York Teaching Hospital
NHS Foundation Trust

Quality Committee – 31 July 2019
Infection Prevention & Control (IPC) Annual Report (2018-19)

Trust Strategic Goals:

☒ **to deliver safe and high quality patient care as part of an integrated system**
☒ **to support an engaged, healthy and resilient workforce**
☒ **to ensure financial sustainability**

Recommendation

For information	☒	For approval	☐
For discussion	☒	A regulatory requirement	☒
For assurance	☒		

Purpose of the Report

This report is a legislative and regulatory requirement. The Trust continues to acknowledge its responsibility to provide safe and effective Infection Prevention & Control (IPC) practice. The primary aim of IPC practice is to reduce harm from avoidable infections that occur either, as a direct result of an intervention, or from contact with the healthcare environment. This report summarises performance against our statutory obligations and provides assurance by describing the interventions and processes employed to reduce the Healthcare Associated Infections (HCAI) within the Trust.

Executive Summary – Key Points

2018-19 has heralded many successes for the IPC team.

In September 2018, we were extremely proud to attend the Trust Celebration of Achievement award ceremony in recognition for the team's efforts in managing Influenza. This was a great honour and we have drawn from this success to help to develop a truly robust seasonal Influenza plan that is now firmly embedded, tried and tested, and employed across the Trust.

The Trust performed well against its threshold for cases of Clostridium-Difficile Infection (CDI). We reported 41 against the target of 47. Further to this, all of

these cases were investigated through the Post Infection Review (PIR) process and 22 cases demonstrated ‘no lapses in care.’

We fully recognize that our challenges moving into the 2019-20 financial year are many. We have submitted a consolidated list of priorities that require financial support. These priorities have largely come to the fore during some challenging periods of outbreaks and subsequent discussions to prevent them recurring.

All of the risks that we carry are populated on the IPC Risk Register and escalated through the Director of Infection Prevention and Control as necessary.

We also look forward to adapting our governance structures to ensure that our services are embedded at the heart of the 6 new Care Groups forming in August 2019. We see this as key to the success of the IPC agenda and so have made this one of our Quality Priorities (QP).

Recommendation

1. The Trust Board are asked to consider and support the IPC financial priorities submitted through the Director of Infection Prevention & Control. In particular, the investment in new Hydrogen Peroxide decontamination equipment and trained staff to operate them (see appendix 1).
2. The ward / department refurbishment programme must be completed in 2018/19.
3. A new IPC governance structure should be supported and embraced with the formation of the 6 new Care Groups. IPC should be become ‘business as usual’ within them.

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Contributory Authors:

Damian Mawer (Deputy Director of Infection Prevention and Control, Infection Prevention Doctor & Consultant Microbilogist), Katrina Blackmore (Consultant Microbiologist) Dave Biggins (Head of FM Compliance), Anita Chalmers (Antimicrobial Pharmacist), Jacob Snelson (Maintenance Manager), Jenny Louth (Facilities Manager), Wendy Dale (Domestic Supervisor).

Director Sponsor: Helen Hey (Director of Infection Prevention & Control)

Date: 28 Jun 2019

1.1 Infection Prevention & Control Arrangements

Standards in Infection Prevention are set and guided by:

The Health and Social Care Act 2009: Code of Practice on the Prevention and Control of Healthcare Associated Infections and Related Guidance (The Hygiene Code)

- The NHS Commissioning Board, Everyone Counts 2013/14
- Monitor License – No: 130145 Issued 1/4/13 Version 2
- Monitor Risk Assessment Framework 2014/15
- CQC Registration CRT1 – 480230002 Issued 21/9/12
- NHS Outcomes Framework 2014/15 Domain 5
- Relevant DH Guidance and Recommendations
- NICE Infection and Prevention and Control Quality Standard 61, 2014
- Epic 3: National Evidence Based Guidelines for Preventing Healthcare Associated Infection in NHS Hospitals in England

The current team (June 2019) consists:

Director for Infection Prevention and Control (DIPC) – Helen Hey
Lead Nurse for Infection Control – Band 8B, Tom Jacques (appointed May 2019)
Advanced Nurse Specialist – Band 7 x 3WTE. (currently 1 vacancy - recruited to)
Specialist nurse – Band 6 x 3WTE. (Currently 2 vacancies – both recruited to)
Surveillance Nurse – Band 5 x 1WTE.
Associate practitioner – 1WTE
Administrative assistant – Band 3 x 1WTE
Clerical officer – Band 3 x 1WTE

The Infection Prevention nursing team work alongside the Consultant Microbiologists/ Infection Prevention doctor
Damian Mawer (Infection Prevention Doctor / Deputy Director Infection Prevention & Control)
Katrina Blackmore (Decontamination / Water Safety)
Dave Hamilton (Microbiology Clinical Lead)
Barry Neish (Water Safety)
Neil Todd (Antimicrobial lead/ Ventilation)

The Trust Infection Prevention Steering Group provides oversight of Infection Prevention arrangements (Summary of current Governance – Appendix 2).

The DIPC has presented the following reports to the Quality Committee and Trust Board during 2018/19:

Quarterly DIPC reports
Annual DIPC report 2017/18

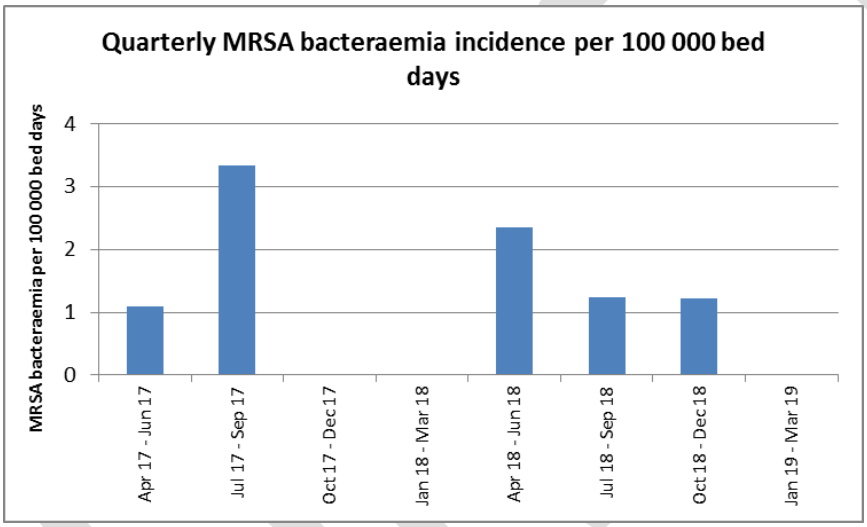
Monthly dashboards – mandatory surveillance reports
Infection Prevention risks on corporate risk register

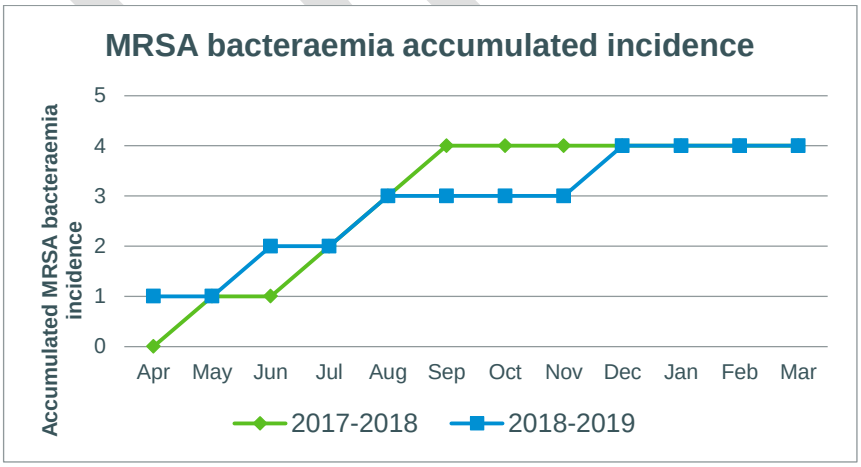
1.2 Mandatory Reporting of Healthcare Associated Infections (HCAI)

In 2018-19, it was mandatory for trusts to report MRSA, MSSA and E. coli bloodstream infections (bacteremia), and *C. difficile* toxin cases, to Public Health England.

In 2018-19, reporting of other Gram negative bloodstream infections will also be mandatory, although the Trust has been reporting these voluntarily since April 2017.

Meticillin resistant *Staphylococcus aureus* (MRSA)

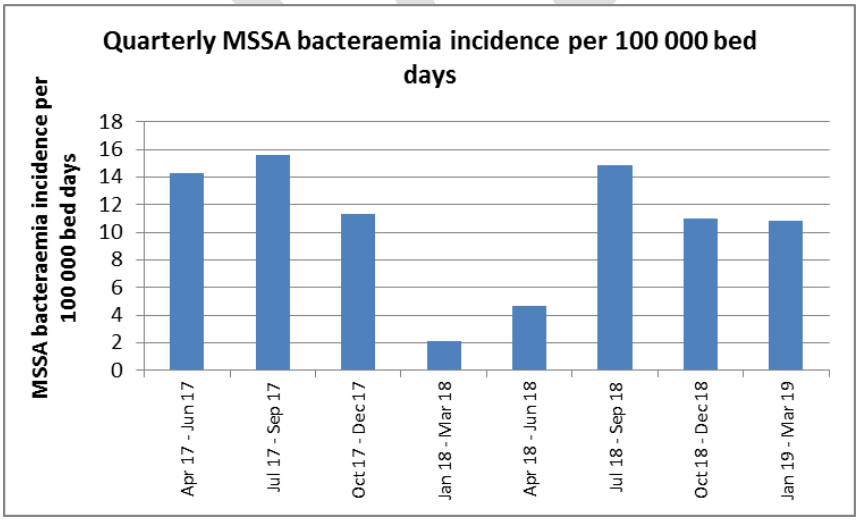


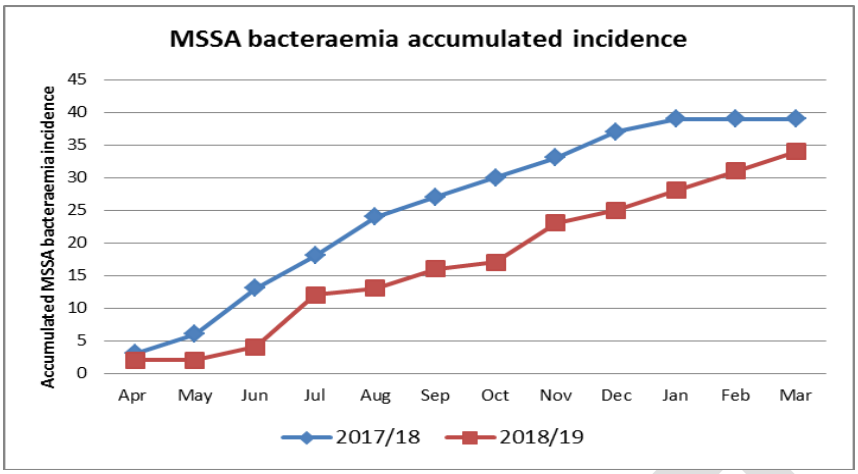


Post Infection Review (PIR) was held for all cases, and work is ongoing locally and across the trust to reduce risk of device related infection and blood culture contamination rates led by the Staph Aureus bacteraemia reduction group.

