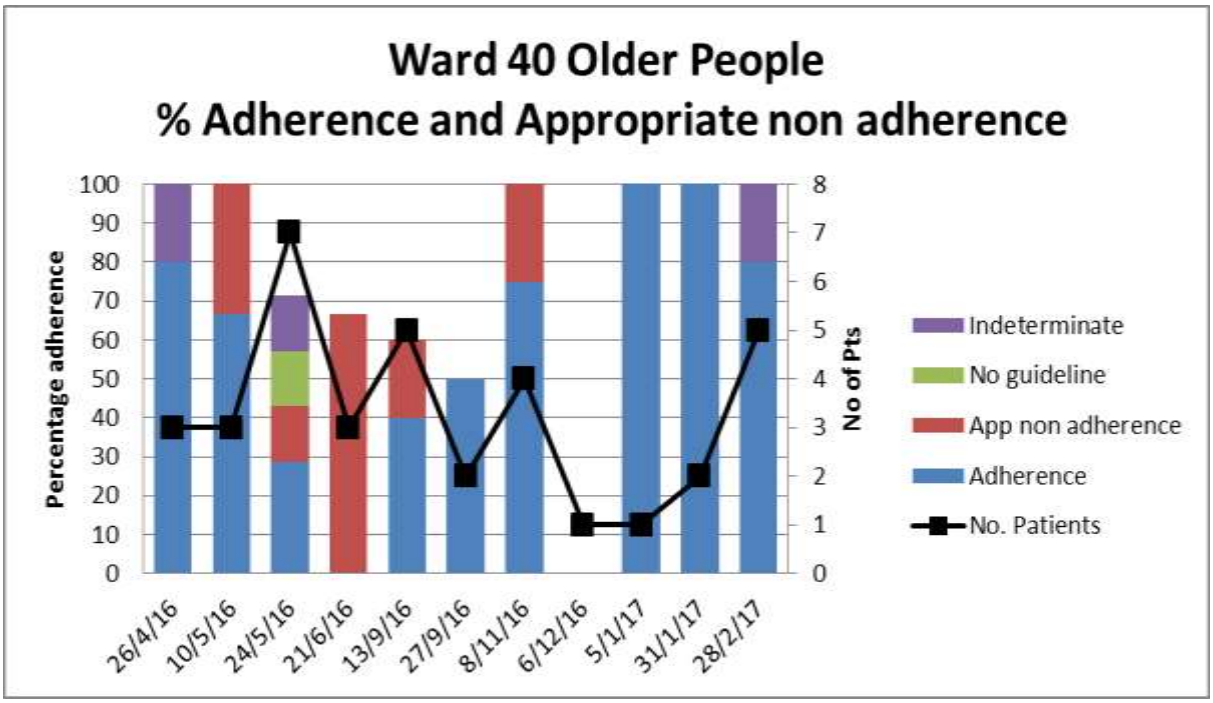
	5/1/16	6/5/16	13/5/16	20/5/16	24/5/16	31/5/16	10/6/16	14/6/16	21/6/16	28/6/16	7/7/16	19/7/16	9/8/16	23/8/16	30/8/16
indeterminate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% no guideline	0	0	8	0	0	0	0	0	0	0	7	0	0	0	0
% app non adh	25	29	25	23	23	22	10	30	22	45	20	0	25	20	0
% adherence	42	57	33	69	38	56	50	30	44	18	47	70	67	50	73
No of pts		7	11	13	15	10	10	10	9	11	15	10	12	10	11

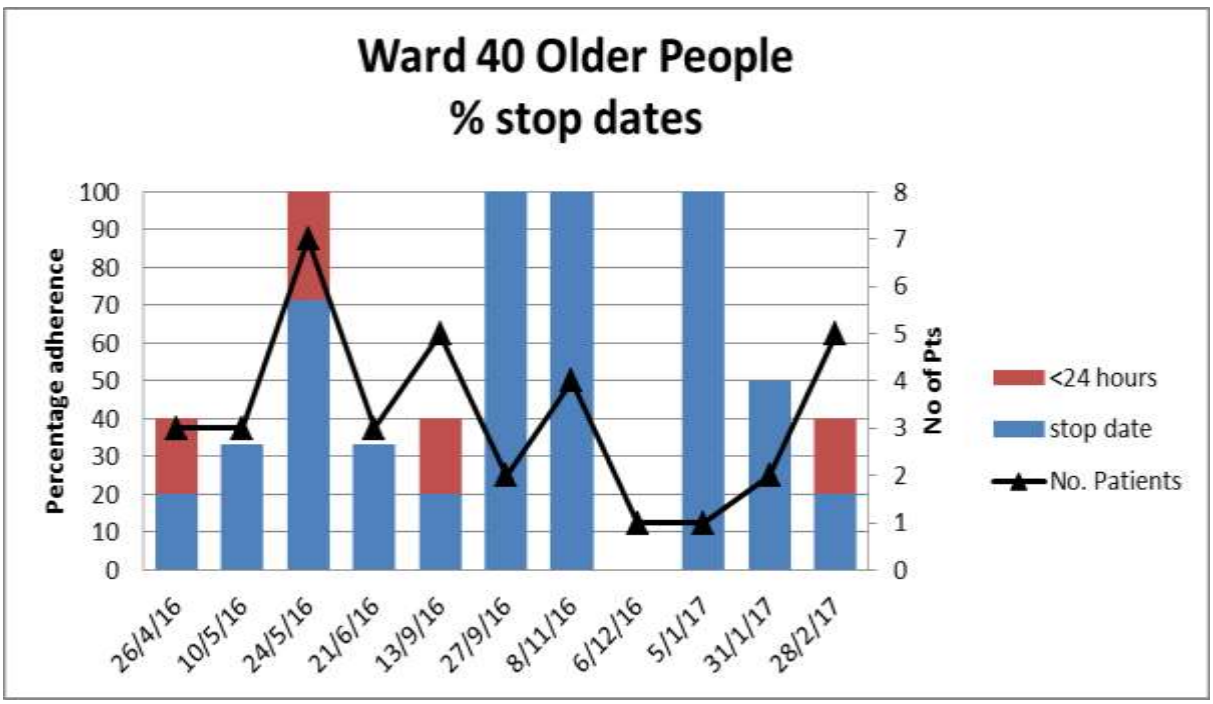
SWAH Ward 3 (Medicine / Respiratory Step down)
Stop Date

