



NOT PROTECTIVELY MARKED

Public Board Meeting

September 2019 Item No 11

THIS PAPER IS FOR DISCUSSION

PATIENT AND STAFF SAFETY – HEALTHCARE ASSOCIATED INFECTION (HAI) UPDATE REPORT

Lead Director Author	Claire Pearce, Director of Care Quality and Strategic Development Susan Wilson, Head of Infection Prevention and Control	
Action required Key points	 The Board is asked to note/discuss this update report. Scottish Ambulance Service overall hand hygiene compliance has been sustained between 91- 92% over the last 6 months. Compliance in July dropped to 89% in two regions/sub-regions but improved again in August. One sub-region's compliance reduced significantly to 86% in August; related to one ambulance crew. Overall compliance with a elements of Standard infection control precautions (SICPs) continues to indicate sustained good practice (Pages 3 & 5-10). 	
	The National Cleaning Services Specifications (NCSS) monitoring results for cleanliness of the healthcare environment continue to be maintained above the 90% target. The NCSS estate result for South East sub-region dropped to 84% In August. This was an extraordinary result affected mainly by the small number of locations audited that month and the issue of faulty trolley cot mattresses; currently being replaced. (Pages 3 & 5 - 10)	
	HPS sent out an alert at the end of July providing updated information on the current outbreak of Ebola Virus Disease (EVD) in the Democratic Republic of Congo (DRC). (Page 4)	
	Overall compliance with the recorded use of the PVC insertion bundle was maintained above 95% during July and August 2019. (Page 4) .	
	The Annual Infection Prevention and Control Report 2018/19, which has been approved by both the Infection Control and Clinical Governance Committees is provided as an appendix to this report for noting (Appendix 1).	
Timing	This paper is presented to the Board bi-monthly in the Scottish Government's prescribed template.	

Doc: HAI update Board	Page 1	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

Link to Corporate Objectives	2.1 - A patient safety work programme must include ongoing work to prevent and reduce the risk of HAI for patients, staff and the public.
Contribution to the 2020 vision for Health and Social Care	The work and information referred to in this report supports the Service in its contribution to the 2020 Vision for Health and Social Care in relation to Safe and Effective Care.
Benefit to Patients	Safe clinical practices, a clean environment and patient care equipment protect patients from the risk of Healthcare Associated Infection (HAI).
Equality and Diversity	Healthcare Associated Infection (HAI) policies apply to all staff and patient groups. These are based on NHS Scotland HAI policy and Guidance. Health Protection Scotland (HPS) and Healthcare Improvement Scotland (HIS) conduct equality impact assessment on all HAI national guidance, policy and standards. The hand hygiene, Standard Infection Control Precautions (SICPs) and cleanliness audit results reported are a mandatory HAI requirement related to national policy and guidance.

Doc: HAI update Board	Page 2	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

Healthcare Associated Infection Report

September 2019

Hand Hygiene

Scottish Ambulance Service overall hand hygiene compliance has been maintained between 91-92% in the past 6 months. Compliance dropped just below 90% in 2 Regions/sub-regions (North and West Region North) in July but improved again in August to 95% and 93% respectively. West Region South's compliance unexpectedly dropped to 86% in August; this was the first time since January that their compliance has been below the 90% target and was mainly related to just one crew's non-compliances. This was discussed with the staff on the day and it is anticipated that this result will improve again going forward. Non-compliance with hand hygiene practices observed during the audits is raised with staff at the time to improve future practice.

Hand hygiene compliance run charts for Scottish Ambulance Service overall and each Region/sub-region are reported in section 2.

Standard Infection Control Precautions (SICPs) Audit:

Overall compliance with all elements of Standard Infection Control Precautions (SICPs) was sustained at 96% in July and August 2019; with Region/sub-regional compliance in the range of 94 - 98% for that period. This provides assurance that staff are applying standard infection control precautions (SICPs) appropriately. Monthly SICPs compliance is reported to Regional management for dissemination to staff and improvement action.

Cleaning and the Healthcare Environment

Scottish Ambulance Service overall and Regional compliance against NHS Scotland's National Cleaning Services Specification (NCSS) continues to meet the required standard for both cleanliness and general fabric (Estates) of stations and ambulances.

In August the NCSS estates result for South East sub-region dropped to 84%. This was an extraordinary result affected mainly by the fact that only 4 stations were audited in that month of which 3 were below the 90% target for the estates section. This was due mainly to the ongoing issue of faulty trolley cot mattresses, currently in the process of being replaced by the manufacturer. Two of the locations audited also had a number of estates issues in the station related to them being older premises; none of which were considered high risk for healthcare associated infection (HAI) although they do impact on the ability to clean the areas appropriately. The issues noted were referred to the station managers for rectification.

The NCSS estates score only relates to issues that impact on the ability to clean an area effectively and can fall below the required 90% in some older stations. Regional results by station are reported to Management who are responsible for addressing rectifications and recording this on Health Facilities Scotland (HFS) Facilities Management System.

NCSS Cleanliness and estates monthly compliance results for Scottish Ambulance Service overall and each Region/Sub-Region in the last year are reported in section 2.

Doc: HAI update Board	Page 3	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

Outbreaks/Incidents:

The weekly data provided by Health Protection Scotland (HPS) indicating NHS Scotland Hospital ward closures due to Norovirus is circulated to Ambulance Control Centres (ACCs) for information.

Respiratory Protective Equipment (RPE):

The Executive Team meeting in August considered an options appraisal for the provision of respiratory protective equipment and agreed to proceed with powered air-fed units.

Health Protection Scotland (HPS): Ebola Virus Disease Outbreak in Democratic Republic of Congo (DRC)

HPS sent out an alert at the end of July providing updated information on the current outbreak of Ebola Virus Disease (EVD) in DRC. The World Health Organisation (WHO) has now declared the outbreak as a Public Health Emergency of International Concern (PHEIC). The aim of this is to focus further support on the outbreak response and does not change the risk to Scotland and the wider UK which remains as negligible to low. Standard Operating Procedures have been developed for monitoring returning workers to the UK from affected areas.

Peripheral Venous Catheter (PVC) Insertion Bundle:

Service overall compliance with recording application of the PVC insertion bundle was 95.9% in July and 96% in August 2019 against the quality indicator aim of 95%.

Annual Infection Prevention and Control Report 2018/2019:

The Annual Infection prevention and Control Report 2018/19 has been approved by both the Infection Control and Clinical Governance Committees and is attached as an appendix for noting.

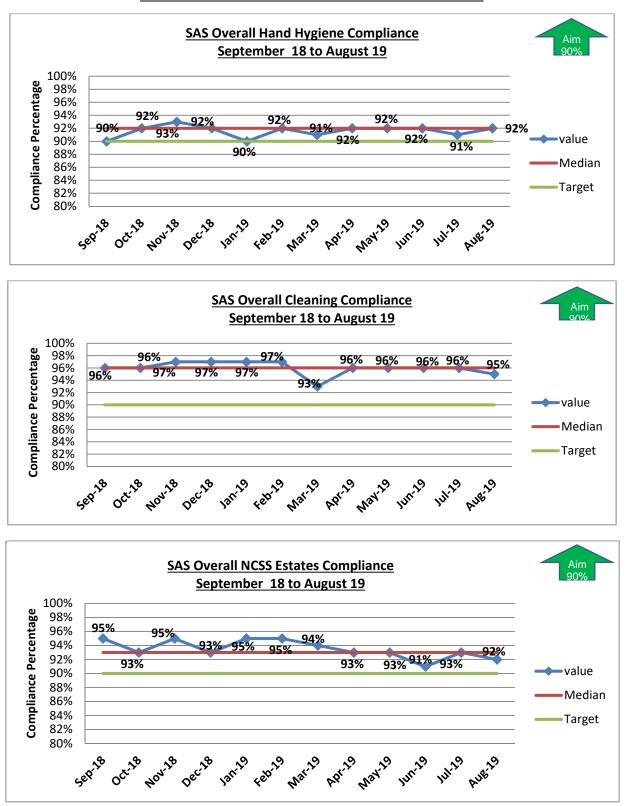
The report details year end achievement against the Annual Infection Prevention and Control Work Programme 2018/19. A summary of work achieved is provided on pages 6-11 with comprehensive details against each delivery area provided in pages 12-17.

The majority of work was completed by year end (31st March 2019), the actions shown as work in progress were carried forward to the 2019/20 Annual Programme.

Doc: HAI update Board	Page 4	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

Section 2 – Hand Hygiene and National Cleanliness Standards (NCSS) Compliance

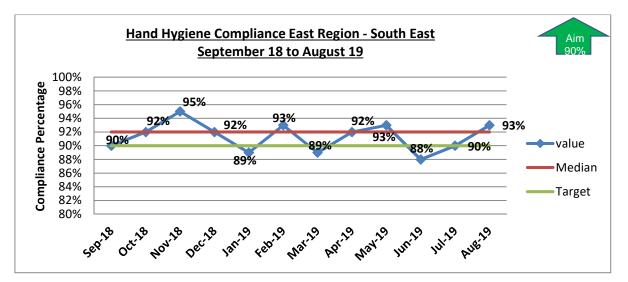
The following series of Run Charts provide information for the Scottish Ambulance Service overall and each Region/ sub-region on hand hygiene and NCSS cleaning compliance for the period September 2018 – August 2019.