MRSA bacteraemia issues identified through Post Infection Review - 2018 to 2019		
Case	**Date**	**Issues identified**
Case 1	24/04/2018	Cannula related – cannula left in situ for procedure that was postponed several times
Case 2	20/06/2018	Tesio line related – previous admission bacteraemia in May 2018 related to a finger injury becoming septic. Second positive blood culture related to a colonised line.
Case 3	17/08/2018	Infected parotitis secondary to reduced hydration because of poor swallow following Cerebral Vascular Accident
Case 4	24/12/2018	Full MRSA screen not taken on admission – later found to have infected elbow wound. Delay in starting decolonisation treatment

Meticillin susceptible *Staphylococcus aureus* (MSSA)

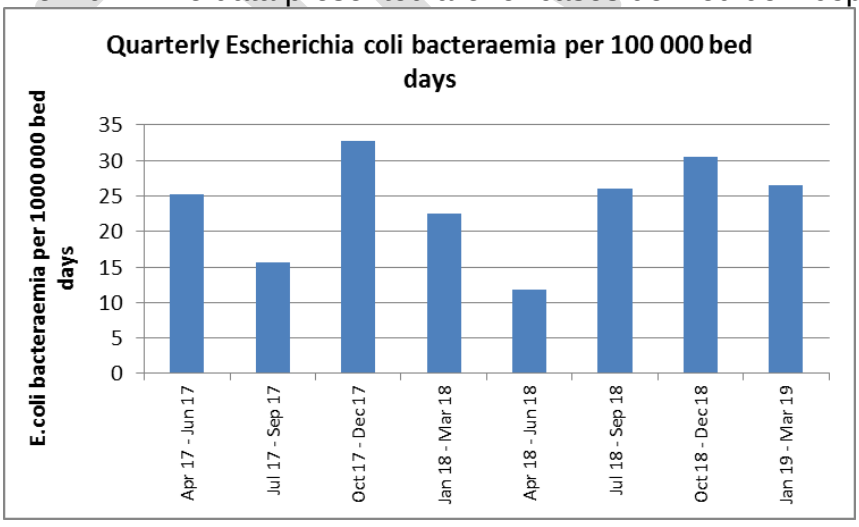


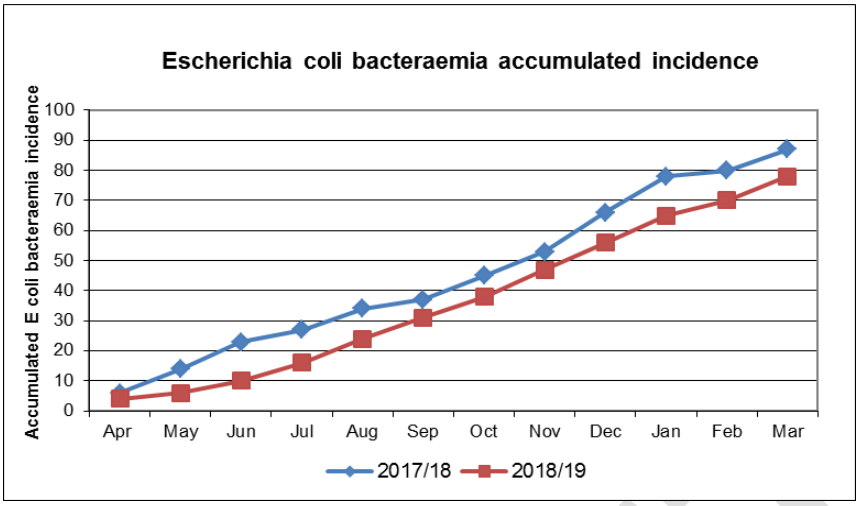


MSSA bacteraemia rates are slightly lower than in 2017/18, with a final total of 34 against a target of 30. The Staph aureus bacteraemia reduction group are working on a number of initiatives, to be introduced in 2019/20, which aim to further reduce the rate. Non-ported cannulas have now been introduced and twice daily monitoring of cannula sites. This will be followed by the introduction of cannula insertion packs and. Reducing unnecessary cannulation of patients in the Emergency Departments is essential (a flyer for patients with advice about their cannula was in May 19).

Escherichia coli bacteraemia

There is a 50% reduction target for healthcare associated *E. coli* bacteraemia across the healthcare economy between 2017 and 2021, set as a CCG Quality Premium. The data presented are for cases defined as 'hospital onset'.



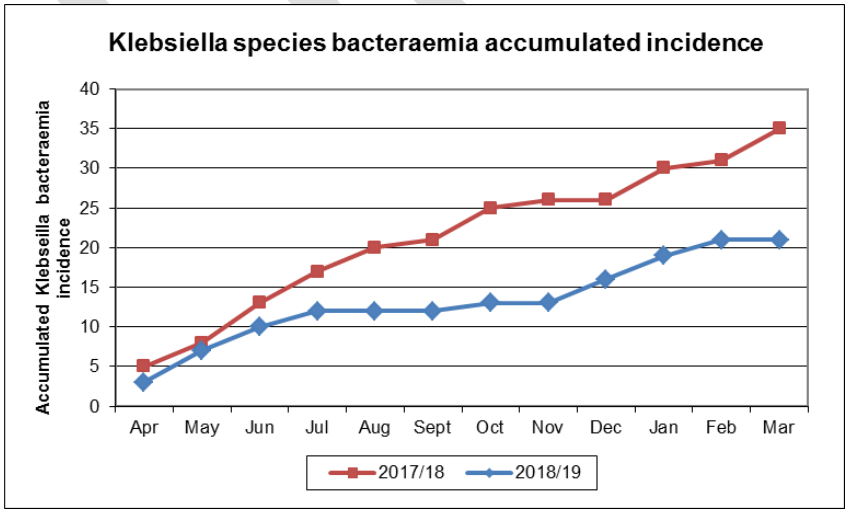


The IPC team is working with the CCG Infection Prevention leads to consider ways of introducing wider health economy solutions where recurring problems are identified.

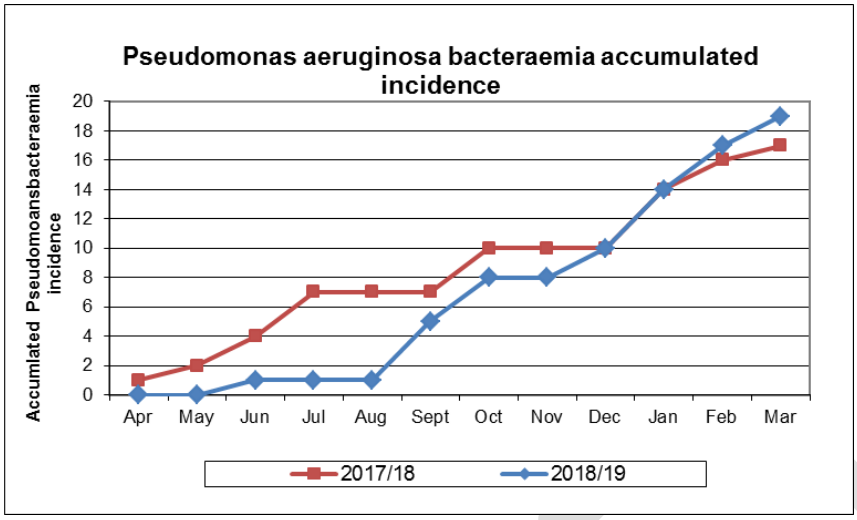
Further to last year's pilot, the trust-wide introduction of coloured jug lids to help identify those who are not drinking sufficiently in hospital is complete.