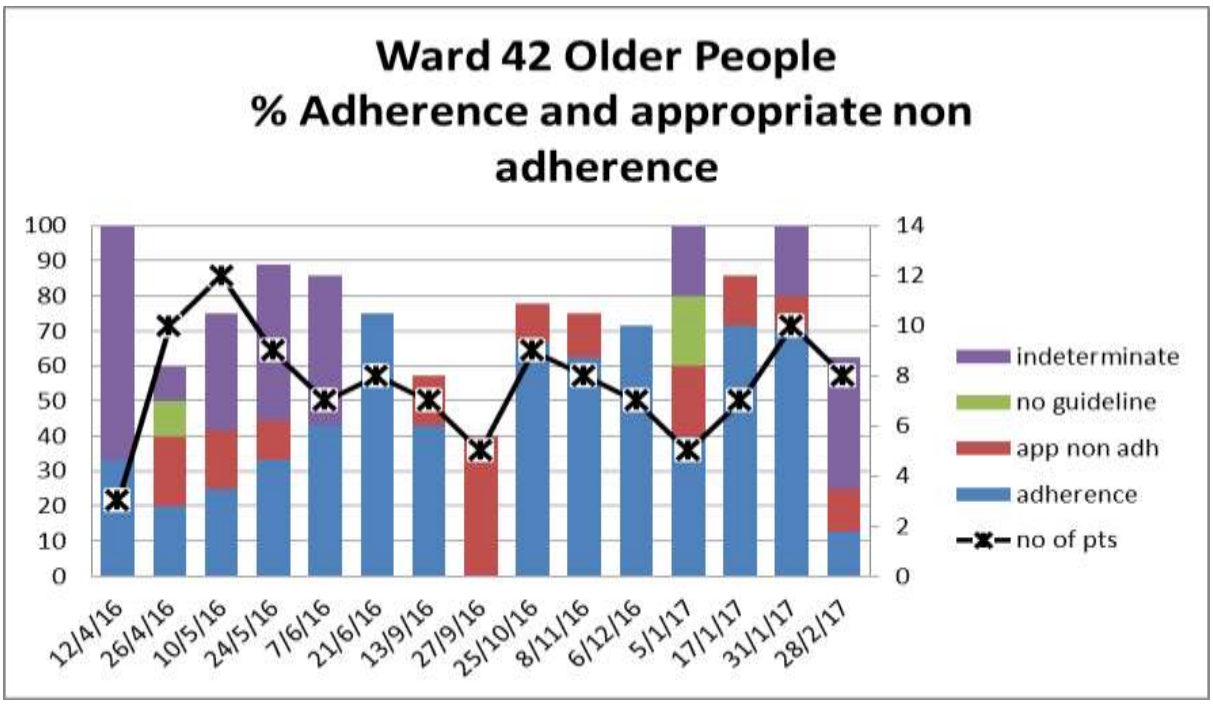


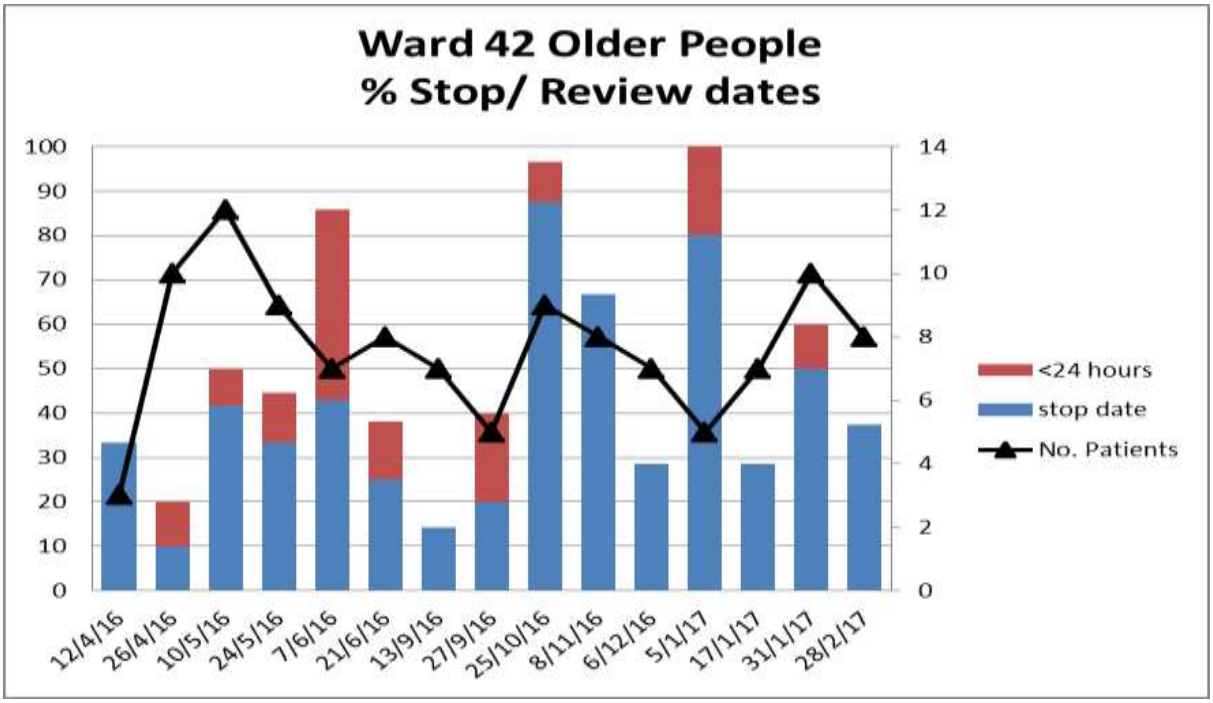
Appendix 7

RESULTS OF ANTIMICROBIAL PRESCRIBING AUDITS IN PRIMARY CARE & OLDER PEOPLE'S SERVICES WARDS ALONGSIDE THE MICROBIOLOGIST WARD ROUNDS






Ward 42 Older People
% Adherence and appropriate non adherence
100
90
80
70
60
50
40
30
20
10
0
14
12
10
8
6
4
2
0
indeterminate
no guideline
app non adh
adherence
no of pts
12/4/16
26/4/16
10/5/16
24/5/16
7/6/16
21/6/16
13/9/16
27/9/16
25/10/16
8/11/16
6/12/16
5/1/17
17/1/17
31/1/17
28/2/17


Ward 42 Older People
% Stop/ Review dates
100
90
80
70
60
50
40
30
20
10
0
14
12
10
8
6
4
2
0
<24 hours
stop date
No. Patients
12/4/16
26/4/16
10/5/16
24/5/16
7/6/16
21/6/16
13/9/16
27/9/16
25/10/16
8/11/16
6/12/16
5/1/17
17/1/17
31/1/17
28/2/17

Appendix 8

SUMMARY FINDINGS OF AUDIT OF GENTAMICIN PRESCRIBING APRIL 2016

Introduction

Gentamicin is a commonly prescribed antibiotic with a complicated dosing regimen dependent on weight and renal function. Incorrect dosing can result in nephrotoxicity and ototoxicity. These side effects can be minimised through appropriate dose calculation, therapeutic drug monitoring, avoiding concomitant risk factors and the use of shorter drug courses.

In a bid to simplify/ standardise the dosing regimen within the WHSCT, a gentamicin kardex and gentamicin calculator were introduced with multidisciplinary responsibilities.

Method

1. Data collectors: Ward-based clinical pharmacists using data collection sheets.
2. The data was collected over a week on up to four patients who were receiving a course of gentamicin or a stat dose.
3. The dose as per guidelines was calculated by clinical pharmacists.

Data Collected

In total 26 patients were audited during one week in April 2016 across the WHSCT.

18 gentamicin charts and 8 stat doses of gentamicin were examined.

Discussion

Application of Chart and Choice of Regimen

89% of patients commenced on regular gentamicin had a gentamicin chart initiated with extended daily interval dosing an appropriate choice for each of these cases.

55% of charts were the electronic calculator versions which automatically calculate the dose of gentamicin as per guidelines. This had been newly introduced since the last audit in March 2015 and perhaps needs highlighted to medical staff to encourage usage.

Documentation of Weight and Height

Nursing notes predominant source, with 94% having height and weight recorded (an increase from 83%/ 83% in 2015).

Documentation on gentamicin charts has increased from height/ weight 55%/ 75% in 2015 to 72%/ 76% in 2016.

Availability of an actual body weight has increased from 53% in 2015 to 92% in 2016 allowing for more accurate calculation, whilst the recording of actual height has increased from 18% to 62%.