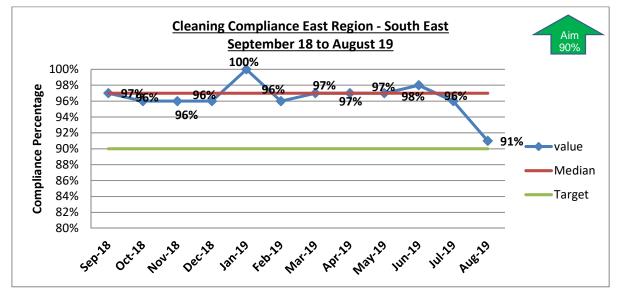


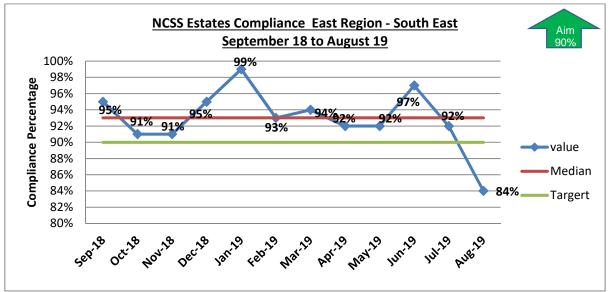
SCOTTISH AMBULANCE	SERVICE OVERALL	REPORT CARD
JCOTTISTI ANDOLANCE	JLIVVICE OVENAL	

Doc: HAI update Board	Page 5	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

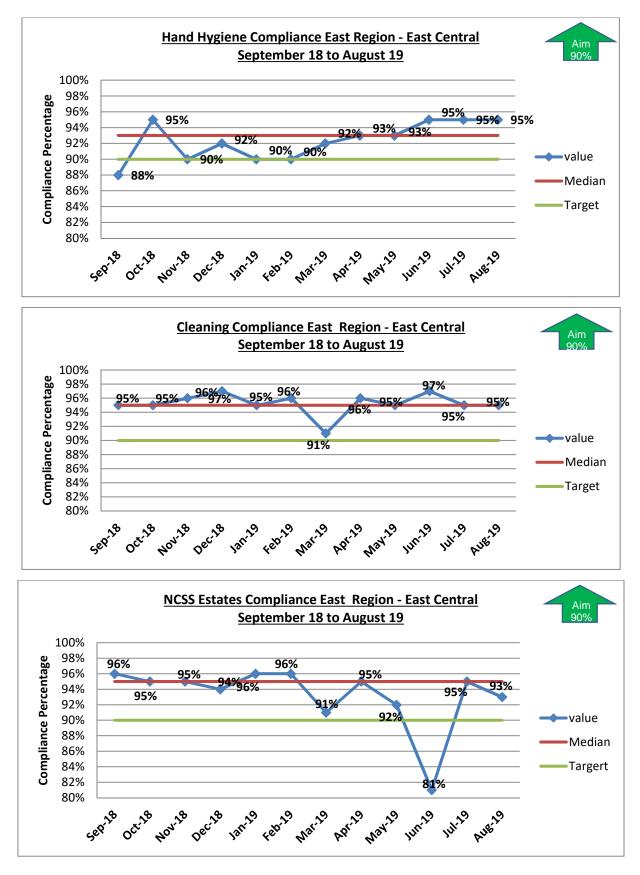








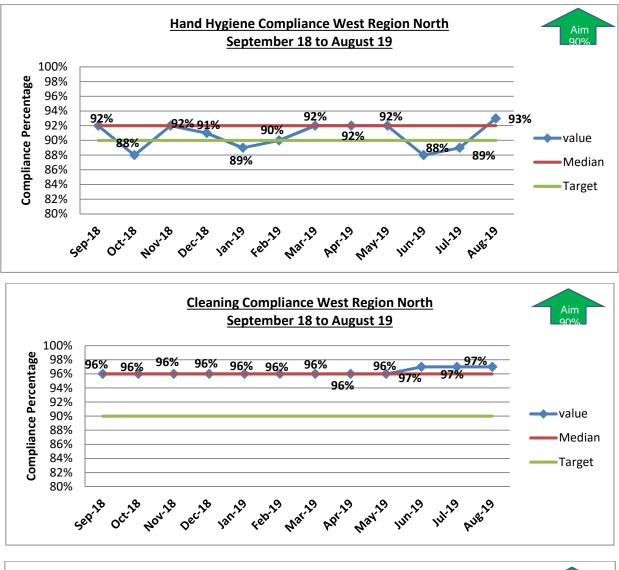
Doc: HAI update Board	Page 6	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

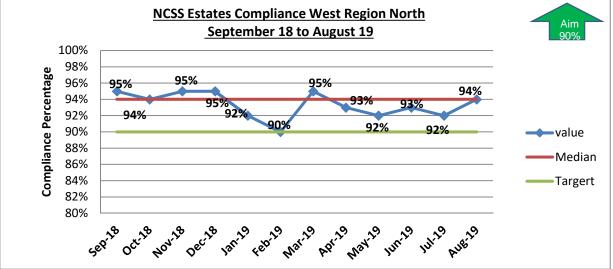


EAST REGION - EAST CENTRAL REPORT CARD

Doc: HAI update Board	Page 7	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

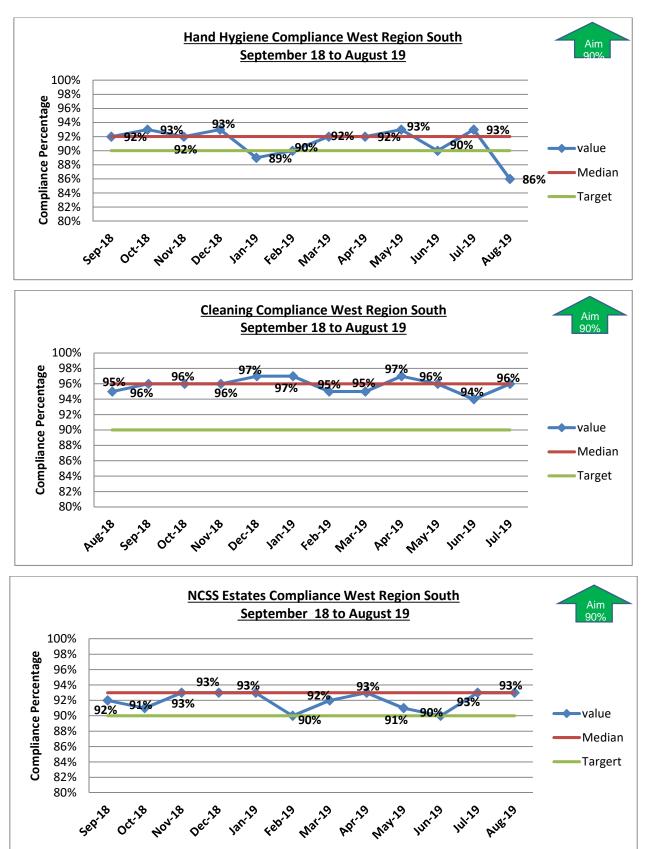






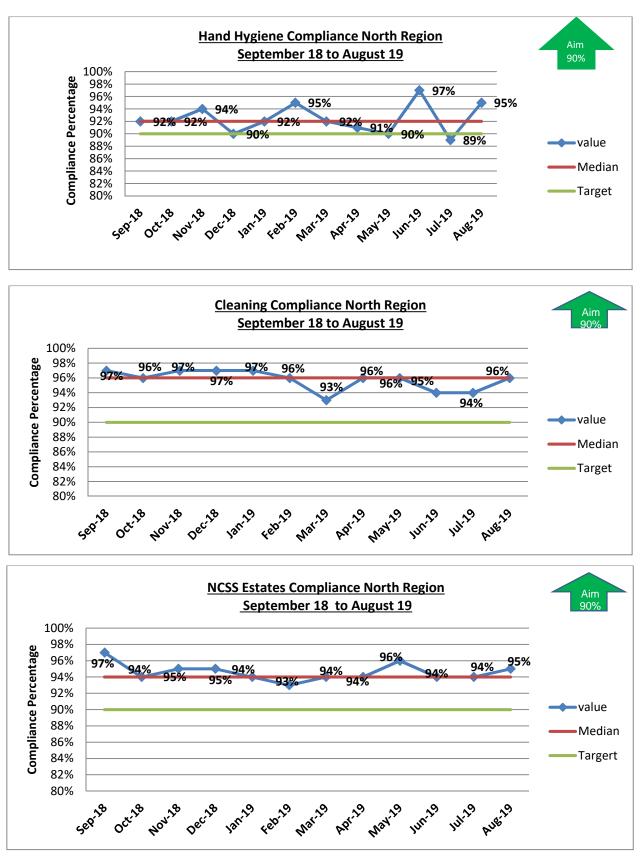
Doc: HAI update Board	Page 8	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

WEST REGION - SOUTH REPORT CARD



Doc: HAI update Board	Page 9	Author: Head of Infection Prevention & Control
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019

NORTH REGION REPORT CARD



Doc: HAI update Board	Page 10	Author: Head of Infection Prevention & Control			
Date: 2019-09-25 HAI Update	Version 1.0	Review Date: November 2019			







Infection Prevention & Control Annual Report April 2018 - 2019

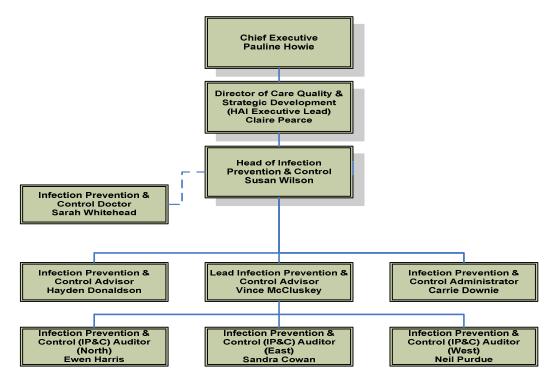
Approved by Chief Executive:

Approved by Infection Control Committee (Chair):

Approved by Clinical Governance Committee (Chair):

May 2019

CONTENT	PAGE
SAS Infection Prevention & Control Organisational & Reporting Structure.	3
Infection Prevention & Control Team Members – Roles & Responsibilities	3-6
Executive Summary	6-9
Overview Summary 2018/19 Infection Prevention & Control Programme	9-11
Appendix 1- Update to 31 st March 2019 on implementation of 2018/19 Infection Prevention & Control Programme	12-17
Appendix 2 – SAS Overall & Divisional Hand Hygiene Audit Compliance Results April 2018- March 2019	18
Appendix 3 – SAS Overall & Regional Standard Infection Control Precautions (SICPs) Audit Compliance Results April 2018 - March 2019	19
Appendix 4 – SAS Regional Compliance for Individual Elements of SICPs April 2018 - March 2019	20-21
Appendix 5 – SAS Overall & Regional Cleanliness and Estates (NCSS) Monitoring Compliance by Month & Quarter April 2018 - March 2019	22
Appendices 6 & 7 – SAS Overall & Regional Cleanliness and Estates (NCSS) Monitoring Compliance Trends April 2018- March 2019	23-24



Scottish Ambulance Service Infection Prevention and Control (IPC) Organisational & Reporting Structure

- The Head of Infection Prevention & Control (IP&C) reports to Board Meetings, Clinical Governance Committee, National Infection Control Committee, National Clinical Operational Governance Group (NCOGG) and National Health & Safety Meetings.
- The National Infection Control Committee meet quarterly chaired by the HAI Executive Lead. Approved Infection Control Committee minutes go to NCOGG and Clinical Governance Committee meetings.
- The Infection Prevention & Control Team regularly attends Regional sub- division Management Team and Health & Safety meetings.
- The Infection Prevention & Control Team meet quarterly supported by monthly and as necessary teleconferences. The Head of IP&C meets monthly with both the Infection Control Doctor and HAI Executive lead.
- The Regional Infection Control Auditors and Infection Prevention & Control Advisor are continuously in stations and hospital receiving units monitoring the care environment and IPC practice.