The catheter care pathway is to be added to CPD nursing investigations so that the paper copies can be discontinued. This will enable electronic reminders to staff to ensure regular reviews are documented, and audits to be undertaken to assess compliance. The move to CPD is dependent on the IT development team to complete. This will be re-focused upon on 2019-20

3d. Klebsiella species bacteraemia



Pseudomonas aeruginosa bacteraemia



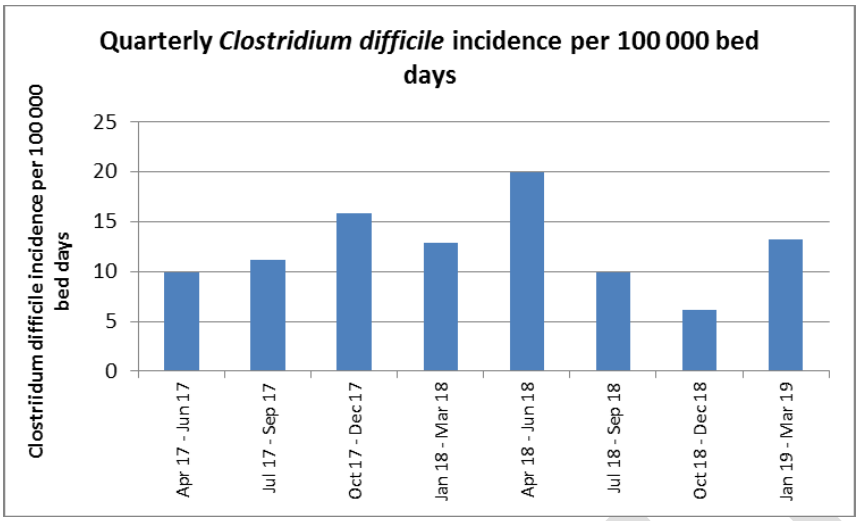
Clostridium difficile

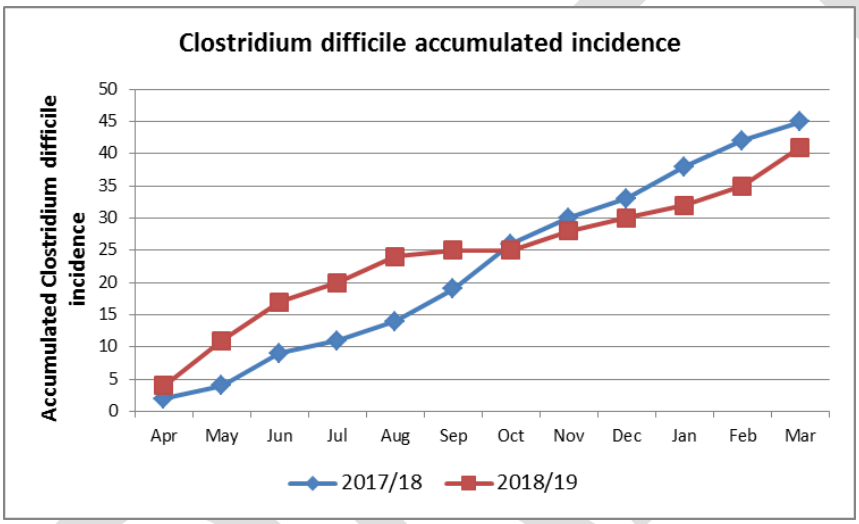
The trust Trajectory for 2018-2019 was 47 cases of hospital acquired *C. difficile.* Our final total for the year was 41.

Following C difficile Post Infection Review meeting, and discussion with the CCG, it was agreed that 22 of these cases the trust had no lapses in care that had contributed to the patient acquiring *Clostridium difficile*.

When the lapses in care did occur, there were a few recurring themes:

- Antibiotic prescribing: EPMA was introduced at the end of 2017. This should make antibiotics easier to manage from a trust perspective.
- Environmental concerns: It was identified that a number of wards were looking tired and need refurbishment. These were highlighted as priority for refurbishment in summer of 2018.
- Staffing issues: Shortage of nursing staff is a continuous theme. The trust is fully engaged in managing this.
- Hand Hygiene: Bespoke hand hygiene training was undertaken in areas where it was identified hand hygiene scores were low along with continuous training on how to use the Hand Hygiene observation tool.





Changes in the reporting parameters for CDI were introduced on 01 Apr 2019. Notably, the way patients with CDI are apportioned to the Trust has dramatically changed with only a modest increase in the threshold. Given the current outbreak of CDI in Scarborough Hospital along with these changes, it is likely that the Trust will be over its threshold for 2019/20.

1.3 Audit & Surveillance

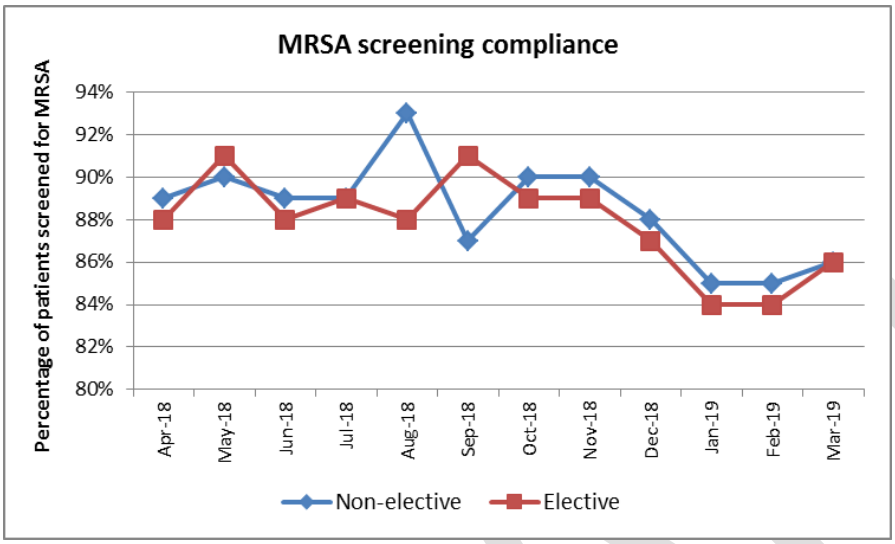
CPE (Carbapenemase producing enterobacterales)

There were no Trust attributed cases of CPE identified in 2018/19.

These multi-drug resistant organisms continue to present a threat to patients and healthcare organisations in the UK and worldwide. Work continues to identify and screen possible carriers. Precautions are taken to prevent onward transmission from possible or confirmed carriers, in line with local and national guidance.

MRSA screening

The directorate and ward compliance percentages for elective and non-elective MRSA screening were added to the Infection Prevention dashboards in 2018 and are now included each month in dashboards. There has been a notable decrease in compliance towards the end of 2018/19. It is hoped that the new governance structures will enable Care Groups to actively engage in the maintenance of this.



1.4 Surgical Site Infections (Orthopaedics)

Following concerns regarding higher than expected surgical site infection rates following arthroplasty in Bridlington hospital, work was initiated to ensure compliance with best practice standards, culminating in a visit and report from Professor Mike Reed early in 2017.

During 2018-19, a working group has been led by Mark Andrews to implement the recommendations from Professor Reed. All actions are now either complete or in progress:

Post Infection review (PIR) of all SSI cases
Continuous SSI surveillance
Pre-operative optimisation
Roll-out of Methicillin –Susceptible Staph. Aureus (MSSA) screening and decolonisation
Active warming to ensure normothermia

In 2018-19, Dr Nick Carrington led the implementation of the recommendations on the York site. This work is ongoing.

Continuous SSI surveillance following Total Hip Replacement (THR) and Total Knee Replacement (TKR) surgery from April 2017, using the Public Health England (PHE) Surgical Site Infection Protocol (SSISS).

Primary and Revision THR and TKR	Annual 2017/18 All Trust	Annual 2018/19 All Trust
Number of THR operations	1334	1153
Number of SSI	10	8
Percentage SSI against operations	0.75%	0.69%

The national benchmark for Surgical Site Surveillance rates is 0.4% for primary THR and TKR surgery and 1.6% (hip) and 1.2% (knee) for revision surgery. Any infection that occurs up to one year post surgery would meet the inclusion criteria set by PHE, so final figures remain subject to change. The patients will be assessed at one year using CPD and laboratory database records.

1.5 Notable Incidents 2018/19

Norovirus Outbreak (YH)

1. York hospital and associated community sites experienced a large norovirus outbreak between 10th January and 19th February 2019. Eleven wards were involved. These wards were partially or fully closed for a combined total of 133 days, creating significant operational pressures and a marked negative impact on patient flow. 157 patients, 64 staff members and ten visitors were affected. The outbreak attracted scrutiny from the media and external partner agencies.

2. Key findings from the outbreak:

1. Recognition of the outbreak was delayed, probably because community units were affected early on, rather than acute wards.
2. Staff movement between wards contributed significantly to spread of the virus
3. Nurse staffing shortages added to the challenge of managing closed wards
4. Basic infection prevention practice (e.g. hand hygiene) on closed wards was variable. Current lack of hand wash basins does not support best practice.
5. Cohort nursing on affected wards was attempted but was unsuccessful and is not recommended.
6. The ageing fabric of most wards makes effective cleaning difficult.
7. The relatively low proportion of side rooms on acute wards at the York site hampers effective outbreak management.

8. Staff from multiple wards share changing and toileting facilities. This can contribute to the spread of viral gastroenteritis among staff.
9. There is no single mechanism for achieving rapid, widespread communication with staff members across the trust.
10. External partner agencies were supportive but could have been contacted earlier, as the response to large-scale norovirus outbreaks needs to come from across the whole health economy. Clear lines of communication, responsibilities and actions for each of the various partner organisations would facilitate the management of future outbreaks.

3. Key actions taken during the outbreak:

- Daily review of affected clinical areas by all the Infection Prevention nurses (IPN's):
- Outbreak meetings (twice daily, Monday to Friday, from 29/1/19 – 1/2/19, then daily until 9/2/19). Gold Command meetings were held on 29/1/19, 1/2/19 and 4/2/19.
- Close working between the IPT and the operations team to support patient flow.
- Cancellation of all elective surgery.
- Diversion of new medical admissions to AMC with enhanced consultant presence there to support admission avoidance.
- Use of ambulance diverts at the boundaries of the trust's catchment area.
- Provision of appropriate signage for restricted/closed wards and communal areas. This included large 'banner' signs outside closed wards.
- Daily chlorine-based cleaning of all clinical areas, with additional cleaning of frequent-touch points.
- Managers asked to review staffing rotas, to minimize movement of staff between closed and open areas.
- Visitor restrictions in place from 29/1/19 to 11/2/19.
- Restricted movement of all ancillary staff.
- Communications:
    - Internal:
        - Ward closures updated daily on the intranet.
        - Key messages around IPC practice circulated via leaflets, posters, email and a WhatsApp group for junior doctors in medicine.
        - Use was also made of the screen saver and comms board in the main entrance area to advertise advice about norovirus.
    - External:
        - An explanation of visiting restrictions and advice on avoiding hospital were circulated via posters in the hospital, an answerphone message on the main hospital telephone number, the trust's website and social media platforms.
        - NHS England paid for some targeted 'advertising' on Facebook.