Completion of the Chart

Nursing staff on different wards are signing for administration of gentamicin in different locations, e.g. chart alone, kardex alone or both. Clarification of where signatures for administration are required may be necessary to avoid wastage of nursing time.

Overall medical staff were correctly prescribing gentamicin on the chart, however the actual yellow monitoring section was not completed in 12/14 instances.

The purpose of the monitoring section was to increase patient safety, raise awareness of monitoring requirements whilst on gentamicin and create a relevant reference guide at a glance to anyone prescribing gentamicin. There has been an increase in documentation overall in comparison to last year with serum creatinine recorded 29% in 2016 compared to 0% in 2015.

Our audit also investigated if any patient had experienced a serum creatinine rise of > 26 micromol/L over 48 hours at any stage (criteria for AKI) and found that one patient had, but this had not been acted on.

Furthermore, 5 patients experienced a gentamicin level return back > 1 and in each instance the dose was an overdose in comparison to guidelines.

Once again the result of the sample was completed with greatest frequency (79%) suggesting that the importance of levels and monitoring is acknowledged and acted upon.

The preferred sample time was filled in on 50% of occasions; an increase to the 17% in 2015.

Predominately junior doctors (F1, F2) were responsible for calculating the dose of gentamicin to be prescribed on the kardex.

An overall result of 50% adherence to guidelines would suggest that education regarding gentamicin dosing might be beneficial and highlighting the benefits of the gentamicin calculator may help improve this.

Appendix 9

SUMMARY FINDINGS OF LOWER RESPIRATORY TRACT INFECTION RE-AUDIT APRIL 2016

Standard

WHSCT Secondary Care Antimicrobial Therapy Guidelines

Method

1. Data collectors: Lead Antimicrobial Pharmacist and Respiratory Specialist Pharmacist.
2. Each adult inpatient ward was visited. The ward sister identified patients receiving antibiotics for lower respiratory tract infections. Respiratory tract infections to be included:
   a. Community-Acquired Pneumonia (CAP)
   b. Community-Acquired Aspiration Pneumonia
   c. Infective Exacerbation of COPD (or Chronic Bronchitis)
   d. Hospital-Acquired Pneumonia (including Hospital-Acquired Aspiration Pneumonia)
   e. LRTI
3. Mixed infections, i.e. urinary tract infection/ respiratory infection, were excluded from the audit.
4. Data collation and report to be written by the Antimicrobial Pharmacist.

Results Summary

	Baseline Audit December 2012	**Re-Audit January 2013**	**Re-Audit February 2013**	**Re-Audit April 2016**
Number of patients audited	22	11	25	43
Total number of antibiotics audited	30	15	43	63
Allergy status on kardex Yes/ No	95% Yes	100% Yes	100% Yes	98% Yes
Route of Administration IV/ PO	61% IV 39% PO	20% IV 80% PO	42% IV 58% PO	33%IV 67% PO
Review or stop date included Yes/ No	27% Yes	47% Yes	33%	42%
Indication in notes Yes/ No	87% Yes	87% Yes	86%	100%
CURB-65 score in notes for CAP Yes/ No	20% Yes	29%Yes	29% Yes	55% Yes
Adherence to guidelines Yes/ No/ Appropriate Non-Adherence (ANA)*	41% Yes 9% No 41% ANA	53% Yes 20% No 27% ANA	58% Yes 19% No 21% ANA	40% Yes 35% No 25% ANA

Conclusion and Action Plan

1. April 2016 re-audit adherence and appropriate non-adherence has decreased to 63%. The target is 90% adherence to guidelines. Some of the drop in adherence was due to patients with CAP receiving doxycycline. Doxycycline is on guidelines as monotherapy for patients

with penicillin allergy with CAP CURB-65 score 1 or 2 as recommended in the British Thoracic Society (BTS) guidelines, however

a. Two patients received amoxicillin and doxycycline, CURB-65 = 2, BTS suggests doxycycline alone.
b. Three patients received co-amoxiclav and doxycycline.
c. Two patients received levofloxacin and doxycycline. CURB-65 = 1 and CURB-65 = 0. BTS would suggest doxycycline alone for both these patients.
d. Two patients received piperacillin-tazobactam and doxycycline. One for CAP and one for HAP.

2. Documentation of CURB-65 score in notes has improved. This is the validated tool for severity assessment for CAP as recommended by BTS.

3. Percentage of prescriptions with stop dates has improved from 27% to 42%; however this could improve more.

Appendix 10

RESULTS OF EUROPEAN ANTIBIOTIC AWARENESS DAY POINT PREVALENCE SURVEY OF ANTIMICROBIAL CONSUMPTION NOVEMBER 2016

Approximately 39% of inpatients at each site were prescribed antimicrobials. This figure is comparable to a PPS carried out in 2015, which found approximately 40% of patients at each site (39% Altnagelvin; 41% SWAH) were prescribed antimicrobials.

Table 1: Overall results of indication and review/ stop date documentation per hospital site

	Altnagelvin	SWAH
% Review/ Stop Dates Documented	41.5%	69%
% Indication Documented	33%	51%

Table 1 illustrates the percentage of kardexes with stop/ review date and indication documented on the kardex per hospital site.

Documentation of indication was poor across both sites and should perhaps be targeted to increase awareness of recording this on the kardex at both sites.

The WHSCT is one of the highest users of ciprofloxacin and co-amoxiclav. One aim of the PPS was to identify indications for prescribing of these antimicrobials. Results are outlined above.

The most common indication for co-amoxiclav involved chest infections, urinary infections and intra-abdominal infections.

The most common indications for ciprofloxacin involved hospital-acquired pneumonia.

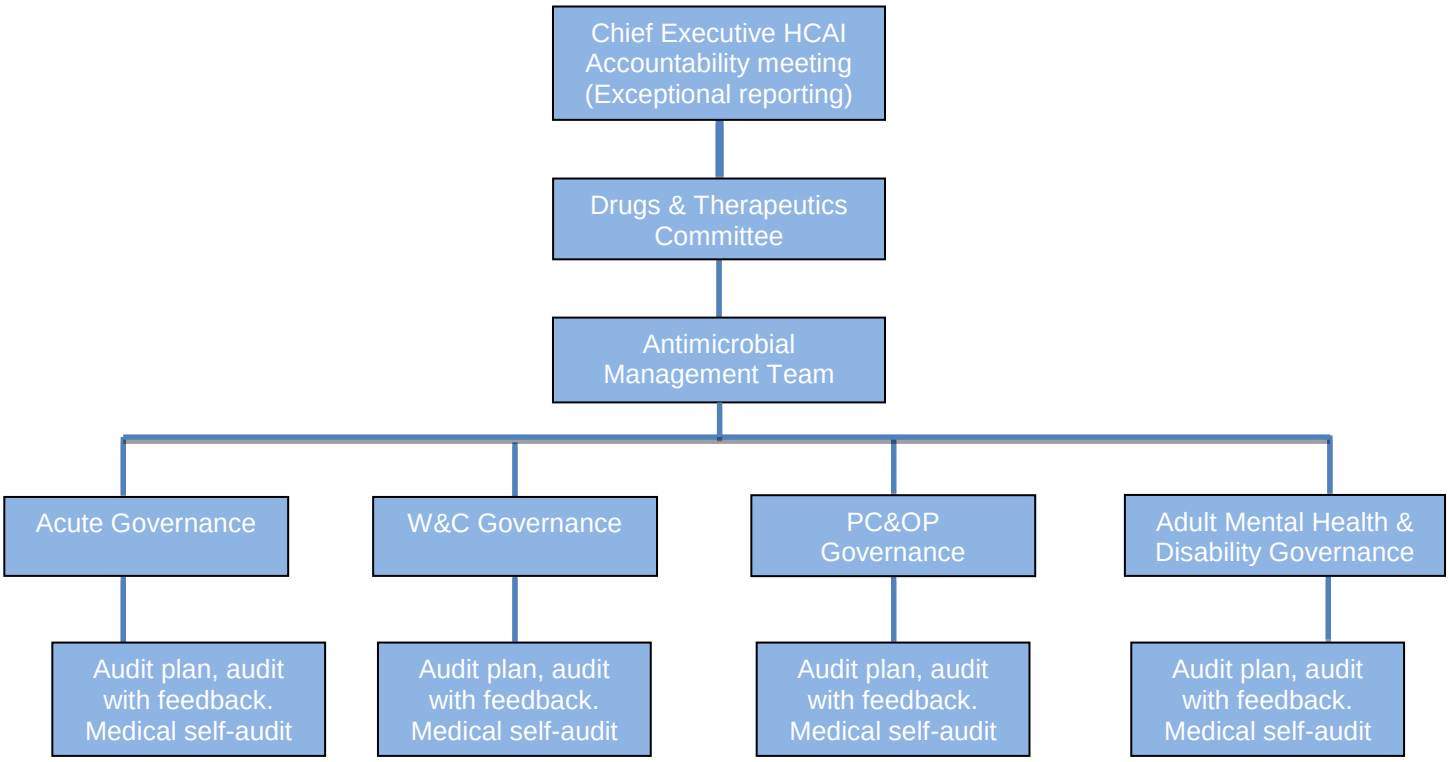
SWAH had 0 patients receiving ciprofloxacin. One of the limitations of a PPS over one day is that it may not reflect the true practice/ pattern that occurs over time.