Infection Prevention & Control (IPC) Organisational Roles and Responsibilities:

The Head of Infection Prevention and Control (IPC) meets monthly and as required with the executive lead for HAI, to discuss progress with the IPC work programme and other priority issues. The HAI Executive lead chairs the quarterly Infection Control Committee (ICC) meetings. ICC membership includes: senior members of the IPC Team, a public representative and other Stakeholders representing Operational Regions and Departments across the service. The Head of IPC present an infection control update to quarterly Clinical Governance Committee (CGC) meetings. The HAI Executive Lead reports directly to the Chief Executive and Board on HAI/IPC matters. The Head of IPC presents a HAI update report to bi-monthly Board meetings; this report is published as part of the Board papers on Scottish Ambulance Service public facing website.

An annual Infection Prevention and Control Programme is compiled by the Head of IPC. This is circulated widely for consultation and approved by the Chief Executive, Infection Control and Clinical Governance Committees. Progress against this is reviewed and discussed at each ICC meeting. Issues affecting progress or implementation of the programme or changed priorities are brought to the attention of the ICC, Clinical Governance Committee (CGC), Board and Chief Executive as necessary.

An Infection Prevention and Control Annual Report is compiled at the end of each financial year. This report presented details year end progress against the 2018/19 annual IPC Programme, any significant occurrence/incidents and changes to the Infection Prevention and Control Team. The Annual Report undergoes the same approval process as the Annual Programme.

Infection Prevention & Control Department – Mission

The Infection Prevention and Control Dept. facilitate and contribute to the delivery of safe and effective care by ensuring there are robust policies and processes in place for the prevention and control of healthcare associated infections and communicable diseases. This is achieved through the provision of safe and clean patient care equipment and environment, safe standards of practice, dedicated knowledgeable staff and engagement with the public and other health care providers.

Infection Prevention & Control (IPC) Dept. - Roles & Responsibilities.

Current Infection Prevention and Control Dept. Establishment:

1 x WTE Head of Infection Prevention and Control - Mrs. Susan Wilson

This post is designated as having overall responsibility for management processes and risk assessment relating to infection prevention & control, cleaning and decontamination to include:

- Planning, Coordination and implementation of infection prevention and control work programmes across the Scottish Ambulance Service.
- Delivery of an approved infection control programme, supported by the Infection Prevention & Control (IPC) Team, Infection Control Committee, Board and Executive Team, Operational Regions and other Departments across the Service.
- Ensuring clear mechanisms to access specialist infection control advice and support.
- Ensuring current National IPC policies and procedures are in place and adapted as necessary in the context of the ambulance environment and that any ambulance service specific policies are developed as required, are evidence based and reviewed every 2 years.
- Ensuring relevant national HAI updates, policy or guidance is reported to Senior Management and Board meetings and the service comply with these in the context of the pre-hospital setting.
- Ensuring Scottish Ambulance Service complies with current NHS Scotland National Cleaning Service Specification (NCSS) cleanliness standards, managing the national monitoring framework and reporting process for this and providing specialist IPC advice in regard to new or existing cleaning contracts.
- Working in collaboration with the Clinical Directorate and Procurement to ensure that all invasive medical devices are single use and that re-usable patient care equipment can be cleaned effectively.
- Working in collaboration with the Clinical Directorate to ensure antimicrobial patient group directives are developed in consultation with the IC Doctor and the Scottish Antimicrobial Prescribing Group (SAPG).
- Production of an annual report covering HAI/infection prevention and control, decontamination and cleaning.

1 x WTE Lead Infection Prevention & Control Advisor - Mr. Vince McCluskey

The Lead Infection Prevention & Control Advisor is responsible for:

- Providing specialist infection prevention and control advice and support to all Divisions, Departments and staff across the service.
- Assisting with development and implementation of IC policies, IC guidance and the annual IC work programme.
- Directly managing the Regional Infection Prevention & Control Auditors
- Providing specialist input to audits and conducting specialist and peer review audits.
- Development of infection prevention and control learning materials for various different levels of staff in collaboration with the Education and Professional Development Dept.
- Delivering specialist infection control education for all grades of staff.
- Reviewing infection control incidents reported and providing advice to Managers as required.
- Completion of infection control risk assessments.
- Completion of HAI Scribe risk assessments for all new/refurbished ambulance stations in collaboration with Estates Department and advising Fleet Dept on design of new ambulances to meet IP&C requirements.

1 x WTE Infection Prevention and Control Advisor – Mr. Hayden Donaldson

The post holder has now completed a BSc in infection prevention and control and continues to develop his specialist advisor role. The Post holder is responsible for:

- Promoting SICPs compliance to raise staff awareness of the elements of SICPs, across the service
- Promoting zero tolerance to non-compliance National Infection Prevention and Control policy.
- Planning and Implementation of a rolling national SICPs audit programme
- Monitoring trends in SICPs non-compliance and communicating this with recommendations for action.
- Compilation and distribution of SICPs audit reports/action plans to Divisional Managers
- Networking with IP&C Teams across other NHS boards and UK Ambulance Services
- Providing specialist infection prevention & control education to various staff groups.
- To facilitate quality improvement initiatives to address areas of concern/non-compliance with infection prevention and control policy
- Ongoing development of specialist infection prevention and control knowledge and skills
- Providing specialist infection control advice
- Attendance at Regional and national meetings as IP&C Team representative

3 x WTE Regional Infection Prevention & Control Auditors (North, East and West) - Mr. Ewen Harris (North), Ms. Sandra Cowan (East), Mr. Neil Purdue (West)

The Regional Infection Prevention & Control auditors are responsible for:

- Development and implementation of Divisional cleanliness monitoring programmes for stations in line with the NHS Scotland Facilities Monitoring Tool (FMT).
- Input of monitoring data to FMT and assigning rectifications to ASMs

- Completion of Rivo environmental infection control audits for each ambulance station 6 monthly, reporting results to Managers and inputting audit data onto Rivo system
- Liaising with ASMs to ensure rectification sign off on FMT and Rivo systems.
- Informing ASMs of monitoring results and where necessary in collaboration with the IP&C Advisor escalating this to more senior management levels when standards are not met /sustained.
- In collaboration with the IP&C Advisor providing advice and support to Divisions and private contract cleaning companies around NCSS and monitoring
- Providing basic IP&C information to staff and cleaners on stations and to refer matters requiring more specialist advice to the IP&C Advisor or Manager.

Infection Control Doctor (ICD):

Specialist microbiology/ ICD support of 1 session per month is provided by Dr. Sarah Whitehead a Consultant Microbiologist in NHS Lanarkshire. The ICD meets monthly with the Head of IPC, attends Infection Control Committee meetings, advises on infection control policy and the annual infection control programme and is consulted on all aspects of infection prevention and control where specialist microbiological or antimicrobial resistance input is required. The ICD attends the Service Medicines Management Committee (MMC) as required to ensure specialist input to planning and development of antimicrobial patient group directives and more recently has provided advice concerning pre-hospital antibiotic treatment of Sepsis.

Executive Summary

This Annual Report provides feedback on the Service's achievement against the annual Infection Prevention and Control Programme covering the period April 2018 to 31st March 2019. Progress against the annual programme is reviewed at the quarterly meetings of the Infection Control Committee (ICC) throughout the year and updates around this forms part of HAI reports to the Clinical Governance Committee and Board. The annual report also provides compliance data reporting achievement against the infection prevention and control audit programme, updates on priority issues, information concerning incidents/outbreaks, emerging threats and alerts from Health Protection Scotland (HPS).

In the last few years NHS Scotland has reported a significant reduction in rates of healthcare associated infections (HAIs). However, despite this HAI is still considered a significant risk to patient safety particularly taking into account the significant public health threat of antimicrobial resistance. A national HAI agenda continues to address this in terms of assuring adherence with robust infection prevention and control practices and reducing antimicrobial prescribing. NHS Scotland's Health and Social Care Delivery Plan (2016) requires the provision of the highest standard of safe quality care, whatever the setting.

Scottish Government's 5 year Strategic Framework (2016) maps out the Antimicrobial Resistance/Healthcare Associated Infection (AMR/HAI) work streams to realise its 2021 vision and commitment for the safety of patients, the public and all healthcare staff. The Healthcare Environment Inspectorate (HEI) operates a robust inspection process and scrutinise standards of cleanliness and IPC practices across NHS Scotland.

Scotland's Healthcare Quality Strategy calls for safe and effective care with no avoidable injury or harm and a safe and clean environment. NHS Boards are responsible for the quality and safety of care and are required to scrutinise local data to drive improvement. Tackling healthcare associated infections and reducing antimicrobial resistance are key priorities as is ensuring public confidence.

Scottish Ambulance Service continues to strive to sustain and further improve the quality and safety of patient care by ensuring there is: appropriately educated and developed staff delivering high standards of clinical practice in a clean, well maintained clinical environment with clean well maintained care equipment. The Service also promotes a culture of zero tolerance to non-compliance with infection prevention and control policy and acknowledges the duty of care to provide a safe working environment for staff.

SAS Strategy 'Towards 2020- Taking Care to the Patient' aims to deliver care to patients where and when they need it. The Service is now managing more unscheduled cases by telephone or face to face assessment avoiding unnecessary hospital admissions. This is supported by Specialist paramedic posts with

enhanced skills to treat more patients in community settings. The importance of rigorous application of infection control practices is essential to this but can be a challenge depending on the environment in which care is delivered when not a clinical area.

The 2018/19 annual Infection Prevention & Control Programme was aligned to the Scottish Antimicrobial Resistance and Healthcare Associated Infection (SARHAI) Delivery Plan, NHS HIS HAI Standards (2015) and recommendations in the Vale of Leven Inquiry Report; in the context of the ambulance setting.

The Annual IPC work Programme 2018/19 was approved at a meeting of the Clinical Governance Committee on 17th May 2018. Over the year 1st April 2018 – 31st March 2019 the Infection Control Committee met on 4 occasions – 22nd June 2018, 2nd October 2018, 19th December 2018 and 6th March 2019. Approved minutes from these meetings were reported up to Clinical Governance Committee meetings along with a quarterly HAI update report and a HAI report was also presented to bi-monthly public Board meetings.

NHS Scotland National Infection Prevention & Control Policy Manual (NIPCM) underwent further updates over the year as updated versions are produced the IPC Department amend the associated appendices within in the context of the ambulance environment prior to publication on @SAS. In terms of compliance with Chapters 2 and 3 of the NIPCM work continues, led by the Health & Safety Department to fully implement suitable respiratory protection for staff when dealing with certain infectious diseases. Further to the Executive Management Team's previous acceptance pending a financial plan of a recommendation paper to progress face fit testing for FFP3 respirators, aiming to have 95% of A&E staff face fit tested by Sept – Dec 2018; the Head of Health and Safety was tasked in the first instance to test the suitability of powered air-fed respirators as an alternative option. This work continues presently and the Infection Prevention and Control Department has been involved in terms of providing specialist advice around the appropriate use, cleaning and correct donning and doffing procedures for this equipment. The Head of Health and Safety sits on the Infection Control Committee (ICC) and provides updates to every meeting around progress with this work and a final decision on the way forward is still awaited.