        - A pro-active press statement was provided to local media outlets. The Chief Nurse subsequently gave interviews to local radio and regional television stations.
- Involvement of external partners:
    - CCG – various teams in the hospital liaised with the CCG to request relevant advice be sent to local GPs, patients and potential visitors.
    - Community IPT – this team provided advice and support to care homes, to facilitate discharge of appropriate patients from closed areas.
    - PHE – Dr Simon Padfield, the local CCDC, was updated about the outbreak on a number of occasions.
    - NHS Improvement – the IPT discussed the outbreak with David Charlesworth, regional lead for IPC at NHSI, on a number of occasions.

4. Good practice points during the outbreak:

The outbreak was a challenging time for many members of staff. Examples of excellent practice were evident throughout the period. The following list provides some examples; it is not exhaustive.

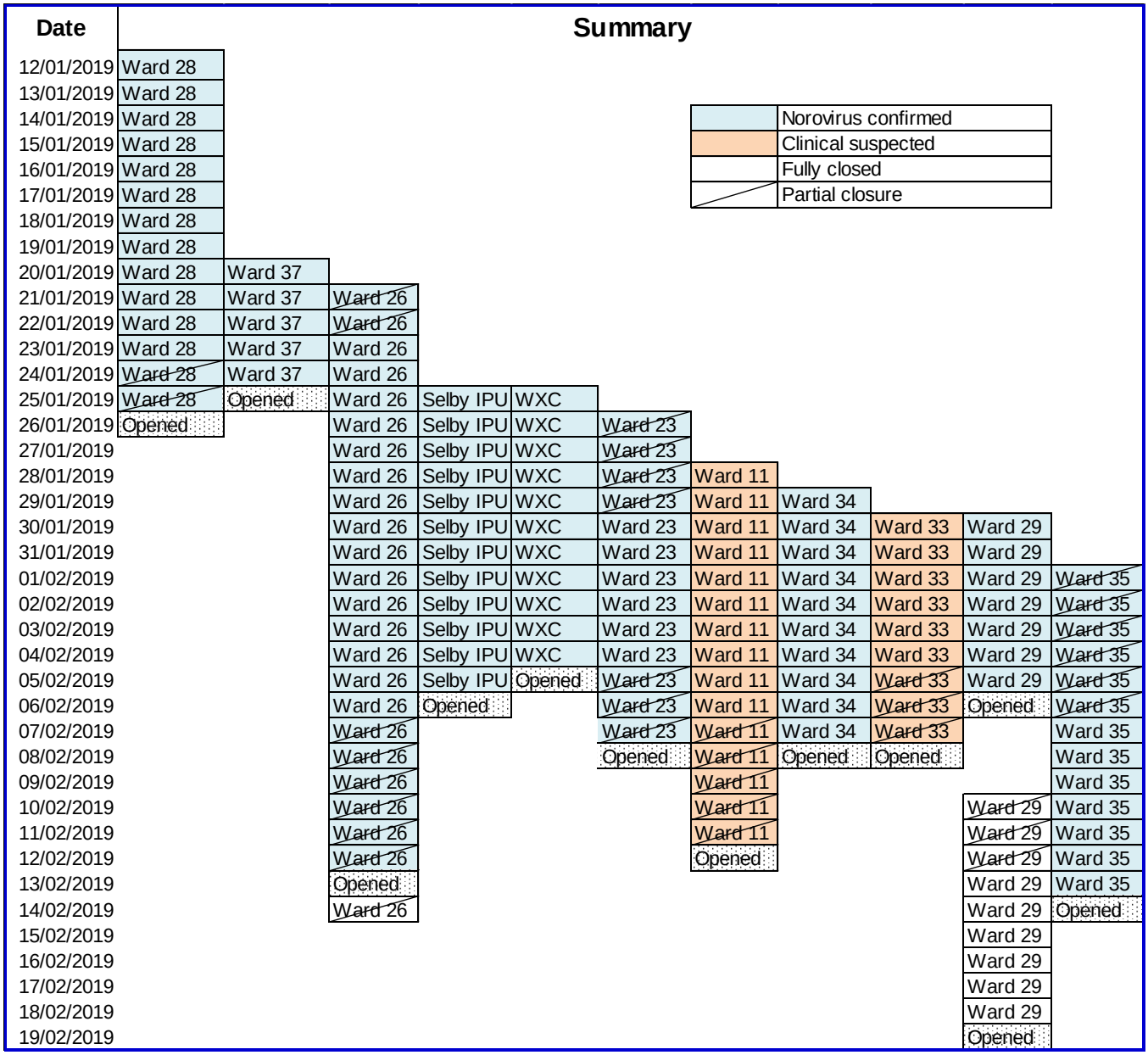
- The IPNs worked extremely hard to review closed areas, including at weekends, and provide support to staff on closed wards. They also advised the operations team on a daily basis, to support patient flow.
- The affected wards responded positively to the challenges of norovirus, with good examples of infection prevention practice in every area.
- Domestic service sustained a rota of enhanced cleaning despite staffing challenges.
- There was good internal communication between the IPT, operations, senior nursing and relevant directorate management teams. Daily outbreak meetings facilitated that process.
- The comms team rapidly communicated messages with service users and the public.
- Infection prevention colleagues at the CCG and in the Community IPT provided valuable support to care home, facilitating discharges from closed areas.

5. Further actions taken since the outbreak:

- The trust's outbreak guideline has been updated to include clearer guidance on managing outbreaks of viral gastroenteritis.
- Written resources for viral gastroenteritis have been moved to a readily available electronic folder that is readily accessible through the hospital intranet.

- The Emergency Planning team is to review whether a new telecommunications system, Netcall, can be used to disseminate outbreak messages to staff.
- A meeting involving the trust and community partners from across the health economy is planned, to look at developing a system-wide response to viral gastroenteritis outbreaks.
- In future outbreak the IPC team will risk assess the use of shared staff changing / toileting facilities.
- A review of hand washing facilities at the entrance to wards is underway
- The Comms team has produced clearer messages for visitors during an outbreak.

Figure 1: Norovirus outbreak timeline showing closures of affected wards and community units



Date	Summary										
12/01/2019	Ward 28										
13/01/2019	Ward 28										
14/01/2019	Ward 28										
15/01/2019	Ward 28										
16/01/2019	Ward 28										
17/01/2019	Ward 28										
18/01/2019	Ward 28										
19/01/2019	Ward 28										
20/01/2019	Ward 28	Ward 37									
21/01/2019	Ward 28	Ward 37	~~Ward 26~~								
22/01/2019	Ward 28	Ward 37	~~Ward 26~~								
23/01/2019	Ward 28	Ward 37	Ward 26								
24/01/2019	~~Ward 28~~	Ward 37	Ward 26								
25/01/2019	~~Ward 28~~	Opened	Ward 26	Selby IPU	WXC						
26/01/2019	Opened		Ward 26	Selby IPU	WXC	~~Ward 23~~					
27/01/2019			Ward 26	Selby IPU	WXC	~~Ward 23~~					
28/01/2019			Ward 26	Selby IPU	WXC	~~Ward 23~~	Ward 11				
29/01/2019			Ward 26	Selby IPU	WXC	~~Ward 23~~	Ward 11	Ward 34			
30/01/2019			Ward 26	Selby IPU	WXC	Ward 23	Ward 11	Ward 34	Ward 33	Ward 29	
31/01/2019			Ward 26	Selby IPU	WXC	Ward 23	Ward 11	Ward 34	Ward 33	Ward 29	
01/02/2019			Ward 26	Selby IPU	WXC	Ward 23	Ward 11	Ward 34	Ward 33	Ward 29	~~Ward 35~~
02/02/2019			Ward 26	Selby IPU	WXC	Ward 23	Ward 11	Ward 34	Ward 33	Ward 29	~~Ward 35~~
03/02/2019			Ward 26	Selby IPU	WXC	Ward 23	Ward 11	Ward 34	Ward 33	Ward 29	~~Ward 35~~
04/02/2019			Ward 26	Selby IPU	WXC	Ward 23	Ward 11	Ward 34	Ward 33	Ward 29	~~Ward 35~~
05/02/2019			Ward 26	Selby IPU	Opened	~~Ward 23~~	Ward 11	Ward 34	~~Ward 33~~	Ward 29	~~Ward 35~~
06/02/2019			Ward 26	Opened		~~Ward 23~~	Ward 11	Ward 34	~~Ward 33~~	Opened	~~Ward 35~~
07/02/2019			~~Ward 26~~			~~Ward 23~~	~~Ward 11~~	Ward 34	~~Ward 33~~		Ward 35
08/02/2019			~~Ward 26~~			Opened	~~Ward 11~~	Opened	Opened		Ward 35
09/02/2019			~~Ward 26~~				~~Ward 11~~				Ward 35
10/02/2019			~~Ward 26~~				~~Ward 11~~			~~Ward 29~~	Ward 35
11/02/2019			~~Ward 26~~				~~Ward 11~~			~~Ward 29~~	Ward 35
12/02/2019			~~Ward 26~~				Opened			~~Ward 29~~	Ward 35
13/02/2019			Opened							Ward 29	Ward 35
14/02/2019			~~Ward 26~~							Ward 29	Opened
15/02/2019										Ward 29	
16/02/2019										Ward 29	
17/02/2019										Ward 29	
18/02/2019										Ward 29	
19/02/2019										Opened	

	Norovirus confirmed
	Clinical suspected
	Fully closed
~~Ward 26~~	Partial closure

Respiratory Viruses

Levels of influenza and other winter respiratory viruses were much lower during winter 2018-19 than the previous year. As a result the trust experienced fewer admissions, with less impact on wards and patient flow. There were four ward outbreaks across the two main hospitals. The most significant involved Ward 39 then the Acute Stroke Unit in York. No patient deaths occurred as a consequence of these outbreaks.