Appendix 11

ANTIMICROBIAL MANAGEMENT TEAM STRUCTURE, MEMBERSHIP AND TERMS OF REFERENCE

Reviewed December 2014

Structure



Members of Antimicrobial Management Team

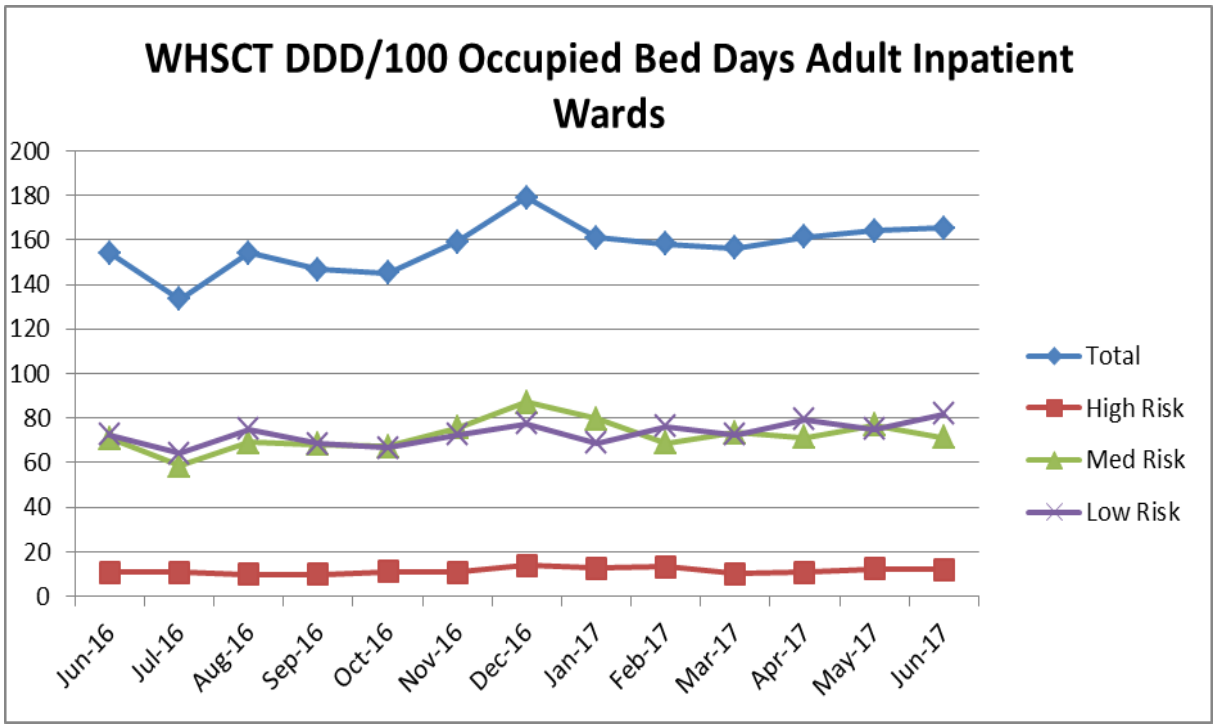
- Consultant Microbiologist(s)
- Antimicrobial Pharmacist(s)
- Information Technology Specialist
- Head of Infection Prevention & Control
- DCD for Medicine/ Surgery/ W&C/ PC&OP

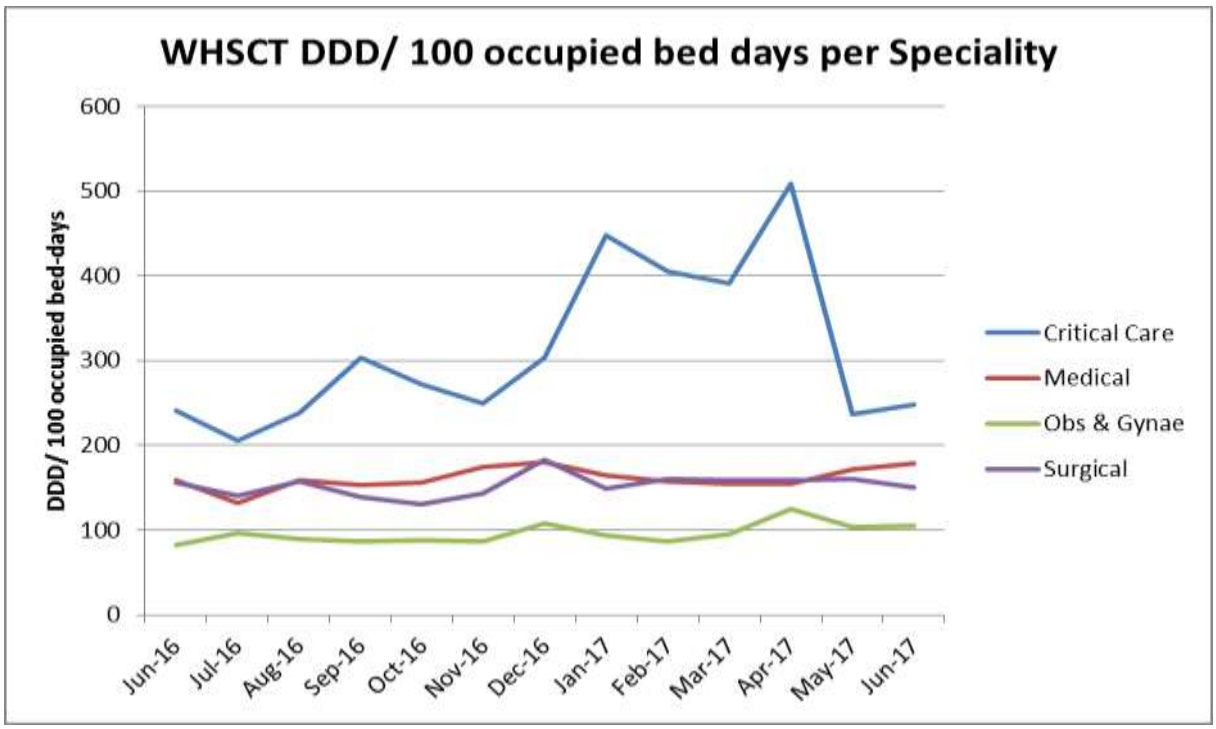
Terms of Reference

1. Improve standards of antimicrobial use by supporting staff education and clinical governance.
2. Promoting application of hospital antimicrobial guidelines.
3. Enable audit and feedback regarding antimicrobial guidelines.
4. Report local and national trends on antimicrobial resistance and antimicrobial utilisation.