A regular programme of Standard Infection Control Precautions (SICPs) monitoring continued across the Service during 2018/19 with compliance reports shared with Regional Management for improvement action. Generally results from SICPs monitoring overall continues to indicate very good practice with infection prevention and control procedures. However, some elements of SICPs scores are affected by a lack of appropriate supplies available on ambulances to allow full application of SICPs. This has been raised at ICC, National Clinical Governance Operation Group (NCGOG) and National Vehicle Design and Equipment Group (NVDEG) meetings to determine how improvement can be achieved and it was suggested that a review of the daily vehicle, equipment check sheet to confirm the exact equipment required may assist this. However this also requires that staff are consistently conducting daily checks and replenishing supplies appropriately. Some Regions have introduced blue bags to carry Infection control supplies and this seems to be successful in those areas. The IPC Advisor continues to encourage all areas to adopt this approach.

Further improvement with hand hygiene compliance continues to be an aim despite the Service overall and each region/sub-region generally achieving above 90% compliance. Specific improvement was seen in West Region North with a more sustained improvement above 90% for 5 months of the 7 month period September 2018- March 2019; which is significantly better than in the previous year. Service overall median hygiene compliance remains at 92% with the highest result recorded in November 2018 at 93% and the lowest recorded in July 2018 at 89%.

Further improvement can be achieved by Managers and senior staff reinforcing appropriate glove use and compliance with the 5 moments for hand hygiene. This can be achieved by ensuring staff have recently (within the last 2 years) completed the hand hygiene module that forms part of the foundation modules of the Standard Infection Prevention and Control Education Pathway (SIPCEP) available on Learnpro.

A Hand hygiene awareness event was held in West Region at the Queen Elizabeth University Hospital on 5th May 2018 to coincide with WHO Global Hand hygiene Day.

Service overall and individual Region/Sub-Regions compliance for both hand hygiene and overall SICPs for the year is shown in run charts in the appendices of this report.

At the end of 2018 Health Protection Scotland (HPS) published a National Monitoring Framework to Support Safe and Clean Care Audit Programmes; to encompass all infection prevention and control (IPC) audits conducted in boards whether undertaken by infection prevention and control teams or local management. The Framework is designed to support a standardised approach to IPC auditing in terms of the methodology and includes a self assessment to indicate any action required to comply. Further to this work is being scoped nationally (NHS Scotland) in terms of audit data capture as Boards suggested that an electronic audit tool would greatly assist with SICPs monitoring and reporting.

HAI Incident/Outbreak Management and Management of Alert Organisms/Conditions:

Weekly data received from HPS on Norovirus activity in relation to hospital ward closures across NHS Scotland continues to be sent to Ambulance Control Centres (ACCs) for information. In terms of preparation for the winter season the IPC Department circulated a Newsletter that included information on the importance of the flu vaccine in protecting against seasonal influenza as well as information about the signs, symptoms and management of Norovirus.

Over the year HPS produced briefing notes to inform boards of issues with increased incident of measles cases in England and Europe with an associated increased risk of imported cases to Scotland. This was reported at the time, noting that FFP3 level protection is required particularly when staff are not aware of their immune status.

Information was also circulated by HPS prior to August 2018 concerning the increased risk of imported cases of Middle East Respiratory Syndrome Coronavirus (MERS CoV) during the Hajj Pilgrimage in August. Further to this it was reported that there had been a confirmed MERS CoV case in England and updated MERS CoV algorithms were produced at that time. SAS transported 3 suspected MERS Cov cases over that period of time and another later in the year; ultimately none of these were confirmed cases but this highlighted the need to progress work to provide FFP3 level respiratory protection for A&E staff. HPS also published a Public health response plan for possible/confirmed MERS CoV that provided guidance on the assessment and management of patient contacts. HPS also reported on the ongoing Ebola situation in the Democratic Republic of Congo (DCR) and the potential risk around returning workers from that area and how they should be risk assessed and monitored/managed by Health Protection Teams.

Over the year there were also some further incidents when staff were followed up by local Health Protection Teams following contact with patients diagnosed with specific infectious diseases once admitted to Hospital.

The successful implementation of an annual Infection Prevention & Control Programme requires an active organisation wide approach with the commitment of all Departments and staff. The majority of actions to achieve the key results areas in the 2018/19 annual IP&C programme were completed in full. The few that remain work in progress have been carried forward to the 2019/20 annual programme. A full RAGs report indicating completion against the 2018/19 programme is provided in **appendix 1**.

The Infection Control Programme is part of the quality assurance framework which is linked to other local and National strategies and NHS organisations to include:

- SAS Strategy 'Towards 2020-Taking Care to the Patient'
- SAS Annual Delivery Plan
- SAS Strategic Workforce Plan
- Clinical Governance, Quality and Patient Safety
- Health, Safety & Wellbeing
- Risk and Resilience
- Estates and Planning
- Fleet

- Procurement
- Healthcare Improvement Scotland (HIS)
- Healthcare Environment Inspectorate (HEI)
- NHS Education Scotland (NES)
- Health Facilities Scotland (HFS)
- Health Protection Scotland (HPS)
- SGHD AMR/HAI 5 year Strategy and Annual Delivery Plan
- Scottish Patient Safety Programme
- NHS Scotland Quality Strategy
- NHS Health and Social Care Delivery Plan 2016

Overview Summary 2018/19 Infection Prevention & Control Annual Programme:

Delivery Area 1- Antimicrobial prescribing and resistance:

The Infection Control Doctor continued to provide specialist microbiology advice to the Medicines Management Group as necessary. The administration of Intravenous antibiotics for suspected Sepsis cases when time to hospital exceeds 1 hour was implemented. The Medicines Management Group continues to monitor audit reporting of antimicrobial administration and compliance with patient group directions (PGDs).

Delivery Area 2- Cleaning, Decontamination and the Built Environment:

The majority of actions were achieved in full. The work with the IC&T Department to provide a retrievable record of ambulance vehicle cleaning on the terrafix tablets planned for completion early in the year after being carried forward from the previous year was not concluded. The request went to a capital group meeting in September and an IC&T Dept. representative reported back that due to a backlog of work with Synbiotix this was not currently a priority and would again be carried forward for completion in May 2019. The lack of an effective electronic recording feature continues to affect recording of vehicle cleans as the information recorded cannot be retrieved for confirmation and assurance checking and paper records are not completed well due to an electronic system being available.

Further progress was made with ensuring the appropriate storage of blankets and medical devices/patient care equipment on all stations. However, some stations still require some further improvement and this is being monitored by the Infection Prevention Control Dept. and reported to the Infection Control Committee (ICC) and Operations Managers.

Work was undertaken to complete spot check audits on patient transport vehicles, this identified issues with storage of the correct infection control supplies and issues of over-stocking and out of date items. Regions were informed of the results and asked to ensure action was taken to address the issues. Given that similar issues with supplies was noted with A&E ambulances, during SICPs audits; it was suggested that the vehicle and equipment daily check sheets were reviewed to ensure they were appropriate to each type of vehicle. This was discussed at the National Vehicle and Equipment Group and Clinical Operations Group with the intention of forming a small sub-group to progress this work; to date this work has not started.

The move to iOS technology for inputting Cleanliness audit results onto the NCSS Facilities Monitoring Tool (FMT) system was completed in full in September and has been successful in reducing the time taken to input and upload data onto the FMT system.

Delivery Area 3- Infection Prevention and Control Policy Guidance and Practice:

The work with the IC&T Department to host the ambulance specific SICPs interactive PDF learning resource; developed with NHS Education Scotland on Terrafix is aligned with the request to record the vehicle cleaning records and therefore for the same reasons has been carried forward to this year's work programme. However it is the intention to check whether this document could be added to the ambulance app as an alternative.

Work to provide an appropriate IPC induction session for new Clinical Advisors in ACC was not conducted as planned this year as there was no request for this input despite previously being provided on a regular basis. The role of the Clinical Advisor has evolved recently with the introduction of the new clinical

response model however it remains essential that ambulance crew have informed information and support when they are on the road, with no access to @SAS. This has always been provided by Clinical Advisors referencing the appropriate IPC policy with on call Clinical Managers providing support as required out with regular hours and at weekends. This was the system previously agreed to satisfy the HEI Inspectorate following the first inspection of SAS in 2011. Further discussion will take place with ACC management over the next few months to ensure appropriate IPC education is provided to this group of staff. Work will also commence to consider whether appendix 11 of the National Infection Control Policy Manual can be added to the ambulance App to provide immediate information to crew.

As noted on page 8 the work to introduce appropriate FFP3 level respiratory protection has not yet been concluded. The IPC Dept. continues to provide specialist advice to the Health & Safety Dept. around this as required. The action around staff training in the use of higher level PPE necessary when dealing with High Consequence Infectious Diseases (HCID) currently e.g. MERS CoV and Avian Influenza was completed with learning materials provided by the IPC Dept. for inclusion on 2018/19 Learning in Practice (LIP) for A&E staff. The poster with contact information for the IPC Dept. was updated to include recent staff changes and printed copies distributed across the Service.

Delivery Area 4 – Organisational Structures:

Bimonthly HAI update reports were submitted to Board meetings during 2018/19 and published with the papers on Scottish Ambulance Service public facing website. The annual IP&C Report 2017/18 was approved by the Infection Control Committee and at the Clinical Governance Committee meeting of 13th September 2018. The annual IP&C Programme for 2018/19 was widely circulated for consultation, approved by the Infection Control Committee in March and by the Clinical Governance Committee at the meeting on 17th May 2018.

Delivery Area 5 – Staff and Leadership:

The IPC and Education and Professional Development Depts. (EPDD) met regularly over the year, to ensure there is specialist input to the HAI education component of all courses. A representative from NHS Education Scotland (NES) also attends one meeting each year to engage around ongoing developments and provide support. The IPC Dept. provides learning materials for A&E and Ambulance Care Assistant induction courses delivered by the EPDD staff and conduct regular quality assurance assessments on the delivery of this session.