The Seasonal Influenza Planning Group meets regularly between winter seasons to refine the trust's winter respiratory virus management plan. This year the work was integrated with Winter Planning which further enhanced its impact. Key features of this robust plan

are the availability of rapid laboratory testing, effective communication between key stakeholders (the lab, operations team and Infection Control) during the winter, clear guidance on the management of patients with influenza and their contacts, and the use of cohort wards on both hospital site (ward 23 in York and Lilac ward at Scarborough).

C-diff Outbreak (SGH)

There is an ongoing and significant outbreak of *C. difficile* infection (CDI) affecting Scarborough hospital at the time of writing (25/6/19). The first case was on 25/2/19. Since then there have been 22 cases of CDI caused by the same strain of the bacterium. A number of wards have seen clusters of cases (Holly, Johnson ward at Bridlington, Oak and Lilac), but many of the patients have had stays on multiple wards. The outbreak and its management have attracted scrutiny from PHE, the CCG, NHSI and NHSE.

Key findings:

1. Most patients experienced multiple ward moves.
2. Delays in sending stool samples from some patients with diarrhoea. Samples not being sent according to the trust's guideline.
3. Uncertainty about who was responsible for cleaning raised toilet seat.
4. Variability in commode cleaning and auditing of the process.
5. Variable hand hygiene practice across wards and staff groups. Lack of regular hand hygiene audits on many wards.
6. Difficulty cleaning the Arjo-huntleigh Enterprise 8000 series bedframe.
7. Limited HPV cleaning service and lack of a decant space restricting ability to provide both reactive and proactive HPV services.
8. Kentucky mop heads being used for floor cleaning in Scarborough.
9. Antibiotics not being reviewed, or reviews not leading to de-escalation / stopping of antibiotics when appropriate. Patients receiving unnecessarily prolonged courses of antibiotics as a result.

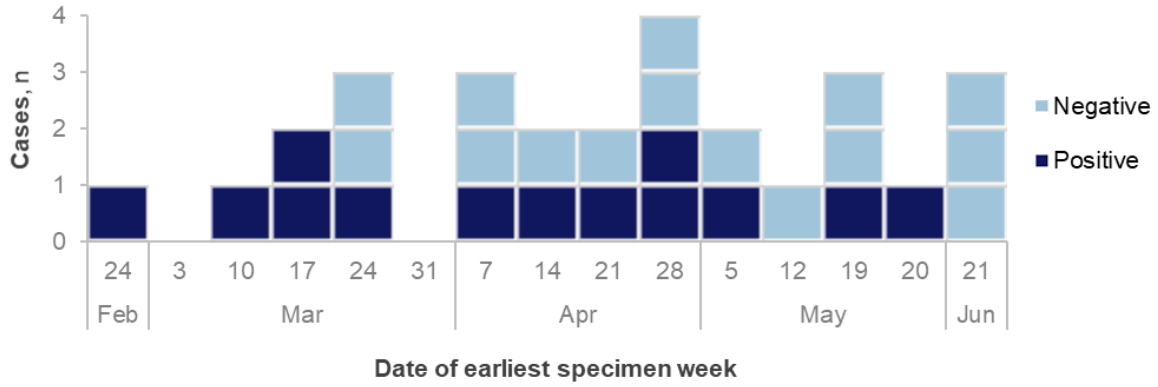
Key actions being taken:

1. Weekly outbreak meetings involving the DIPC, medical director / AMD, senior Ops team managers, Estates & Facilities, matrons, pharmacy and IPC. Advice and input has also been provided by PHE, the CCG and NHSI.
2. Working group set up to review ward moves and produce an inter-ward transfer document, aiming to reduce the number of moves.
3. Flowchart giving guidance on when to send diarrhoea for C. diff testing displayed prominently in all ward areas. Ward managers to educate staff in its use.
4. Clarification that raised toilet seats are cleaned by domestic staff and dissemination of that message.
5. Ward managers asked to put in place auditing of commode cleaning.
6. Hand hygiene training provided to matrons, to be cascaded to ward staff. Weekly hand hygiene audits re-introduced; undertaken by independent observers with immediate feedback to ward staff and central feedback to ward managers / matrons via an online database.
7. Training package to support decision making around optimal side room use. To be delivered by IPC to bed managers.
8. IPC team to review current systems for undertaking environmental cleaning audits.

9. Engagement with Arjo-hunteigh to obtain removable bed frame covers that are easy clean.
10. Estates and Facilities preparing business cases for the replacement of Kentucky mop heads with microfiber mops and for an expansion of the HPV service (both new machinery and an increased number of operatives).
11. Tools from the ARK-Hospital antibiotic stewardship research project, currently running successfully in Acute and General Medicine at York, to be introduced at Scarborough.
12. Dissemination of key messages (hand hygiene, equipment cleaning, and antibiotic prescribing) disseminated to all relevant staff groups.

An updated report on the outbreak will appear in the Q1 IPC report for 2019-20

Figure 2: Number of C. difficile cases in Scarborough and Bridlington hospitals, by week.



Notes:

- Negative and positive refers to the toxin status of the stool sample result. Toxin negative samples are not reported via the national surveillance system.

28 cases are shown, but only 22 had the same strain and were considered to be part of the outbreak.

MRSA (SCBU YH)

There have been intermittent cases of MRSA on Special Care Baby Unit in York since 2016.

After nearly 10 months without a case, MRSA colonisation was found in individual babies by screening in June, November and December.

In February and March there were 6 further cases, these were linked in time and place. During this cluster, an outbreak control group was convened and additional measures taken with respect to practice and the environment, and transmission was halted.

Consistent with previous years, these cases have all been identified by screening with no clinical infection.

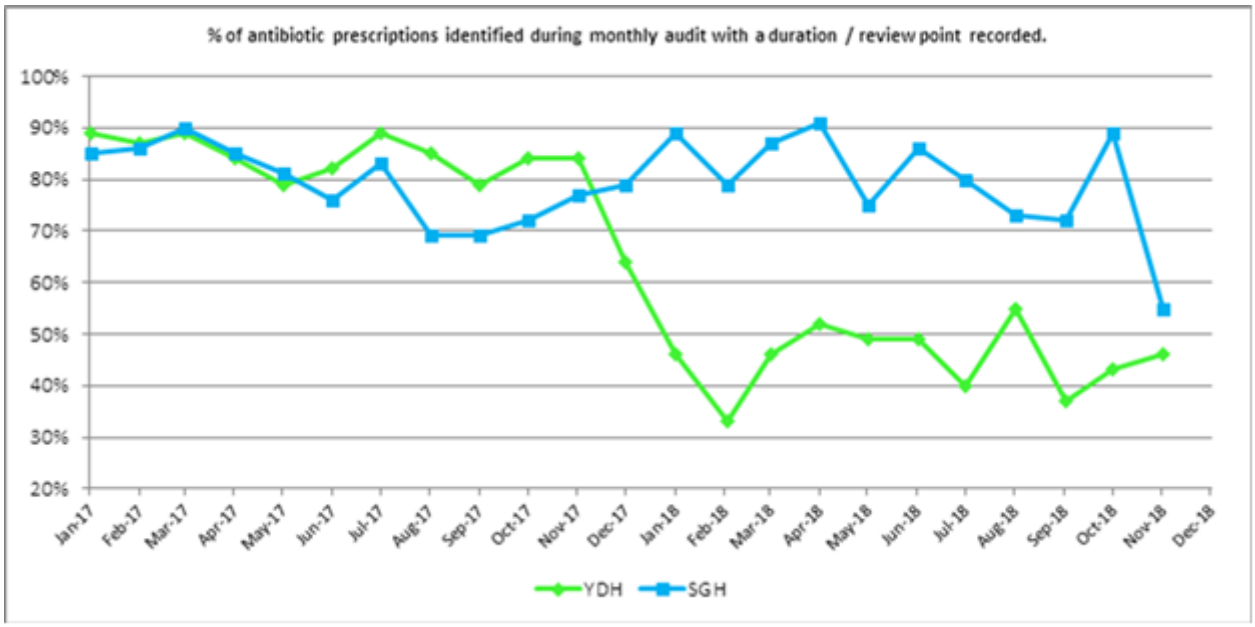
Public Health England have been supporting the investigation of this unusually protracted outbreak. Whole genome sequencing has revealed that these MRSA strains are nearly identical, suggesting recurrent introduction from a single source. Environmental screening did not yield MRSA. They will continue to provide support for more in depth epidemiological investigation to identify the reservoir for this organism.

While the ongoing reservoir remains unclear, it has again been demonstrated how easily bacteria can spread within the unit which is much smaller than modern design standards. The fabric of the building and fittings make effective cleaning a particular challenge.

1.6 Antimicrobial Prescribing

Monthly antimicrobial audits in Scarborough have continued to show adherence to the prescribing standards which are as follows:

- All antimicrobial prescriptions shall have an indication recorded on the prescription
- All antimicrobial prescriptions shall have a duration or review date recorded on the prescription



In Scarborough EPMA was introduced between October and November. In EMPA the indication is a mandatory field and so there is 100% compliance for that although some prescriptions have the indication of micro advice which is not a proper indication. Unfortunately there was a large drop off in recording either a review or duration beyond what is automated by the system. The audits have been suspended for a time however since there has been a gradual increase in the volume of prescribing plus the recent C.diff outbreak this will be revisited in the July AST with a view to recommencing the audit of duration and review.

The indicators for the new financial year 18/19 have changed. The pip/taz indicator has been dropped and replaced with a new indicator which is aimed at the total antibiotic prescribing being greater than 55% from the WHO access group of antibiotics. The trust

already achieves in excess of 61%. The carbapenem prescribing is an even greater challenge of reducing by 3% given that we are very low prescribers of carbapenems. We have continued to monitor pip tazo prescribing as it is a broad spectrum antibiotic with a propensity to increase resistance and precipitate c. diff infection.