Appendix 12

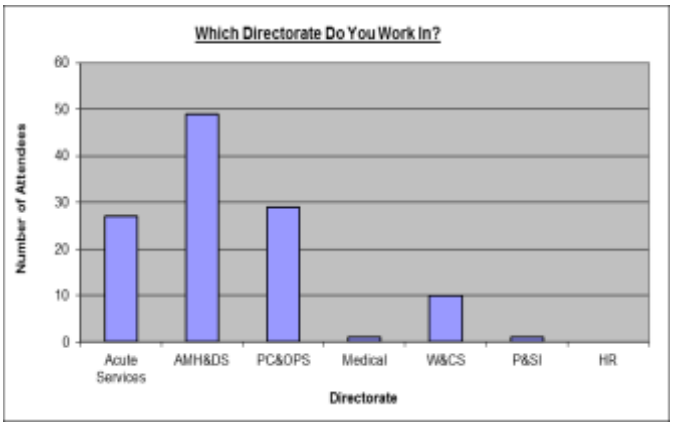
ANTIBIOTIC USAGE TRENDS

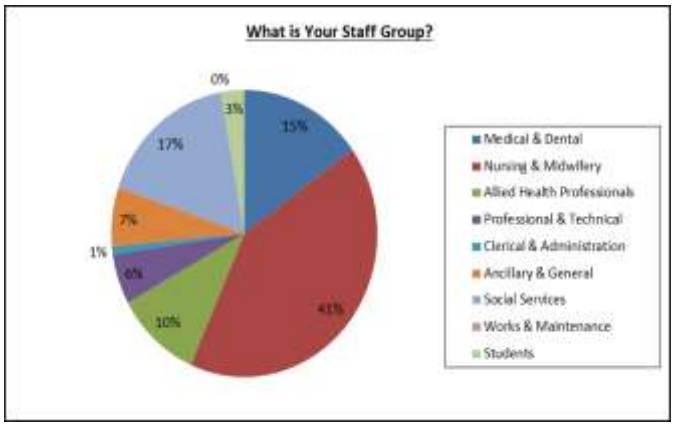


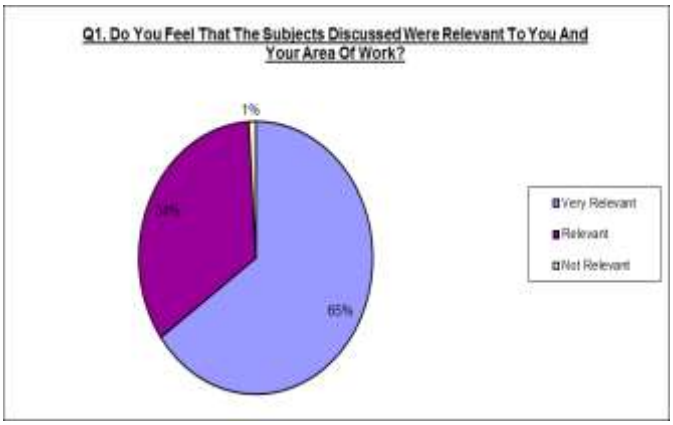


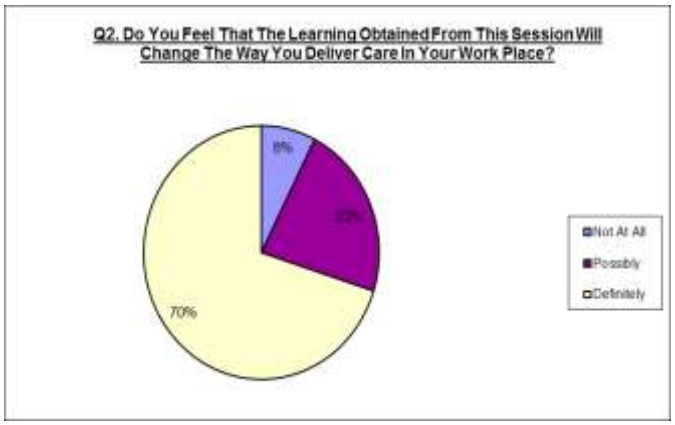
Appendix 13

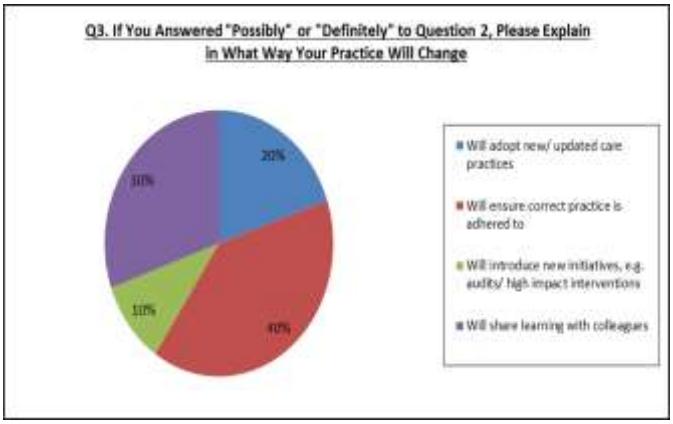
FINDINGS FROM MANDATORY TRAINING EVALUATION FORMS