The HAI Education Strategy document was reviewed and refreshed with input from the Head of EPDD; once finalised this will be uploaded to @SAS to replace the existing document. In January 2018 Information was sent out to Operational Management concerning the need to ensure that new Team Leaders (TLs) or TLs that had not previously completed the Cleanliness Champions Programme complete the 12 foundation modules of NES Standard Infection Prevention and Control Education Pathway (SIPCEP). A list of known TLs who had not yet completed Cleanliness Champions was provided for each area. SIPCEP modules and other NES HAI modules continue to be hosted on Learnpro although NES has now moved over to Turas learn. The majority of health boards continue to access these resources via Learnpro and NES are currently trying to arrange a means of ensuring that boards are not unduly affected whilst working between 2 systems.

Work was completed in September 2018 to provide learning materials for the face to face IPC session included on LIP for the 2018 session.

Delivery Area 6 – Quality Improvement:

The target for the Infection Control quality indicator pertaining to recording adherence with the Peripheral Vascular Cannula (PVC) insertion bundle was increased from 85% to >90% during 2018. Monthly data continued to demonstrate sustained and ongoing improvement. Monthly compliance continues to be reported to the Board, Clinical Governance Committee and the ICC, the average overall compliance for the 12 month period was 95.6%. CGC had requested a report considering the reasons for ongoing non-compliances. A non-compliance report was set up on Data warehouse that allowed access to individual electronic records of PVC bundle reporting. It was found that on occasion the complete bundle could not be recorded due to situations including: immediately life threatening situations where the priority is to save lives and therefore certain aspects of the bundle may be missed. This situation is already recognised within the bundle instructions and cannot be avoided in the pre-hospital setting. Other situations included failed cannulations and where PVC's had been

inserted by other healthcare professionals- in both these cases the bundle elements cannot be recorded in full by the ambulance crew. Therefore as the bundle is currently set up on the electronic patient record 100% compliance with recording cannot be expected.

The small improvement project undertaken in collaboration with the Patient Safety Manager and a Paramedic Team Leader in West Region South to assess the impact of a sterile PVC insertion pack led to a decision by the Patient Safety Manager to complete a proposal paper recommending introduction of the pack as routine Service provision. Unfortunately the Patient Safety Manager has since moved onto a new post and further update around progress needs to be obtained. The review/update of the PVC insertion bundle has been carried forward to this year's work programme as NES offered to produce a learning resource (Aide memoire) for PVC insertion and it was considered that once this work is complete around June/July 2019 the bundle will then be reviewed to ensure they align.

There was no HEI self assessment update requested or HEI Inspections over this time period. However on the back of the situation at the Queen Elizabeth University Hospital (QEUH) whereby patient infections were considered to be linked to pigeon droppings within the environment, the Estates dept. was required to provide assurance to Health Facilities Scotland (HFS) that plant rooms and ventilations systems across the estate were kept well maintained and clean. Further to this the Director General requested assurance from all boards following a HEI Inspection of QEUH that the requirements noted in their report were being managed in other health boards. This was completed in the context of the ambulance setting for SAS and a copy of the response provided to the Clinical Governance Committee (CGC) meeting in May 2019.

In order to ensure robust systems are in place to control any issues with birds or vermin on stations the Chair of the CGC has requested enhanced reporting around this. Going forward the Estates Dept. will report to the Infection Control Committee on logged calls to the Estates help desk concerning this and current status on action taken.

Delivery Area 7 – Surveillance:

A comprehensive infection prevention and control audit programme that monitors the cleanliness and fabric of the healthcare environment (ambulance vehicles and stations) and infection prevention and control knowledge and practice in relation to compliance with NHS Scotland's National Infection Prevention and Control Policy Manual continues across Scottish Ambulance Service. Data and trends from these audits is reported to the Board, the Infection Control and Clinical Governance Committees and to Divisional Management Teams. Very good overall compliance with all elements of SICPs continues to be demonstrated, but with the need for further improvement in hand hygiene compliance; as referred to earlier in this report. It is acknowledged that the pre-hospital environment and inconsistent provision of appropriately positioned facilities at some receiving units can impact on compliance with the 5 moments for hand hygiene but further awareness around assessing when gloves are required and ensuring they are removed as necessary is still required and forms part of the clinical infection prevention and control induction sessions.

Further hand hygiene awareness sessions were held in West Region over this period and West Region North has seen some sustained improvement in hand hygiene compliance in the 6 month period up to April 2019, compared with the same period last year.

Overall good compliance continues to be achieved against NHS Scotland national cleaning standard relating to the cleanliness of ambulances and station environment.

Some audit results, mainly NCSS- Estates audit and Rivo Infection Control ambulance audit were affected by the issue with damaged seals associated with the new trolley cot mattresses. This was escalated to the company some months ago and damaged mattresses have been replaced. An updated version of the mattress is now available and the Company has agreed to replace all previous mattresses with this version and remove original mattresses for appropriate disposal. This solution has been achieved through ongoing discussion with the Company and representatives from Fleet, Health and Safety and IPC Depts. Work continues with Regions to achieve further improvement in Rivo infection control vehicle audit results in terms of the other main issues affecting them which continues to be around adequate checks of equipment and provisions on ambulances, repair/cleanliness of equipment and repair of furniture/fixtures/ fittings. The IPC Team will continue to support Regions with this going forward.

Appendix 1- Details the overall achievement against the key results areas in the 2018/19 Annual Infection Prevention and Control Programme. Work in progress has been carried forward and given priority within the 2019/20 Programme or reviewed in terms of appropriateness going forward.

Annual Work Programme 2018/19 – Update to 31st March 2019 Delivery Area 1 – Antimicrobial Prescribing and Resistance - (HAI Standard 5)

RAG: Green- complete, Amber-In progress, Red -incomplete

Key Result Area	Action	Lead	Timescale	Progress	R.A.G.
 To ensure compliance with HAI standard 5- 'Antimicrobial stewardship' and National Antimicrobial Prescribing Stewardship Programme in the context of the ambulance care setting To provide assurance around the safe management and use of antibiotics and that use is in accordance with published guidelines. 	1.1 Sepsis 6 work programme is aiming to introduce pre-hospital I/V antibiotics for suspected sepsis cases when the time to hospital exceeds 1 hour. The Infection Control Doctor provides specialist microbiology advice to the Medicines Management Group who lead this work	IC Doctor/ Medical Director/ Chair MMC/ICC	June 2018	Agreement has been given for administration of antibiotics. SAPG has approved this. June 2018: Need to confirm this is implemented Sept 2018: Confirmed with Andrew Parker this is now in place	Complete
	1.2 Medicines Management Committee (MMC) has developed a system for monitoring and reporting of medicine (including antimicrobials) use with feedback provided at MMC meetings	MMC	Quarterly	June 2018: Need to confirm this is ongoing Sept 2018: Confirmed with Andrew Parker audit of AM use is ongoing	Complete

Delivery Area 2 – Cleaning, Decontamination and the Built Environment - (HAI Standard 8 and 9)

Key Result Area	Action	Lead	Timescale	Progress	R.A.G.
2.1 The patient care environment (Ambulance) and ambulance stations are clean, maintained and safe for purpose.	2.1.1 . To complete work with the I&CT Dept. to assess whether terrafix tablets soft ware can record ambulance daily and weekly cleaning in a way that data can be checked.	IP&C Team	Aug 2018	C/F from last year. I&CT dept. have details of the requirement and stated work will be a priority in 2018/19 financial year Sept 2018: Email from I&CT Dept. to be tabled at Sept capital group meeting	
				Dec 2018: No update despite emails sent	
				Jan 2019- Update from I&CT Dept. Due to backlog of work with Synbiotix this is not a priority for this year and to be C/F to April/May 2019	
	2.1.2 To work with I&CT Dept. to move to iOS technology for NCSS FMT monitoring system working in collaboration with Health Facilities Scotland	IP&C Team/ IT &C Dept/HFS	June 2018	C/F from last year. Ipads purchased June 2018 : Licence being purchased from Synbiotix then can be set up by IT Dept.	Complete
				Sept 2018: Ipads now in use by Auditors	
	2.1.3 Review priority HAI estates maintenance issues noted during NCSS audits and refer to Estates Dept and Divisional management. Refer priority issues in ambulances to Fleet Dept. Complete Datix incident reports for outstanding issues	IP&CTeam/ Reg. Mangt / Ests / Fleet	Quarterly	June 2018: Op staff to raise defect form for ambulance issues. Issues re new ambulances escalated to Fleet Managt.	Complete
	2.1.4 Conduct spot checks audits of Regional PT vehicles to ensure compliance with cleaning schedule & medical supplies, report findings to Managers and ICC	IP&C Team/ Reg Mangmt	Oct 2018	Feb 2019 – Further Spot check audits to be conducted in coming months to check for improvement	Complete

	2.1.5 Complete risk assessment to address the update to NCSS document regards cleaning of sanitary areas with hypochlorite.	IP&C Team	May 2018	Sept 2018:Risk assessment completed	Complete
2.2 Patient care equipment/ medical devices are clean, maintained and safe for use.	2.2.1 All stations to meet the HEI requirement for storage of medical devices, patient care equipment and blankets.	IP&C Team/ Regional Managers	June 2018	Feb 2019- Majority of stations have addressed this but some still require further work. IPC Auditors continue to provide advice	
				March 2019 – ICC requested an exception report to next meeting	
	2.2.2 Provide specialist advice to working group looking at providing new defibrillators	IP&C Team Specialists	Aug 2018	June 2018: V. McCluskey advising this group	Complete
2.3 Ensure new build/upgrades to ambulance station/air ambulance premises are designed to minimise the risk of HAI	2.3.1 Risk assess new shared accommodation plans to ensure they meet required Infection control specification depending on operations at individual sites.	IP&C Team/ Regional Mangt/ Estates Dept.	Quarterly	June 2018: IP&C Team involved in a few projects currently- Stirling, Orkney, Aviemore, Skye	Complete
2.4 Ensure new build/planned	2.4.1 Ensure supplies on ambulances are stored appropriately. Discuss and collaborate with clinical directorate and NVDEG to consider review of VECs sheets	IP&C Team/ Clinical	November	June2018: Raised at COGG meeting and emailed Jim Ward Also raised at NVEG meeting-	
updates for ambulance vehicles are designed to minimise the risk of HAI		Directorate/ NVDEG		Dec 2018: A. Fuller to arrange work group to review vehicle VECs	
				March 2019- Meeting still to be arranged	

Delivery Area 3 – Infection Prevention and Control Policy Guidance and Practice- (HAI Standard 6 and Standard 3)