Weekly antimicrobial stewardship ward rounds which include members of the pharmacy antimicrobial team together with microbiology consultants/registrars have proved very successful in reviewing inpatient antibiotic prescriptions. Work continues to write and update prescribing guidance. We have recently issued new adult treatment poster, ED poster and prophylaxis poster, which promotes the use of order sets. The Trust continues with the ARK study which is measuring whether including an intervention to grade the certainty the prescriber has about whether the patients has an infection i.e. whether it is possible or probable. The aim of this is to give the reviewer the confidence to stop or switch the antibiotics or decide on a new review date. This concept is very much in line with Start Smart then Focus. This has proved very successful and improved the stop rates from a base line of 10% to 30%. The aim is to roll this out in Scarborough form September onwards.

The new CQUIN for 19/20 covers two new areas. The first is the use of single dose prophylaxis in colorectal surgery. This has a target of 90% and our base line is 72%. The surgery clinical governance leads have raised this with the surgeons whose practice is an outlier. They have also invited Neil Todd to attend their governance meeting to discuss the difference between contamination and infection.

The second part of the CQUIN is to improve the diagnosis and treatment of uncomplicated UTIs. The targets were completely unachievable and so there was a negotiation with the CCG to deliver a QI project to ensure that nursing staff and HCAs have received suitable training.

1.7 SGH Domestic Services Report

Introduction

Following on from the 2017-2018 report The East Coast Domestic services are now part of the York Teaching Hospital Facilities Management Limited Liability Partnership (LLP) and consist of Scarborough, Bridlington and Malton Hospitals. The company became operational on 1 October 2018.

The LLP is led by the Managing Director who has a management structure beneath them ensuring the Estates and Facilities Department across all sites is compliant, effective and efficient in providing a quality Facilities Service to the Trust.

The management structure across the East Coast consists of the Facilities Manager who has responsibility for overseeing the cleaning service, 2 Deputy Facilities Managers who oversee the day to day running of the East Coast sites and 7 Assistant Facilities Managers working various hours across the sites to support the Deputy Managers.
Each site also has a number of Facilities Supervisors who ensure the cleaning standards are met and maintained on a daily basis.

Measurements of compliance/cleanliness audits

Since December 2017 performance measurement on the East Coast sites has been calculated by the use of a "symbiotic" system used by The Cleanliness Monitoring team (second party monitoring team) this records cleanliness, maintenance and housekeeping standards in all areas of the trust. Prior to this the East Coast (in-house) measured the standards by use of "performance monitor" a pocket PC system provided by Support Service Solutions.

The Cleanliness Monitoring team use the indicative targets and minimum audit frequencies contained within the National Specifications for Cleanliness for the NHS 2007 as a guide when assessing the audit results, these are:-

Risk Category	Cleanliness Compliance	Minimum Audit Frequency
Very high	98%	Fortnightly
High	95%	Monthly
Significant	85%	Four times per year
Low	75%	Twice per year

Since the introduction of Symbiotic the target scores at Scarborough have reached either a pass or acceptable standard but this is only reflective of the Very High and High risk category areas. The monitoring team has only in the past month started to audit the Significant and Low risk areas.

Following an audit, a report is sent to the Facilities Supervisors who are responsible for ensuring the Domestic Assistants complete all rectifications in a timely manner. The Facilities Supervisor will discuss with the Domestic Assistant the reasons for any failures and identify any on-going issues in relation to this i.e., short staffing or performance concerns.
Once the rectifications are completed the Facilities Supervisor will check the area and if they are happy with the standard of cleanliness they will sign the report off and send it back to the Monitoring team.

The Domestic Assistants are not responsible for cleaning certain items of patient equipment, for example IV stands, BP cuffs, Vac Sacs etc. although the Monitoring teams do check the cleanliness of these items they are scored individually.

Recruitment.

SCARBOROUGH	Monthly Budget	April 2019 Staffing levels	May 2019 Staffing levels	June 2019 Staffing levels
Domestic WTE	101.84	90.25	92.25	94.89

Bridlington	Monthly Budget	April 2019 Staffing levels	May 2019 Staffing levels	June 2019 Staffing levels
Domestic WTE	30.54	N/A	N/A	24.37

Malton	Monthly Budget	April 2019 Staffing levels	May 2019 Staffing levels	June 2019 Staffing levels
Domestic WTE	7.76	7.43	7.43	7.43

The Facilities department has been exploring ways of recruiting new members of staff, recruitment more so at the Scarborough site has been challenging in recent years. Open days and Facebook postings have been arranged to promote the benefits of working for the department for example, staff benefits, annual leave entitlement and sick pay, full training with the option to progress through the department and the agreed pay rise has also helped in the recruitment of Domestic staff.

In 2018 the Government announced that the NHS would no longer be able to recruit into the Band 1 pay scale and the option to upskill into a band 2 was given to all Domestic Staff across the trust.

In September 2019 the Facilities Department will be recruiting the first Cohort of Facilities Apprentices which will give them the opportunity to work across all areas in the department and gain a recognised qualification at the same time.

Training.

All staff receive mandatory training in cleaning services, Infection Prevention, food hygiene and Health and Safety. All staff members are trained in, and aware of the bare below the elbow and uniform policy. The Facilities Supervisors carry out regular audits to ensure staff are adhering to the policies and that they are following their work plans, specifications, and correct storage and segregation of cleaning equipment.
The maintenance of the cleaning manual is on-going and procedures are produced as required, it is reviewed annually and updated as appropriate the most recent update was in March 2019. In addition to this the NPSA revised Healthcare cleaning manual has been used to reference best practice.

Department risk assessments and COSHH assessments are held in the Facilities department and are reviewed and updated as appropriate.

H.P.V

The Facilities Department manages the H.P.V service across the trust. There are currently five HPV machines and three fully trained HPV operatives, one based in Scarborough and two in York. SGH is currently in the process of training a member of the Facilities Operative team to ensure the service is maintained.
The service has been extremely challenged across all sites over the last few months. A business plan has been put forward to ensure the department is able to continue providing the much needed service. It is recognised the HPV delivery is vital in maintaining safe standards of cleanliness and reducing Hospital Acquired Infections therefore we look forward to working with IPC and the Clinical teams in producing and delivering a HPV deep clean and HPV programme very soon.

Cleaning Specifications and Work plans

A3 or A4 laminated specifications are displayed in all wards and departments for Domestics, ward staff and housekeepers to follow. They also provide information to visitors on what should be cleaned and when.
Each ward or department also has its own work plan for the area. Work plans allocate cleaning responsibilities to individual domestics and a timetable of daily and weekly tasks. The plan provides continuity and aids relief staff in carrying out the duties required. A copy of the work plan is held by the domestic staff on each area.
All staff work to the National Specification of Cleanliness 2007 and all work plans and cleaning schedules are based on this, however the specification is set to change in 2019 so all documentation will need to be changed to reflect the changes

The Estates officers and ward or department sisters should advise the Facilities department if there are any changes made to rooms on their areas so that these can be updated on the Dom time system.

Dom Time System

Dom time is the IT package currently used by York trust for the cleaning specification. It is supplied and supported by Support Services Solutions Limited. The cleaning frequencies on the system meet the National Specification for Cleanliness in the NHS 2007. All wards and departments are allocated to a risk category

Risk categories are as follows:

Very high risk
Examples are SCBU, theatres, A&E, ICU, Surgical wards

High risk
Examples are general wards, public thoroughfares and public toilets

Significant risk
Examples are OPD, pathology, mortuaries

Low risk
Admin areas, non-clinical storage areas

For the system to determine cleaning hours, the following information is required:

A plan of the area
Square meterage of each room including corridor areas
Area type – dept., ward, public area
Intended usage of the area – clinical or non-clinical and 24/7 or less frequent
Risk category
Flooring type
Amount of sinks, toilets and showers
Amount of patient beds
Does the area require catering related duties?

The above information is input on to Dom time and the system will separately calculate cleaning time and area duties (catering related) in terms of weekly hours against the appropriately identified risk category and area type. The system was originally set up to allocate the identical cleaning frequency for all rooms within the functional area, however, since the trust merger, some changes have been made where lower risk areas within the functional area receive a lower frequency of clean.

Dom time produces the cleaning specification identifying the 49 elements to be cleaned and the minimum cleaning frequency for the allocated risk category.
Please note there are 50 elements in the PAS 5748 - 2014

From the weekly cleaning hours, a Rota is then produced and the supervisors create a work plan for the area allocating individual rooms to set domestic

General Issues

Following the merge with York Trust a cleaning review was undertaken to ensure consistency of cleaning specifications, risk categories, monitoring standards and methods used across the trust. Cleaning rotas were produced based on the use of micro–fiber instead of the traditional wet mop system that is currently in use at Scarborough Hospital. Unfortunately the funding for micro-fiber was not made available at the time and therefore the rotas do not reflect the cleaning methods used. A business case has now been produced to take this forward. Input from Infection control was essential in the preparation of this.

Requests for terminal cleans and HPV of rooms are received on a daily basis. On occasions, the rooms are not always ready for domestic staff to undertake the clean, either due to the patient still occupying it or Patient equipment and linen still in situ.

Domestic staff has reported that the lockers are attracting dust very quickly after cleaning due to static especially around the lower section. I understand that new lockers have been sourced but that the funding will need to be sourced to purchase them.

The light colour choice of flooring to the main reception area continues to be a cause for concern due to the heavy traffic flow and limited input of cleaning hours which has not been increased, this area is showing signs of dirt particularly in the floor joins despite being scrubbed every morning.

There are still concerns around the bed movement in the hospital. The Facilities Department cannot guarantee that a bed has received the correct cleaning frequency due to the frequent movement of them. Domestic staff often find beds that are dirty when dismantled. It would be beneficial if where possible beds were able to stay on the ward and a patient transferred by other suitable means this would ensure the beds were cleaned to the ward cleaning specification. This has recently been addressed during a meeting to discuss bed movement across the site and discussions are still on-going in the best way forward with this.