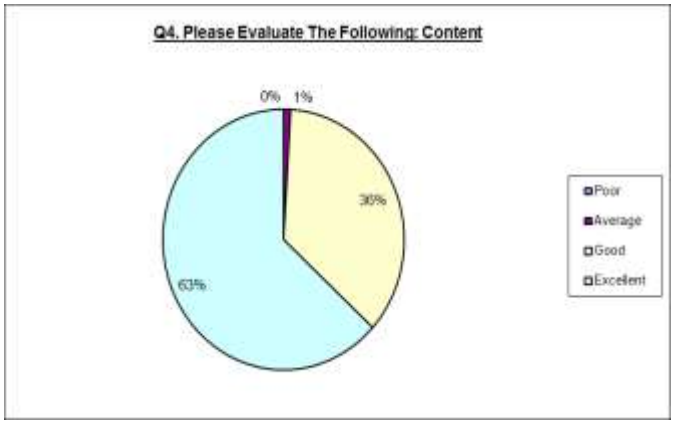


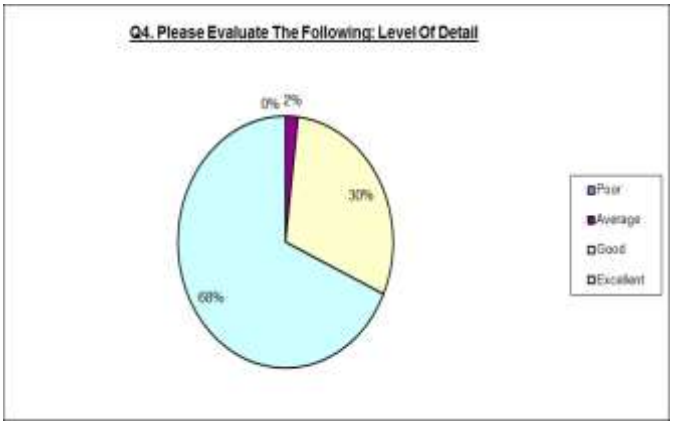


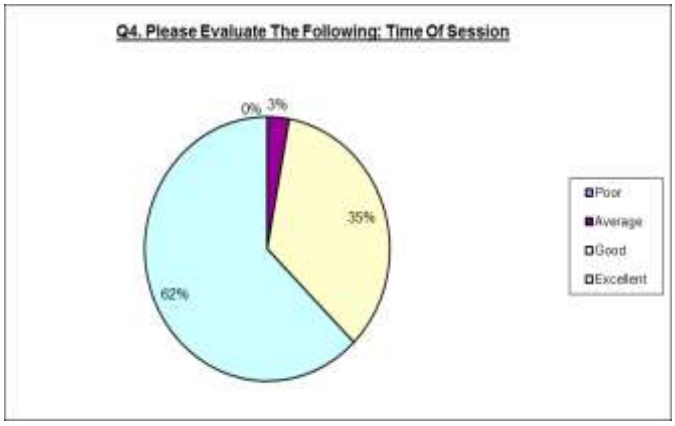


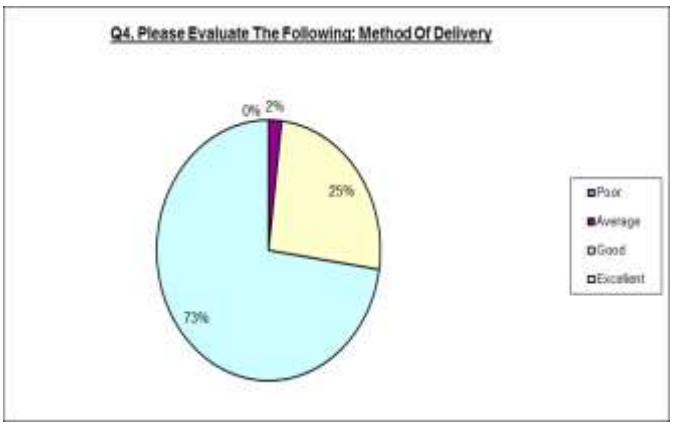


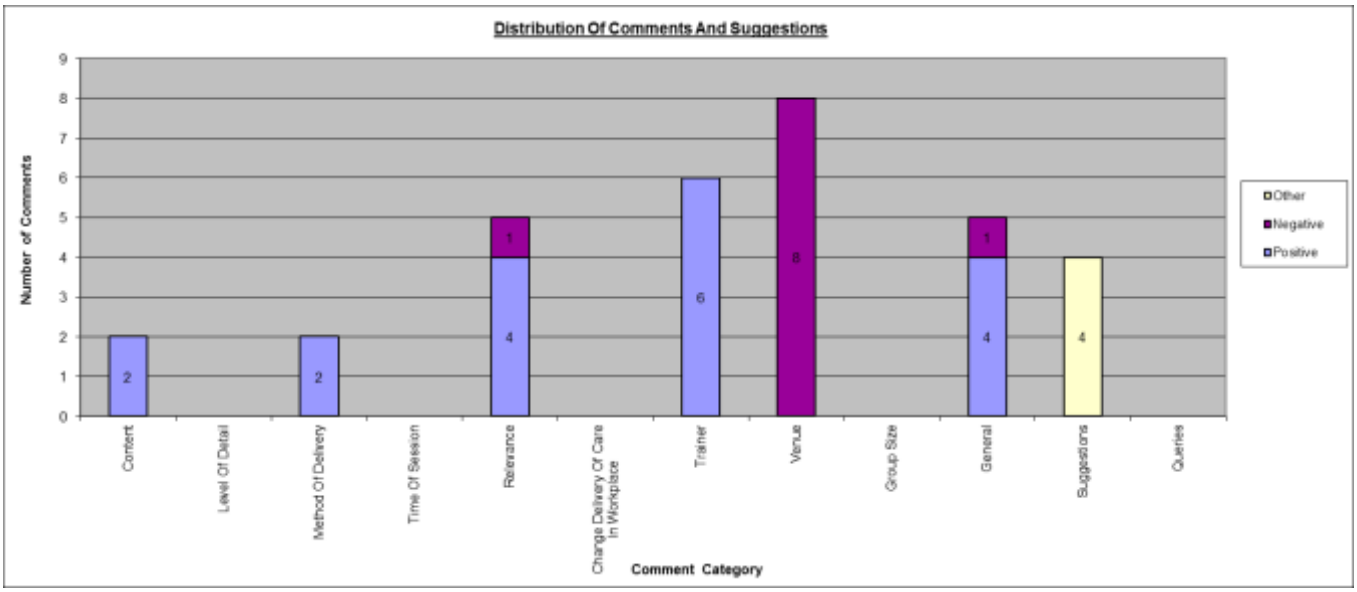









Q4. Please Evaluate The Following: Method Of Delivery
0%
2%
25%
73%
Poor
Average
Good
Excellent


Distribution Of Comments And Suggestions
Number of Comments
Comment Category
Other
Negative
Positive
Content
Level Of Detail
Method Of Delivery
Time Of Session
Relevance
Change Delivery Of Care In Workplace
Trainer
Venue
Group Size
General
Suggestions
Queries

Appendix 14

REGIONAL IP&C GOVERNANCE ASSESSMENT TOOL FOR AUGMENTED CARE AREAS – QUALITY IMPROVEMENT PLAN

Key:

Red	Not actioned
Amber	In progress
Green	Actioned

Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
Criterion 1: Board-Level Leadership to Prevent HCAIs (Healthcare-Associated Infections)					
1.	It is recommended that the appraisal process is further developed and implemented.	Nursing staff appraisal systems will be further developed in conjunction with NMC revalidation requirements and clinical supervision structures.			
		Update Cancer Services 65% of nursing staff appraisals completed.	Elizabeth England, Macmillan Lead Nurse/ Cancer General Manager	Ongoing	Amber
		Update ICU/ HDU ADR form adapted to include NMC revalidation. Clinical Supervision 82% of staff had one session by end of September 2016.	Helena McDonald, Lead Nurse, ATICS	Ongoing	Green
		Update NICU (Dec 2016) Annual appraisals have been commenced in NICU for 2016/17. This includes discussion on ensuring Mandatory Training is up to date, which includes IPC and ANTT training.	Nuala Colton, Lead Nurse, NICU, and NICU Sisters	March 2017	Amber
		Update Renal Unit All registered nursing staff have an annual appraisal which is linked to the NMC Code of Conduct.	Renal Unit Manager	Ongoing	Green
		This requirement will be added to the Infection Prevention and Control (IPC) Three-Year Strategic	Head of Infection Prevention & Control	September 2015	Green

Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
		Plan 2013-16 Year Three Monitoring Report. It will also be included in the new Three-Year Strategic Plan for 2017-20.		March 2017	
2.	It is recommended that the Trust continues to develop and implement a process of patient and public involvement in the delivery of care and services.	Patient and public involvement has been strengthened in the most recent approved version of the IPC Three-Year Strategic Plan 2013-16 Year Three Monitoring Report. Directorates report on progress with this plan at alternate meetings of the Chief Executive Healthcare-Associated Infection (CE HCAI) Accountability Forum.			
		Update Cancer Services Cancer Services has an active Cancer Locality Partnership Group, which encompasses voluntary, charitable and community services.	Elizabeth England, Macmillan Lead Nurse/ Cancer General Manager	Ongoing	Amber
		Update ICU/ HDU Relatives Satisfaction Surveys are collected monthly and actioned as necessary.	Helena McDonald, Lead Nurse, ATICS	Ongoing	Amber
		Update NICU (Dec 2016) The Neonatal Network Northern Ireland (NNNI) has a parent representative on the Board, who attends all meetings. Topics discussed are related to IPC and antimicrobial prescribing, and regional guidelines are developed, such as the Testing and Isolation to Prevent Infections (TIPI) Guideline, regional gentamicin chart and antimicrobial guideline. The NNNI, in collaboration with Queen's University Belfast, have developed a regional parental discharge questionnaire, which is anonymous. These are reviewed and collated at regional level and fed back to individual units. Issues to be considered are highlighted, as well as the positive	Nuala Colton, Lead Nurse, NICU	Ongoing	Green

Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
		aspects of care.			
		Update Renal Unit IPC Team have linked with and provided an information session to the Renal Support Group regarding advice on IPC issues, e.g. handwashing, protecting themselves against seasonal illnesses when on transplant medication.	Renal Unit Manager	Completed and ongoing	Amber
3.	It is recommended that an augmented care group is set up to facilitate shared learning among staff and areas. Staff email access and the use of SharePoint is reviewed to ensure standardisation in practice across wards/ departments.	An Augmented Care Task and Finish Group will be set up to facilitate shared learning among staff and areas. At the conclusion of all actions outlined in this action plan the Group will amalgamate with one of the multiple existing IPC related meetings as a standing item. Forums have been identified for sharing between augmented care areas, e.g. Trust Nursing & Midwifery Governance Committee, IPC Surveillance Sub-Group, CE HCAI Accountability Forum and IPC Link Personnel SharePoint site.	Head of Infection Prevention & Control	January 2016	Green
4.	It is recommended that trusts meet with the PHA to agree the way forward in relation to ongoing quality improvement in the reduction of MRSA and CDI. **(Regional)**	Two meetings have already taken place between key Trust representatives, including the Chief Executive, and Dr Doherty and Dr Geoghegan of the PHA. A further meeting is planned to take place on 2nd September 2015 following the CE HCAI Accountability Forum meeting where Dr Geoghegan will be in attendance.	PHA	Completed and ongoing	Green
5.	It is recommended that the IPC staffing levels are reviewed to take account of the increasing workload,	A briefing paper to discuss protected time for Link Nurses was passed at the CE HCAI Accountability Forum on 22nd July 2015 and it has been agreed that Link Nurses will have protected time.			

Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
	participation in audit and challenges within IPC. IPC link nurses should have protected time to carry out their role.	**Update Cancer Services** Link Nurses are identified in each clinical setting. Direction taken from IPC on how these Link Nurses will be kept up to date.	Elizabeth England, Macmillan Lead Nurse/ Cancer General Manager	Ongoing	Amber
		Update ICU/ HDU C. Robertson is the link for Critical Care and is to commence visiting the Unit monthly and as required. The Unit has two IPC Link Nurses who get protected time regularly and carry out teaching within Critical Care on the bundles and ANTT. They are also supported by the Practice Educator.	Helena McDonald, Lead Nurse, ATICS	Ongoing	Amber
		Update NICU (Dec 2016) The NICU works closely with the Link IPC Nurse and IPC advice is readily available. The establishment of safety initiatives for specific IPC issues and ongoing joint review ensures that we are committed to adhering to best practice. The Unit has two IPC Link Nurses and ANTT trainer and assessors in Altnagelvin NICU, and one IPC Link Nurse and two ANTT trainer and assessors in SWAH NNU. The NICU SharePoint is kept up to date with current issues and joint access is available. This also includes SWAH NNU. Particular focus has been given to blood culture results and audits and any ensuing action taken. High Impact Intervention audits are regularly carried out and results shared on the nursing performance dashboard and displayed at Unit level.	Nuala Colton, Lead Nurse, NICU	Ongoing	Amber

Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
		Update Renal Unit Protected time has already been implemented in the Renal Unit and Link Nurses attend all infection control meetings.	Renal Unit Manager	Completed	Green
		A whole Trust study day to help reinvigorate the Link Nurses system is planned for 8th October 2015; the Chief Executive will address this meeting.	Head of Infection Prevention & Control	Completed	Green
6.	It is recommended that the Trust review the frequency of senior level walk rounds and that all staff attend Mandatory IPC Training.	A review of walk rounds will be completed with a view to increasing frequency in augmented care. These have commenced and completed in ICU/ HDU. Other augmented care areas in plan for 2017-18.	Medical Director	November 2015	Green
		All staff are required to attend Mandatory IPC Training every other year.			
		Update Cancer Services With the confirmed recruitment for the new Radiotherapy Services, IPC Training is ongoing.	Elizabeth England, Macmillan Lead Nurse/ Cancer General Manager	Ongoing	Amber
		Update ICU/ HDU IPC Mandatory Training is 70%. Staff were unable to attend due to staff shortages or staff were rostered to attend training, but were unable to do so due to staff shortages. However, the Practice Educator and Link Nurses have trained staff on the Unit. 61% of staff have had face-to-face training on hand hygiene, the 7 step technique, the WHO 5 moments, PPE and influenza. 10% of staff have had training on MRSA. 22% of staff have had training on risk factors for *C. difficile*, the *C. difficile* care bundle, the Bristol stool chart	Helena McDonald, Lead Nurse, ATICS	Ongoing	Amber

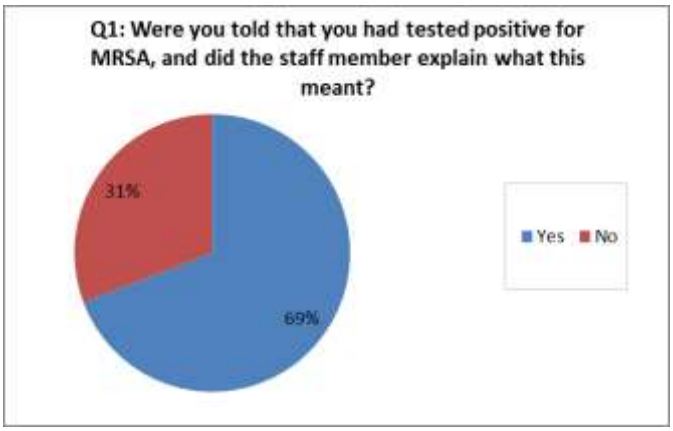
Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
		and the diarrhoea flowchart.			
		Update NICU (Dec 2016) A local database of all IPC and ANTT training is maintained within the Unit and, currently, the majority of all staff are up to date.	Nuala Colton, Lead Nurse, NICU	Ongoing	Amber
		Update Renal Unit All staff are up to date with all Mandatory IPC Training.	Renal Unit Manager	Ongoing	Green
Criterion 5: Environmental Cleanliness					
7.	It is recommended that the Trust continue to review and improve access to all services out of hours.	24 hour arrangements for high priority decontamination already exist. A review of Support Services provision across the Trust is already underway; any additional hours for augmented care may be identified as part of the process.	Director of Performance and Service Improvement	Completed	Green
		Support Services are always involved in incident control/ outbreak meetings and have been since the inception of the Trust.	Head of Infection Prevention & Control	Completed	Green
8.	It is recommended that the Trust continue to work with the DHSSPS, PHA and HSC Board to develop and implement refurbishment plans.	There is currently limited capital availability; all essential projects are progressing.	Assistant Director of Facilities Management	Completed and ongoing	Green
Criterion 8: Admission, Discharge and Transfer					
9.	It is recommended IPC is included when reviewing guidance documents. All Trust documents should be	Action one for the Augmented Care Group will be to review all current admission and discharge documentation and link in with the overall lead. The IPC Lead Nurse Forum has developed an	Assistant Director of Nursing Governance/ Head of Infection Prevention & Control	Completed February 2017	Green