Key Result Area	Action	Lead	Timescale	Progress	R.A.G.
3.1 Implementation of evidence based infection prevention and control guidance at point of care.	3.1.1 Ensure most recent version of the National IP&C policy manual is reviewed and appendices adapted to address specific needs of the ambulance service	IP&C Team/ HPS	Quarterly	June 2018: Latest version to be adapted and uploaded Sept 2018: Latest version on @SAS	Complete
	3.1.2 To provide IC update sessions for new Clinical advisors in ACCs and other depts. / operational staff as required	IP&C Team/ACC Manager	March 2019	Dec 2018: Met with ACC Manager awaiting further response	
	3.1.3 To provide SICPs awareness training sessions for SORT staff	IP&C Team/Sort Managers	April 2018	Dec 2018: H. Donaldson has organised with SORT Feb 2019- Training date arranged	Complete
	3.1.4 Review and update IP&C Governance policy to ensure TOR agreed by Clinical Governance Committee are included	Head of IP&C	July 2018	Sept 2018: TOR for all Committees for final agreement by CGC Feb 2019- Checked with L. Ralph that document finalised	Complete
3.2 To improve and sustain compliance with Standard Infection Control Precautions (SICPs)	3.2.1 Arrange hand hygiene awareness raising sessions in each Region, to include PTS staff.	IP&C Team/ Regional managers and Staff	Oct 2018	June 2018: 1 session QEUH in May Sept 2018: Further session to be planned Dec 2018: PTS session completed	Complete
	3.2.2 Plan Awareness campaign for National Hand Hygiene day 2018 based on the theme of Sepsis	IP&C Team	May 2018	June 2018: as above held at QEUH	Complete
	3.2.3 Review data around the national SICPs monitoring framework being developed to ensure it meets the needs of the ambulance setting.	IP&C Team/HPS	Dec 2018	Sept 2018: IP&C Team member sits on this group Dec 2018:Framework just published to review for any further work required	Complete

Key Result Area	Action	Lead	Timescale	Progress	R.A.G.
	3.2.4 Work with IC&T Dept. to assess whether the interactive PDF SICPs resource developed by NES can be hosted on ambulance tablets	IP&C Team/ Info & Comms Technology Dept.	July 2018	C/F from last Year. IC&T Dept have stated this will be a priority for further work from April 2019 financial year. Sept 2018 : This was included in the business case noted in 2.1.1 to go to Capital group in Sept. March 2019 : Update as per 2.1.1 above	
	3.2.5 Review and update SICPs supplementary procedures document that clarifies SICPs procedures in the context of the ambulance setting.	IP&C Team	July 2018	Sept 2018: Document to be approved at ICC meeting in October 2018	Complete
	3.2.6 Continue to review/adapt SICPs audit programme to target specific non- compliances and to allow more time for awareness raising work	IP&C Team	Oct 2018	June 2018: Audits reduced in all subdivisions except WC where HH compliance requires improvement	Complete
3.3 Scottish Ambulance service is prepared in the event of an emerging infection threat or pandemic. Level1-Business as normal and Level2- Preparedness for an emerging threat.	3.3.1 To review progress with FFP3 respirators fit testing to ensure ambulance staff can apply National TBPs policy in full. Need to meet minimum requirement for staff face fit testing. Level 1- SORT and A&E staff	Head of H&S/ IP&C Team/ HAI Exec Lead	Sept 2018	C/F from last year. Recommendation paper now agreed by OMT and Exec. Team. Finance and Implementation plan to be agreed Sept 2018 : Further paper recommends powered respirators Dec 2018 : Testing of powered respirator underway in Dunfermline station March 2019 - Completed run through of IPC scenarios with staff	
3.4 To ensure appropriate staff are competent in the use of higher level PPE required when dealing with category 3 infectious diseases of high consequence e.g. MES CoV	3.4.1 To agree with EPDD a method of providing training on safe use of higher level PPE to A&E staff. Consider possibility of including on next year's LIP course and method of delivery.	IP&C Team/EPDD / HAI Exec Lead	July 2018	June 2018: Discussed with EPDD no feedback as yet, also requested possible resource provision from NES Sept 2018: PPE session to be included on LIP 2018- learning materials supplied to EPDD	Complete
3.5 There is effective communication systems and processes in place	3.5.1 Review current IP&C categories and sub-categories on Datix and agree updates required with risk Manager	IP&C Team/ Risk Manager	October 2018	Sept 2018: Meeting to be arranged with Risk Manager Feb 2019- Meeting held no major changes required at present	Complete
	3.5.2 Produce infection prevention & control flash report or an article for Response magazine- twice a year	IP&C Team/ Comms Dept	July & Dec 2018	June 2018: IP&C Advisors to produce an flash report update Sept 2018: Autumn Report completed	Complete
	3.5.3 Update IP&C Team poster with staff changes	IP&C Team	June 2018	June 2018: information updated on @SAS. Poster still to be refreshed Sept 2018: Poster updated print costs being checked Dec 2018: Posters being distributed	Complete

Delivery Area 4 – Organisational Structures- (HAI Standard 1 & Standard 3)

Key Result Area	Action	Lead	Timescale	Progress	R.A.G.
4.1 Leadership and commitment to Infection prevention & control to ensure a culture of continuous quality improvement.	4.1.1 Completion of bi-monthly HAI board report and reports to Clinical Governance Committee	Head of IP&C	Bi-monthly	June 2018: Last reports presented in May	Complete
	4.1.2 IC Programme 2018/19 approved by Infection Control and Clinical Governance committees	Head of IP&C	May 2018	June 2018: Approved in March and May and noted by Board in May	Complete
	4.1.3 IC programme quarterly progress reports to IC Committee meetings.	Head of IP&C	Quarterly	June 2018: 1 st update to ICC meeting 22 nd June	Complete
	4.1.4 Compile annual IC report for 2017/18	Head of IP&C	June 2018	Sept 2018: Annual Report approved by ICC and CGC	Complete

Key Result Area	Action	Lead	Timescale	Progress	R.A.G.
	4.1.5 Annual report 2017/18 approved by infection Control & Clinical Governance Committees	Head of IP&C	July 2018	Approved @ June 2018 meeting, confirmed in minute Oct 2018	Complete
	4.1.6 Compile annual IC Programme for 2019/20	Head of IP&C	March 2019	March 2019- Programme approved at ICC to go to CGC for approval.	Complete

Delivery Area 5 – Staff development and Leadership (HAI Standard 2)

Key Result Area	Action	Lead	Timescale	Progress	R.A.G
5.1 Education on Infection prevention and control is provided and accessible to all staff to enable them to minimise the risk of infection in the care setting	5.1.1 Review and update HAI Education Strategy to address new SIPCEP Programme.	Head of IP&C/ HAI Education Lead	July 2018	Dec 2018- Work still underway Feb 2019- Reviewed and updated draft with EPDD for comment	Complete
	5.1.2 Undertake a programme of QA assessments on delivery of Infection Control Induction education for clinical staff – A&E and PTS	IP&C Advisors/ EPDD	Nov 2018	June 2018: QA assessment conducted in April at Hamilton Sept 2018 – QA assessment in North Region	Complete
	5.1.3 Work with Learnpro Manager to assess whether data re completion of individual SIPCEP modules can be pulled over to Data Warehouse for access by Regional Managers	Head of IP&C/EPDD Learnpro lead	July 2018	Sept 2018- Met with James Marsh reports updated onto Data warehouse every month. Access may need looked Dec 2018: EPDD taking this forward Feb 2019- Completion reports are available on Learnpro	Complete
	5.1.4 Continue to review student evaluation of IP&C induction session on VQ courses	IP&C Team/ EPDD	October 2018	Sept 2018 - This is ongoing	Complete
	5.1.5 Compile list of Team Leaders who have not completed the Cleanliness Champions Programme for mandatory completion of foundation level of SIPCEP	IP&C Team/Oper Managmt	June 2018	Sept 2018: Original list reviewed due to TL changes across Regions Dec 2018: List updated Feb 2019 TL list sent out to Regional management for action in January	Complete
	5.1.6 Provide communication method to assess staff needs in terms of IP&C education	IP&C Advisor	Sept 2018	Sept 2018- Considering separate email in box- Feb 2019- Request made to IT	Complete
	5.1.7 In collaboration with EPDD agree delivery of an appropriate HAI/IP&C update on annual LIP training	IP&C Team/ EPDD	July 2018	Sept 2018: Learning materials and lesson plan provided to EPDD – subject is PPE	Complete
5.2 Support and development of IPC Team to ensure IPC competency requirements are met.	5.2.1 Provide opportunity for professional/clinical development to meet nurse/paramedic registration requirements for appropriate members of the IP&C Team	Head of IP&C / IP&C Team	January 2019	June 2018: Team attended IPS Conf in May Glasgow. IP&C Specialists attending TB Conf in Edin. In June Jan 2019- development ongoing	Complete

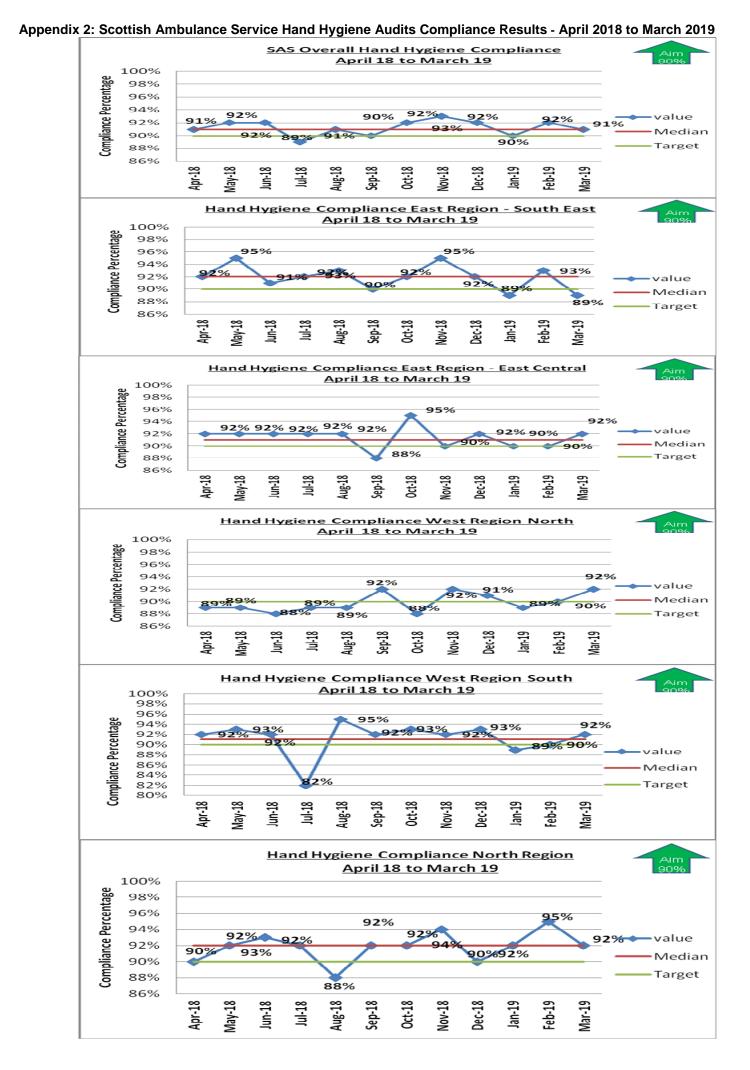
Delivery Area 6 – Quality Improvement (HAI Standard 1 & 7)