There are concerns around some beds that are currently in use in the trust. The Enterprise 800 has been found to have small covers on the side rails that hide the screws holding the rail on. During a deep clean of one of the beds the covers were removed and it was found

that there was physical contamination of organic matter that had been there for some time, this matter would have almost certainly been harboring micro –organisms. This was raised with IPC who have taken the concern forward with the relevant department. To ensure the beds are fully cleaned whilst they are still in use by the trust the Facilities staff have been trained by the Medical engineering team how to take the covers off safely.

Discussions are still on-going around the need for a decant and decontamination area on the SGH site this will assist the department in providing a pro-active deep cleaning schedule, ideas are currently being examined during the recent outbreak and regular IPEOG meetings.

1.8 YH Domestic Services Report

Introduction

Responsibilities

York Domestic Cleaning Service is part of The York Teaching Hospital Facilities Management Limited Liability Partnership (LLP) that became operational from 1st October 2018. York Teaching Hospital Facilities Management is wholly owned by the NHS and following consultation domestic staff was Tuped over to the LLP. Management held regular staff briefings that assisted in the smooth transition.
The LLP is led by a single Senior Head of Estates & Facilities Service together with his team of Assistant Heads.
The Domestic Manager (York) oversees the cleaning service whilst the day-to-day management responsibilities rest with the Deputy Facilities Manager.
The Domestic Manager retired in November 18 and returned to work 3 days a week to coach and support the Deputy Facilities Manager.
The Domestic structure has strengthened since the appointments of a Deputy Facilities Manager in October 2018 followed by an Assistant Facilities Manager December 2018. In February 2019 we received approval to increase the number of Supervisors. This ensures that Supervisors are more visible on the Wards & Departments thus offering increased support to domestic staff.
Supervisors have been allocated their own areas of responsibility increasing overall ownership.
They, together, are responsible for ensuring the domestic cleaning is carried out to the required standards and frequencies on a daily basis. However, employees of the Trust, all have responsibilities to contribute in maintaining a clean and safe environment for patients and everyone using the hospital's premises.

Governance
Health & Social Care Act 2008
CQC Registration Requirements 2014
Health & Safety at Work Act 1974
Data Protection 1984
NHS England Patient Confidentiality Policy 2016 (Code of Practice 2003)
NHS Code of Conduct for Managers 2002
Trust Standing Financial Instructions
Matron's Charter 2004
National Specifications for Cleanliness in Healthcare Premises 2015

All Policies & Procedures approved by the Trust
All Policies & Procedures related to Infection Control & Prevention

Relevant Standards
The Health & Social Care Act 2008: It states that health care premises including hospitals must provide and maintain a clean and appropriate environment and have systems in place to ensure all care workers are aware of and discharge their responsibilities in the process of preventing and controlling infections."
The Care Quality Commission: The CQC monitors the cleanliness in health care premises to ensure that the health care organisations are fit for purpose and it also uses cleanliness as a key performance and quality indicator when considering health licence registration. Hospitals are required to comply with the Hygiene Code of Practice under the health & Social Care Act. The CQC can use its power to issue improvement notices and order closure in worst scenario.
Matron Charter: The NHS Matron charter has brought back this Senior Nursing role. The Charter clearly states that Matrons have responsibilities for ensuring that a clean and safe environment is provided on the wards under their care and management.
The National Specifications for Cleanliness 2015: The specifications was introduced April 2001 and renewed over the years. York Domestic Service is working to the 2015 specifications. An updated version of the 2015 National spec is expected to be introduced late 2019.

Cleaning Specifications and Work plans

A3 laminated specifications are displayed in all wards and departments for Domestics, ward staff. They also provide information to visitors on what should be cleaned and when. Each ward or department also has its own work plan for the area. Work plans allocate cleaning responsibilities to individual domestics and a timetable of daily and weekly tasks. The plan provides continuity and aids relief staff in carrying out the duties required. A copy of the work plan is held by the domestic staff on each area.

Training
The Domestic Training & Development Manager and the Domestic Services Manager ensure that all Domestic Services employees are appropriately trained. Domestic Induction for new staff consists of a 2-3 training days in the classroom and practical cleaning tasks. Following the training all new staff is then buddied up with experienced staff until they are competent and feel confident to work on their own. There is no set time for this to ensure people with different levels of understanding are catered for.
Domestic employees attend induction, regular mandatory updates and performance appraisal actions in cleaning skills, health & safety and infection control etc.

Compliance auditing
Second party auditing was introduced at York from 1st April 2018. The audit tasks are carried out by a technical team under the direction of the Trust's Estates & Facilities Head of Compliance. A software system called Symbiotix was chosen by a team of external individuals from a consultancy service as part of the trust-wide Cleaning review. This software has been programmed using the principles of the National Cleanliness Standards, defining different areas into risk categories (very high, high, significant & low) and allocate the areas and frequencies as specified.

The Cleanliness Monitoring team use the indicative targets and minimum audit frequencies contained within the National Specifications for Cleanliness for the NHS as a guide when assessing the audit results, these are:-

Target Scores			
Risk Category	Poor	Acceptable	Good
Very High	<94%	94-97.99%	>98%
High	<85%	85-94.99%	>95%
Significant	<80%	80-84.99%	>85%
Low	<70%	70-74.99%	>75%

Following an audit Synbiotix generates a report and is sent to the Domestic Supervisors who are responsible for ensuring the Domestic Assistants complete all rectifications in a timely manner. The Domestic Supervisor will discuss with the Domestic Assistants the reasons for any failures and identify any on-going issues in relation to this i.e., short staffing or performance concerns.
Once the rectifications are completed the Domestic Supervisor will check the area and if they are happy with the standard of cleanliness they will sign the report off and send it back to the Monitoring team.

Recruitment and Retention
The recruitment and retention issues during 2018 have continued to be challenging into 2019. However since the government announced that from 1st April 2019 band 1 will be abolished and present staff were given the opportunity to move to Band 2 following an upskilling & training exercise.
We continue to attend job fairs and have a rolling advert out on the NHS job site and hopefully with the new banding this will influence the job seekers' decisions and also assist with retaining the existing skills within the Trust

Recruitment figures York June 2019 current vacancies 13.85wte = 519.37hrs

The Directorate also has plans for many new projects in the near future, the Facilities Apprenticeship Scheme and the multi-skilled Facilities Operative Service provision. These projects would help to modernise the service and bring new opportunities for individuals.

H.P.V
We are in the process of managing the on-site HPV team at York (previously managed from Scarborough site) and plan to extend the team within the domestic staff; this will coincide with the up banding from a band 1 to a band 2
There have been discussions for the York site to introduce a pro-active deep clean and HPV programme.

The Future

The future success of domestic cleaning services requires commitment and support from the senior management team and demands a lot of hard work from operational staff on a daily basis. The Domestic Service Department services will continue to be totally committed to support the wards/clinical services to provide best care within the allocated resources and strive to protect patients from coming into contact with un-

desirable conditions whilst in hospital. The service team realises that it cannot be complacent and recognises that our fight against infection is far from over. Domestic Services play an active role when we are alerted to an outbreak this is by the live IPC document that is viewed and signed off daily. The attendance at emergency meeting to work with all parties involved.

1.9 Decontamination Report

Annual Report of the Decontamination Steering Group covering the period from 1 April 2018 to 31 March 2019

(For inclusion in Infection prevention & Control Annual Report)

Introduction

The aims of this section of the report are to describe the current arrangements for the safe and effective decontamination of reusable medical devices across the Trust.

The Health & Social Care Act 2008 (Regulated Activities) Regulations 2014 part 3 place a legal duty of care on NHS providers to ensure that through Regulation 15
all equipment should be appropriately cleaned and decontaminated.

This requirement is further detailed within Health Technical Memorandum (HTM) 01-01 and 06-01 which states the arrangements for the management and decontamination of reusable surgical instruments and endoscopes.

The Trust has in place a Decontamination of Reusable Medical Devices Policy in place, this policy states the arrangements for the safe effective decontamination of reusable medical devices and surgical instruments in accordance with the legislative, essential quality and best practice requirements identified within Regulations 15 and Health technical memoranda.

The Trust has a Decontamination Steering committee in place which meets 6 times per year. The remit of the Decontamination steering group is to monitor the effectiveness of decontamination processes across the organisation with an annual audit and surveillance programme linked to the NHS Premises Assurance Model being a key component of the groups monitoring strategy. The group met 6 times in the reporting period.

The Trust has an executive Decontamination Lead in post, (Director of Estates & Facilities) and a Deputy Decontamination Lead, (Head of FM Compliance) the appointment of these individuals is key to meeting the best practice requirements stated within HTMs.

Audit & Surveillance Programme

The Decontamination steering group commissions an annual audit programme the purpose of which is to monitor the effectiveness of medical device decontamination processes being undertaken across the organisation primarily within Endoscope Decontamination Units and Sterile services units across the Trust.

The aim of the audit and surveillance programme is to provide assurance to the Decontamination steering group and Infection prevention Operational group on the effectiveness of decontamination processes and the environments in which decontamination takes place.