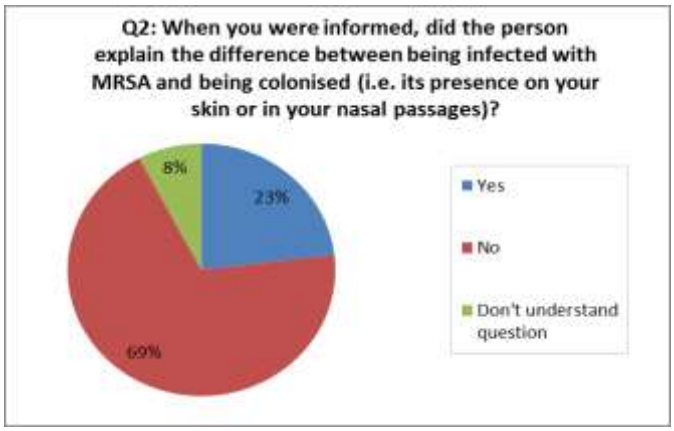
Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
	reviewed and include ownership and a review date.	Adult Regional IPC Risk Assessment and Transfer Form. This has been reviewed as part of the Regional Nursing Assessment booklet and will be included in the updated document.			
10.	It is recommended that the IPC Admission/ Transfer Risk Assessment Form is reviewed. A robust system should be in place to ensure that staff are instructed when to use the form and the need to either retain a copy of the form or a record that the form has been completed. **(Regional)**	Work on the regional Neonatal risk assessment is well underway. The Head of IPC represents the Trust on the regional working group. Adults as described at 9.	Head of Infection Prevention & Control	**Regional**	
		Update NICU (Dec 2016) The NNNI has developed a regional transfer form to facilitate a consistent approach to testing and isolation to prevent infection in neonatal units. This is in operation in all units. NICU care management plans have been updated to include new changes in practice.	Nuala Colton, Lead Nurse, NICU	Completed	Green
11.	It is recommended that the DHSSPS with the PHA and trusts review the use of the ECR to capture patients' infection status. The ECR system should integrate with current IT systems, or where necessary, one regional IT system to capture all relevant patient information should be put in place. **(Regional)**	The Trust IPC Team currently use the ECR to access relevant patient information from other trusts. A regional approach to the use of ECR and a regional surveillance system is very welcome.	Regional	**Regional**	
12.	It is recommended that the Trust continue to work internally with staff and externally with the PHA and primary care to improve	The Trust IPC Three-Year Strategic Plan 2013-16 Year Three Monitoring Report includes a section on antimicrobial stewardship. A regional approach to this is welcomed by the Trust.	Regional	**Regional**	

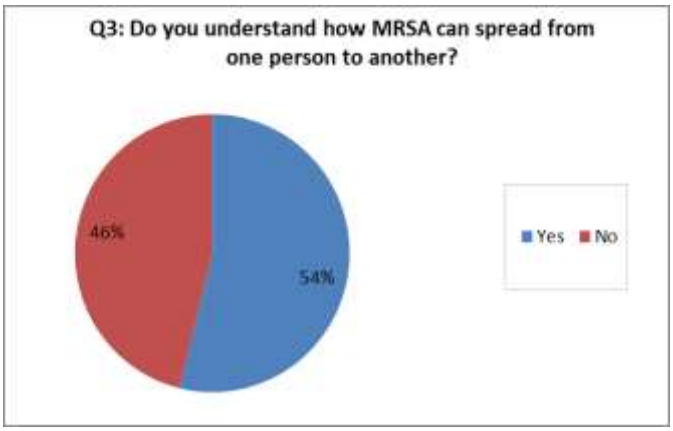
Ref No.	Recommendations	Action Required	Responsible Person	Date for Completion/ Timescale	Status (RAG Rating)
	antimicrobial stewardship and prescribing. **(Regional)**				
13.	It is recommended that the provision of patients' antibiotic information leaflet is monitored. An overarching guidance/ information leaflet should be developed on the use of equipment in the community.	An audit will be planned as part of the actions for the Antimicrobial Management Team (AMT). The AMT have reviewed this recommendation and it was agreed that leaflets regarding antibiotics are already available with each dispensed medication	Medical Director	December 2016	Green
		Referred to the Medical Devices Working Group.	Assistant Director of Nursing Workforce Planning & Modernisation	December 2016	Amber

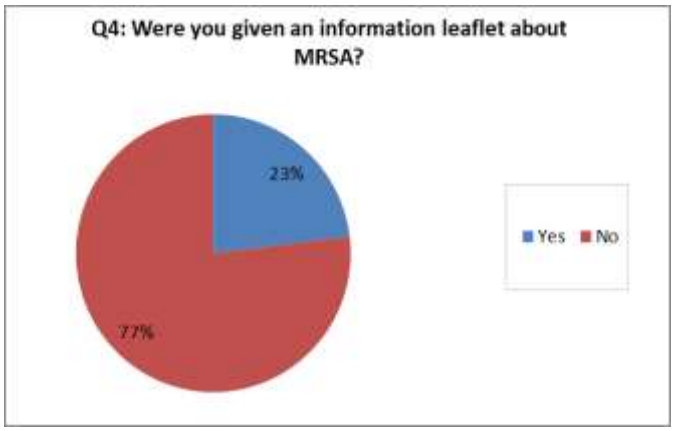
Appendix 15

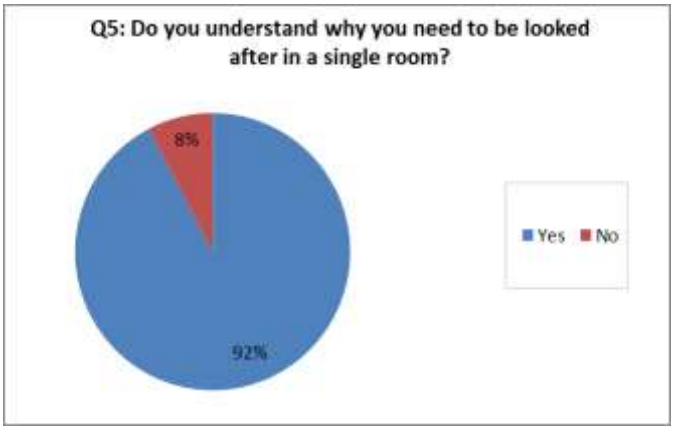
RESULTS OF PATIENT SURVEY ON UNDERSTANDING OF MRSA CARRIAGE











Patient Comments
All the staff are very good.
Too short staffed, impossible to nurse everyone.
Don't see nurses enough.
The staff are very busy.
Don't see enough of the staff.
Don't like the door closed, can't see the nurses if I need them.
Like the single room, more private when your visitors come in.
Everyone's very good.
The staff clean the venflon very well every time.