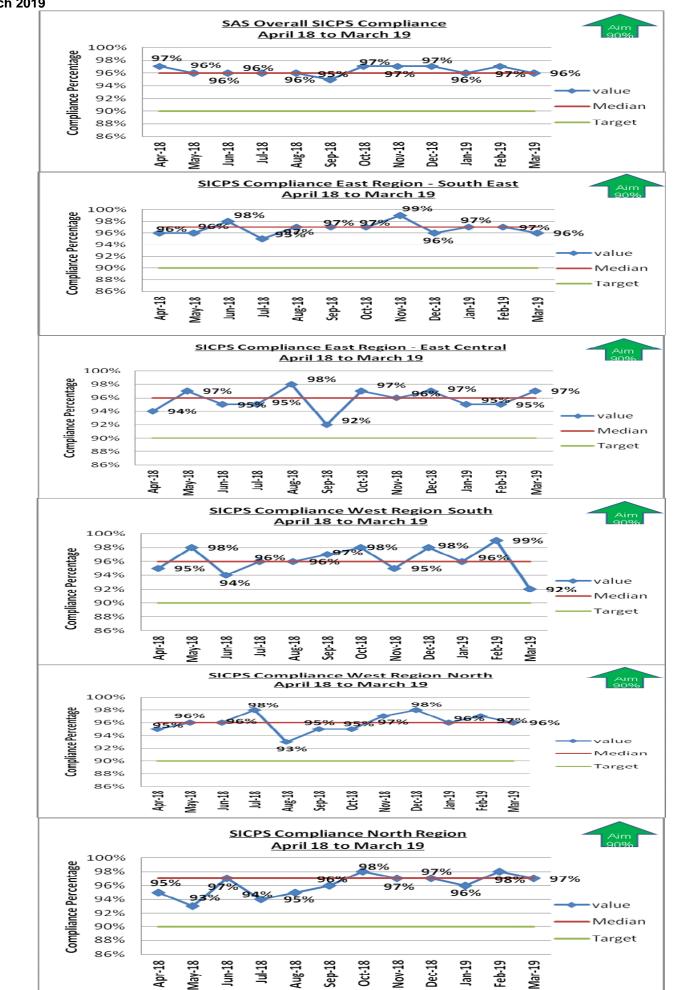
Key Result Area	Action	Lead	Timescale	Progress	R.A.G
6.1 Quality Improvement Tools (care bundles/SOPs) are applied for invasive procedures with increased risk of HAI	6.1.1 To assess impact of PVC insertion pack trial in South west stations. Develop a case for implementation to National Clinical Operational Governance Group (NCOGG)	IP&C Team/ Pt. Safety Manager/ Clinical Directorate	Oct 2018	June 2018: this has been rolled out to approx 4 stations in SWest. D/W Colin Crookston who is completing a proposal for roll-out of the insertion pack Sept 2018- Proposal to be completed by Patient Safety Manager for implementation, outcome awaited March 2019- No further feedback on implementation of this to discuss with new Patient Safety Lead	
	6.1.2 Review and update PVC insertion bundle with information re failed cannulations	IP&C Team/EPDD	Aug 2018	Sept 2018- Bundle review now underway Feb 2019- Working with NES and EPDD to compile SAS venepuncture insertion pocket book guide. Will review and update PVC insertion bundle in line with this C/F to 2019/20 programme	
6.2 Apply improvement methodology as a tool to support the implementation of sustainable changes to improve IP&C.	6.2.1 To support improvement work programmes with Divisions, to address non- compliances from SICPs and other IC audits. Targeting lower scoring areas/stations	IP&C Team/ Regional Managt/NVD EG	Jan 2019	Sept 2018- IPC Auditors support Managers to achieve improvement on an ongoing basis	Complete
6.3 To develop and implement HEI improvement action plans post inspections	6.3.1 Complete and submit updated HEI self assessments and supporting evidence to HEI annually and as required.	Head of IP&C/ HAI Exec Lead	July 2018	Sept 2018- No request for self assessment, HEI currently reviewing the self assessment template Feb 2019- Self assessment template still under review by HEI	Complete

Delivery Area 7 – Surveillance (Audit) - (HAI Standard 4, 1, 6 & 8)

Key Result Area	Action	Lead	Timescale	Progress	R.A.G
7.1 A comprehensive audit system is in place to assess and report compliance with effective SICPs & hand hygiene practices and ensure a quick response to areas of concern.	7.1.1 Conduct regular SICPs monitoring/awareness raising across the Service, distribute regular regional area reports to provide feedback and inform staff and Managers on the required improvement actions.	IP&C Team / Regional managmt	Monthly		Complete
	7.1.2 To input to HPS consensus group looking at a national framework for SICPs audits	IP&C Team	Nov 2018	Framework document produced to complete a self assessment to consider further area for development in audit methodology	Complete
7.2 To provide assurance re application of care bundle for PVC insertion - one of the Quality Indicators reported to Scottish Government	7.2.1 monitor and report compliance with recording of PVC insertion bundle to ICC, CGC and Board	Head of IP&C/ Operations Managemt	Quarterly	Reported as a quality indicator to Board, CGC and ICC	Complete

Key Result Area	Action	Lead	Timescale	Progress	R.A.G
7.3 To provide assurance re cleanliness and maintenance of the healthcare environment.	7.3.1 IP &C Specialists to conduct peer review NCSS audits	IP&C Team	March 2019	Peer review audits conducted over the year	Complete
	7.3.2 Patient/public representative participation in NCSS audit programme - 1 per year per Division	IP&C Team	March 2019	Public involvement in NCSS audits over the year	Complete
7.4 Appropriate facilities and equipment are available to reduce the risk of HAI	7.4.1 Compliance against Rivo IC environmental audits reported monthly to Regional Managers.	IC Manager/ Head of H&S/Ops Managemt	Monthly	Monthly update reports circulated for improvement action	Complete





Appendix 3: Scottish Ambulance Service Standard Infection Control Precautions (SICPs) Compliance - April 2018 to March 2019

Appendix 4: Scottish Ambulance Service – Standard Infection Control Precautions (SICPs) Overall % Compliance for each element and each Region/Sub Region per month – April 2018 to March 2019

North Region SICPs Compliance April 18 – March 19	Apr 18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Fe b 19	Mar 19
Hand Hygiene	90	92	93	92	88	92	92	94	90	92	95	92
PPE	100	97	100	100	100	97	97	98	100	97	97	100
Management of linen	100	93	86	93	93	100	100	100	93	100	93	100
Safe Disposal of waste	87	100	94	85	95	95	100	94	90	90	100	100
Management of patient care equipment	94	100	100	95	100	100	95	96	100	100	100	100
Control of the environment	100	87	96	93	93	93	100	93	100	87	100	93
Management of Blood/Body fluid spillages	100	80	100	100	100	100	100	100	100	100	100	100
Occupational Exposure Management	100	90	100	100	100	100	100	100	100	100	100	100
Respiratory Hygiene	88	100	100	90	90	90	100	100	100	100	100	90
TOTAL	95	93	97	94	95	96	98	97	97	96	98	97

East Region- East Central SICPs April 18 –	Apr 18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Fe b 19	Mar 19
March 19												
Hand Hygiene	92	92	92	92	92	88	95	90	92	90	90	92
PPE	97	97	100	100	100	97	100	100	97	100	96	97
Management of linen	87	87	100	93	100	87	93	87	93	92	100	93
Safe Disposal of waste	95	100	95	100	95	90	100	100	95	94	100	100
Management of patient care equipment	100	100	100	100	100	100	100	100	100	100	100	100
Control of the environment	87	93	93	100	93	87	87	93	100	75	92	93
Management of Blood/Body fluid spillages	100	100	86	83	100	100	100	100	100	100	100	100
Occupational Exposure Management	100	100	100	100	100	100	100	100	100	100	100	100
Respiratory Hygiene	90	100	90	90	100	80	100	90	100	100	80	100
TOTAL	94	97	95	95	98	92	97	96	97	95	95	97

East Region - South East SICPs April 18 – March 19	Apr 18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Fe b 19	Mar 19
Hand Hygiene	92	95	91	92	93	90	92	95	92	89	93	89
PPE	100	94	100	100	100	97	97	100	100	100	96	94
Management of linen	90	93	80	93	83	100	93	100	100	87	100	100
Safe Disposal of waste	95	100	95	100	100	100	100	95	95	100	94	100
Management of patient care equipment	100	100	100	100	100	100	100	100	95	95	100	100
Control of the environment	87	100	93	87	92	92	100	100	93	100	92	93
Management of Blood/Body fluid spillages	100	100	100	100	100	100	100	100	100	100	100	100
Occupational Exposure Management	100	100	100	100	100	100	100	100	100	100	100	100
Respiratory Hygiene	100	100	90	90	100	90	90	100	90	100	100	90
TOTAL	96	98	94	96	96	97	97	99	96	97	97	96

West Region North SICPs April 18 – March 19	Apr 18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Fe b 19	Mar 19
Hand Hygiene	89	89	90	89	89	92	88	92	91	89	90	92
PPE	97	100	100	100	96	97	100	100	100	97	100	100
Management of linen	90	97	90	100	90	93	87	100	100	100	100	100
Safe Disposal of waste	95	93	98	97	93	90	95	90	90	95	81	85
Management of patient care equipment	100	98	95	100	95	100	90	100	100	100	100	100
Control of the environment	93	100	97	96	84	93	100	93	100	100	100	100
Management of Blood/Body fluid spillages	95	100	100	100	100	100	100	100	100	89	100	100
Occupational Exposure Management	100	100	100	100	100	100	100	100	100	100	100	100
Respiratory Hygiene	100	85	95	100	90	90	100	100	100	92	100	90
TOTAL	95	96	96	98	93	95	95	97	98	96	97	96

West Region South SICPs April 18 – March 19	Apr 18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Fe b 19	Mar 19
Hand Hygiene	92	93	92	82	95	92	93	92	93	89	90	92
PPE	100	96	100	97	100	100	96	94	100	100	100	97
Management of linen	87	92	93	100	93	93	100	93	100	80	100	87
Safe Disposal of waste	95	94	100	95	95	100	93	100	100	95	100	85
Management of patient care equipment	100	100	100	100	100	100	100	100	100	100	100	100
Control of the environment	80	100	100	100	100	93	100	93	100	100	100	100
Management of Blood/Body fluid spillages	100	100	100	100	100	100	100	100	100	100	100	86
Occupational Exposure Management	100	100	100	100	100	100	100	100	90	100	100	100
Respiratory Hygiene	100	90	100	80	90	100	100	86	100	100	100	80
TOTAL	95	96	98	95	97	97	98	95	98	96	99	92
SAS Overall SICPs Compliance April 18 – March 19	Apr 18	May 18	Jun 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Fe b 19	Mar 19
Hand Hygiene	91	00				00	00					
	91	92	92	89	91	90	92	93	92	90	92	91
PPE	99	92 97	92 100	<mark>89</mark> 99	91 99	90 98	92 98	93 98	92 99	90 99	92 98	91 98
	-	-	-		-		-		-		-	-
PPE	99	97	100	99	99	98	98	98	99	99	98	98
PPE Management of linen	99 91	97 92	100 90	99 96	99 92	98 95	98 95	98 96	99 97	99 92	98 99	98 96
PPE Management of linen Safe Disposal of waste	99 91 93	97 92 97	100 90 96	99 96 95	99 92 96	98 95 94	98 95 98	98 96 96	99 97 94	99 92 95	98 99 95	98 96 94
PPE Management of linen Safe Disposal of waste Management of patient care equipment	99 91 93 99	97 92 97 100	100 90 96 99	99 96 95 99	99 92 96 99	98 95 94 100	98 95 98 97	98 96 96 99	99 97 94 99	99 92 95 99	98 99 95 100	98 96 94 100
PPE Management of linen Safe Disposal of waste Management of patient care equipment Control of the environment	99 91 93 99 90	97 92 97 100 96	100 90 96 99 96	99 96 95 99 95	99 92 96 99 92	98 95 94 100 92	98 95 98 97 97	98 96 96 99 99 94	99 97 94 99 99	99 92 95 99 92	98 99 95 100 97	98 96 94 100 96
PPE Management of linen Safe Disposal of waste Management of patient care equipment Control of the environment Management of Blood/Body fluid spillages	99 91 93 99 90 99	97 92 97 100 96 96	100 90 96 99 96 97	99 96 95 99 95 97	99 92 96 99 92 100	98 95 94 100 92 100	98 95 98 97 97 100	98 96 96 99 99 94 100	99 97 94 99 99 99 100	99 92 95 99 92 98	98 99 95 100 97 100	98 96 94 100 96 97

NORTH RE	GION	-		WEST REG	SION NORTH			EAST REG	ION - SE		
MONTH	DOMESTIC	ESTATES		MONTH	DOMESTIC	ESTATES		MONTH	DOMESTIC	ESTATES	
April 2018	95.06%	94.10%		April 2018	97.32%	96.02%		April 2018	95.11%	80.05%	
May	97.79%	94.05%		May	97.58%	96.91%		May	96.58%	92.62%	
June	96.37%	94.29%		June	95.17%	94.12%		June	95.98%	93.86%	
July	94.90%	94.77%		July	95.14%	95.47%		July			
August	95.29%	93.95%		August	96.63%	95.25%		August	92.47%	91.21%	
September	96.82%	96.64%		September	95.68%	94.58%		September	97.45%	94.83%	
October	96.01%	94.28%		October	96.45%	94.26%		October	96.10%	90.79%	
November	95.59%	94.47%		November	97.96%	94.40%		November	97.97%	95.74%	
December	96.90%	94.69%		December	96.25%	94.91%		December	95.70%	90.53%	
January	96.82%	94.28%		January	96.34%	91.69%		January	100.00%	98.56%	
February	95.56%	93.13%		February	96.46%	89.60%		February	96.08%	93.11%	
March 2019	93.40%	94.38%		March 2019	95.57%	94.83%		March 2019	97.14%	93.79%	
	Month	DOMESTIC	ESTATES		Month	DOMESTIC	ESTATES		Month	DOMESTIC	ESTATES
Quarter 1	Apr-Jun	96.29%	94.15%	Quarter 1	Apr-Jun	96.39%	95.37%	Quarter 1	Apr-Jun	95.89%	91.51%
Quarter 2	Jul-Sep	95.25%	94.56%	Quarter 2	Jul-Sep	95.79%	95.00%	Quarter 2	Jul-Sep	95.15%	93.16%
Quarter 3	Oct-Dec	95.93%	94.42%	Quarter 3	Oct-Dec	96.43%	94.47%	Quarter 3	Oct-Dec	96.78%	92.79%
Quarter 4	Jan-Mar	95.61%	93.96%	Quarter 4	Jan-Mar	96.12%	91.99%	Quarter 4	Jan-Mar	97.18%	94.30%
EAST REG	ION - EC										
				WEST REG	SION SOUTH			SERVICE C	OVERALL		
MONTH	DOMESTIC	ESTATES		MONTH	DOMESTIC	ESTATES		SERVICE C	DOVERALL	ESTATES	
MONTH April 2018		ESTATES 89.74%				ESTATES 89.60%				ESTATES 89.90%	
	DOMESTIC			MONTH	DOMESTIC			MONTH	DOMESTIC		
April 2018	DOMESTIC 93.53%	89.74%		MONTH April 2018	DOMESTIC 96.57%	89.60%		MONTH April 2018	DOMESTIC 95.52%	89.90%	
April 2018 May	DOMESTIC 93.53% 96.45%	89.74% 96.76%		MONTH April 2018 May	DOMESTIC 96.57% 95.85%	89.60% 90.01%		MONTH April 2018 May	DOMESTIC 95.52% 96.85%	89.90% 94.07%	
April 2018 May June	DOMESTIC 93.53% 96.45% 95.33%	89.74% 96.76% 90.96%		MONTH April 2018 May June	DOMESTIC 96.57% 95.85% 96.30%	89.60% 90.01% 91.31%		MONTH April 2018 May June	DOMESTIC 95.52% 96.85% 95.83%	89.90% 94.07% 92.91%	
April 2018 May June July	DOMESTIC 93.53% 96.45% 95.33% 91.88%	89.74% 96.76% 90.96% 93.43%		MONTH April 2018 May June July	DOMESTIC 96.57% 95.85% 96.30% 95.86%	89.60% 90.01% 91.31% 91.10%		MONTH April 2018 May June July	DOMESTIC 95.52% 96.85% 95.83% 94.45%	89.90% 94.07% 92.91% 93.69%	
April 2018 May June July August	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85%	89.74% 96.76% 90.96% 93.43% 92.63%		MONTH April 2018 May June July August	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31%	89.60% 90.01% 91.31% 91.10% 92.68%		MONTH April 2018 May June July August	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91%	89.90% 94.07% 92.91% 93.69% 93.14%	
April 2018 May June July August September	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62%		MONTH April 2018 May June July August September	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66%		MONTH April 2018 May June July August September	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67%	
April 2018 May June July August September October	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05% 95.05%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14%		MONTH April 2018 May June July August September October	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69% 96.19%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66% 90.62%		MONTH April 2018 May June July August September October	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02%	
April 2018 May June July August September October November	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05% 95.39% 96.39%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14% 95.22%		MONTH April 2018 May June July August September October November	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69% 96.19% 96.04%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66% 90.62% 92.77%		MONTH April 2018 May June July August September October November	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03% 96.79%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02% 94.52%	
April 2018 May June July August September October November December	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05% 95.39% 96.39% 96.99%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14% 95.22% 93.67%		MONTH April 2018 May June July August September October November December	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69% 96.19% 96.04% 96.73%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66% 90.62% 92.77% 92.57%		MONTH April 2018 May June July August September October November December	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03% 96.79% 96.51%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02% 94.52% 93.27%	
April 2018 May June July August September October November December January	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 93.85% 95.05% 95.39% 96.39% 96.99%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14% 95.22% 93.67% 95.53%		MONTH April 2018 May June July August September October November December January	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69% 96.19% 96.04% 96.73% 97.04%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66% 90.62% 92.57% 92.55%		MONTH April 2018 May June July August September October November December January	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03% 96.79% 96.51% 94.52%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02% 94.52% 93.27% 97.12%	
April 2018 May June July August September October November December January February March	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05% 95.39% 96.39% 96.99% 95.39%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14% 95.22% 93.67% 93.67% 95.53%	92.77%	MONTH April 2018 May June July August September October November December January February March	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69% 96.19% 96.19% 96.04% 96.73% 97.04%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66% 90.62% 92.57% 92.55% 90.31%	90.40%	MONTH April 2018 May June July August September October November December January February March	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03% 96.79% 96.51% 94.52% 92.34%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02% 94.52% 93.27% 93.27% 97.12% 95.73%	92.97%
April 2018 May June July August September October November December January February March 2019	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05% 95.39% 96.39% 96.99% 95.39% 95.52%	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14% 95.22% 93.67% 95.53% 95.55% 91.30%	<u>92.77%</u> 94.34%	MONTH April 2018 May June July August September October November December January February March 2019	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 96.19% 96.19% 96.04% 96.73% 97.04% 95.02%	89.60% 90.01% 91.31% 91.10% 92.68% 91.66% 90.62% 92.77% 92.57% 92.55% 90.31% 91.86%	90.40%	MONTH April 2018 May June July August September October November December January February March 2019	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03% 96.79% 96.51% 94.52% 92.34%	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02% 94.52% 93.27% 97.12% 95.73% 94.43%	92.97% 93.83%
April 2018 May June July August September October November December January February March 2019 Quarter 1	DOMESTIC 93.53% 96.45% 95.33% 91.88% 93.85% 95.05% 95.39% 96.39% 96.99% 95.32% 95.52% 90.93% Apr-Jun	89.74% 96.76% 90.96% 93.43% 92.63% 95.62% 95.14% 95.22% 93.67% 95.53% 95.55% 91.30% 94.89%		MONTH April 2018 May June July August September October November December January February March 2019 Quarter 1	DOMESTIC 96.57% 95.85% 96.30% 95.86% 96.31% 95.69% 96.19% 96.04% 96.73% 97.04% 95.02% 95.13% Apr-Jun	89.60% 90.01% 91.31% 91.00% 92.68% 91.66% 90.62% 92.77% 92.55% 90.31% 91.86% 96.23%		MONTH April 2018 May June July August September October November December January February March 2019 Quarter 1	DOMESTIC 95.52% 96.85% 95.83% 94.45% 94.91% 96.14% 96.03% 96.79% 96.51% 94.52% 92.34% 93.23% Apr-Jun	89.90% 94.07% 92.91% 93.69% 93.14% 94.67% 93.02% 94.52% 93.27% 97.12% 95.73% 94.43% 96.02%	

<u>N.B.</u> There were no NCSS Audits conducted in SE Sub-Region in July 2018 as audits were concentrated in EC Sub-Region