The Dashboard below shows the Trusts position at May 2019 against the audit and surveillance programme

Decontamination of Reusable Medical Devices- Audit Dashboard					Reviewed:	8th May 2019							
Audit Activity	Last Audit	Next Audit			Annual Audits to date	No of Major Corrective Actions at Last audit							
					Overall Compliance	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20
Endoscopy SGH/BDH	Aug-18	Aug-19			Endoscopy SGH/BDH	4	1	2	3	5	4	0	
Endoscopy -York	Aug-18	Aug-19			Endoscopy -York	0	0	5	5	0	2	0	
Sterile Services- SGH	Aug-18	Aug-19			Sterile Services- SGH	2	2	0	0	2	0	0	
Sterile Services- York	Aug-18	Aug-19			Sterile Services- York	0	2	2	1	0	0	0	
Outpatients- BDH	May-19	May-20			Outpatients- BDH	4	2	0	2	0	1	0	2
Outpatients-SGH	Jan-19	Jan-20			Outpatients-SGH	1	1	0	0	0	0	0	1
Cardio Unit- SGH	May-18	May-19			Cardio Unit- SGH	2	1	1	0	1	1	2	
Cardio Unit- York	May-19	May-20			Cardio Unit- York	*	*	*	*	*	2	0	0
Last audit Scores	R	A	G/NA		Audit Action Plan Submission								
Endoscopy SGH/BDH	0	3	162	165	Endoscopy SGH/BDH								
Endoscopy -York	0	3	162	165	Endoscopy -York								
Sterile Serv- SGH	0	1	35	36	Sterile Serv- SGH								
Sterile Serv- York	0	5	31	36	Sterile Serv- York								
Outpatients- BDH	2	0	13	15	Outpatients- BDH								
Outpatients-SGH	1	1	12	15	Outpatients-SGH								
Cardio Unit -York	0	1	14	15	Cardio Unit -York								
Cardio Unit- SGH	2	1	12	15	Cardio Unit- SGH								
	5	15	441										

The significant findings and recommendations of the 2018/2019 audit programme were:

- Investment is needed in the internal fabric and fixtures and fittings of the Sterile Services unit at the York Hospital site. This recommendation was made in the 2017/2018 annual report but to date no progress has been made with securing investment to undertake the work.

- Sterilization and disinfection equipment has become more unreliable especially at the Scarborough and Bridlington Endoscopy sites.

- Replacement of Endoscope Washer Disinfection equipment at the Scarborough & York sites is due and will be planned via the equipment replacement programme commissioned by the Decontamination Steering group and approved by the Capital Planning Executive group.

- The Organisation should move towards and electronic tracking and traceability system for Endoscope decontamination processes. a capital project is currently underway to achieve this.
  •
- Cardio Respiratory units should seek to improve storage arrangements for endoscopes and TOE/TV Probes as recommended within the years audit reports.

- Outpatients departments at the Scarborough site should ensure that appropriate risk assessments for the decontamination of naso- endoscopes are in place and reviewed at least once a year.

Key Successes

The group has successfully implemented the audit and surveillance programme and through careful monitoring of any audit findings and outcomes Endoscopy Decontamination and Sterile Services Managers have been able to improve both processes and to a lesser extent the environment in which decontamination of surgical instruments or endoscopes takes place, examples of this include:

- Implementation of cross site monitored action plans relating to audit and surveillance

- Recent approval of 10 year plant and equipment replacement programme

- Process improvement associated with water quality tests for automated endoscope washer disinfectors

- Identification and progression of the case for electronic tracking and traceability systems associated with endoscope reprocessing

- Implementation by EDU management teams of improved endoscope storage and transport arrangements via vacuum packed storage.
  •
- Multi- disciplinary review and re publication of Trust Decontamination of reusable medical devices policy.
  •

2019-2020 Objectives

The group shall continue to support the sterile services department with the planned refurbishment at the York hospital site which should be programmed for completion within the financial year.

The multidisciplinary team through under the leadership of the Decontamination Steering group should seek to further explore and implement the electronic tracking and traceability system for endoscopes across the organisation as a priority.

The group shall also oversee the concept of centralisation of Endoscope decontamination at the East coast sites by decommissioning the EDU at the Bridlington site and commissioning improved EDU facilities at the Scarborough site possibly through a re-design programme within the existing sterile services unit at Scarborough.

The Approved Capital replacement programme progression should be monitored and supported by the Decontamination Steering group.

The Estates team should ensure that evidence to support compliance with the NHS Premises Assurance Model in terms of decontamination is maintained.

David Biggins
Deputy Decontamination Lead
York NHS Teaching Hospital Foundation Trust

June 2019

1.10 Water & Ventilation

Water Systems

Governance Arrangements:

Our governance of water systems across all sites is consistent in the way we manage them. They are checked monthly using our database to make sure the likes of TMV testing and flushing is done and up to date. There is a Water Safety Group where members of the trust and York Teaching Hospital Facilities Management discuss any matters to do with water systems and produce the Water Safety Plan to implement across the trust.

Key Legislation:

We primarily follow the guidance laid out in all parts of HTM 04 and also L8: The control of legionella bacteria in water systems but there is the additional legislation that can be found in the Water Safety Plan.

Measurements of Compliance:

We compile all our relevant documentation in regards to Water in one place to ensure all aspects of our systems stay up to date and compliant with relevant standards as practically possible. Our Authorising Engineer audits our water systems to ensure we remain compliant.

Issues & Challenges:

We have had various issues with the drainage systems blocking up due to the misuse of wipes which gets reported continuously from Estates through the Datix system. This has been an ongoing problem for a considerable amount of time.

Works on Current/New Systems:

The new Endoscopy build is still ongoing and Hydrop our Authorising Engineering consultants have been monitoring the process of the build and has provided feedback and recommendations to the Principal Designers and Project Leads. We will continue assisting on the project throughout the commissioning stage.

Ventilation Systems

Our ventilation systems get maintained and verified as per the relevant guidance and monitored on a regular basis to determine what plants need to be scheduled in for its Annual verification. . There is a Ventilation Steering Group where members of the trust and York Teaching Hospital Facilities Management discuss any matters to do with ventilation systems.

Key Legislation:

We primarily follow the guidance laid out in HTM 03 parts A & B although any other industry guidance and legislation that may be deemed appropriate. Other relevant documents can be found in the Trusts Ventilation Procedure.

Measurements of Compliance:

We compile all our relevant documentation in regards to Ventilation in one place to ensure all aspects of our systems stay up to date and compliant with relevant standards as practically possible. Our Authorising Engineer audits our ventilation systems to ensure we remain compliant.

Issues & Challenges:

Due to the age of some of the plants and their configuration we are encountering more challenges when failures occur from the Annual Verifications. There are various singular plants that supply two theatres and all of our theatre plants share components with one plant or another which makes shut downs for routine maintenance and for failures of the systems more complicated. All recent issues will go to the Ventilation Steering Group to come up with a uniformed approach on how we move forward.

Works on Current/New Systems:

The new Endoscopy build is still ongoing and our Authorising Engineer has been monitoring the process of the build and has provided feedback and recommendations to the Principal Designers and Project Leads. We will continue assisting on the project throughout the commissioning stage.

2. Appendices

HPV For Corporate Directors

Annex A

York Teaching Hospital NHS Foundation Trust

Corporate Directors
Hydrogen Peroxide Vapour (HPV) Decontamination

Trust Strategic Goals:

☒ **to deliver safe and high quality patient care as part of an integrated system**
☒ **to support an engaged, healthy and resilient workforce**
☒ **to ensure financial sustainability**

Recommendation

For information	☒	For approval	☒
For discussion	☒	A regulatory requirement	☐
For assurance	☐		

Purpose of the Report

To inform Corporate Directors of the Trust's current HPV decontamination capability.

To enable informed, detailed discussion with regards to the current HPV decontamination capability and make recommendations for a future model of the service.

Executive Summary – Key Points

HPV decontamination is one of the single most effective methods of reducing the amount of infectious organisms present in the healthcare environment.

Currently, the Trust model for providing this service relies on a limited number of machines being moved between Trust sites over longer distances, operated by a limited number of trained personnel (4). The machines are at the end of their serviceability cycle and failures with these machines are becoming more commonplace. Most importantly, this model does not allow a reactive and proactive service to be concurrently achieved.

Recommendation

The Trust should renew, re-organise and expand the existing HPV decontamination service to provide a robust 24/7-365 model that is capable of being both a reactive and proactive service on all Trust sites.

Author: Tom Jacques

Director Sponsor: Helen Hey (DIPC)

Date: 14 June 2019

Introduction and Background

HPV is a highly effective method of decontaminating the healthcare environment. It is employed after mechanical cleaning has taken place (Terminal Clean). It is used after an infectious patient has vacated an area and is extremely effective in combating spore-forming bacteria (such as clostridium difficile) and multi-drug resistant organisms that are notoriously difficult to eliminate and present a high risk to other patients if transmitted.

HPV can be used proactively by periodically employing it on a rotation programme. This can be targeted at high risk areas or be more generally utilised to significantly reduce the amount of organisms living in the environment or on mobile equipment. It can also be used reactively after an outbreak or to reduce transmission where infection has been identified and usually on vacation of a side-room.

The most efficient way to achieve this is to have HPV decontamination equipment on the hospital site and integrated into the hospital's procedures (business as usual).

Currently the Trust owns 5 HPV machines. The machines are maintained and serviced by Johnson & Johnson. These machines are 5-6 years old and coming towards the end of their serviceable life. The number of failures of these machines is rising. Reportedly these machines are being damaged by the constant need to transport them from site to site. They are of an older design, are quite large and cumbersome to move.

HPV decontamination is a time consuming process. Each machine runs a 4 hour cycle. This obviously puts pressure on operational flow, particularly when side-room capacity is so limited across the Trust. It currently takes approximately 2 hours to transport the machines from York to Scarborough or vice-versa.

The number of machines available dictates the numbers of concurrent cleans that can be employed. During a full ward decant, all 5 machines are employed to minimise the time the process takes.

Operating the HPV machine is a skill that requires specialist training. This training is currently conducted in-house and takes 1 month to achieve. We currently have 4 individuals trained to operate the machines – 2 at Scarborough and 2 at York.

Of the 4 individuals that are trained, the 2 at Scarborough have other responsibilities. Both are Facilities Operatives, 1 of whom is on a secondment as a Domestic Supervisor (but is also providing the HPV service). These roles heavily impact on their ability to provide the HPV service.

The 2 trained individuals at York are solely providing the HPV service but are otherwise employed when the machines are off-site or not in use.

Next Steps

If agreed, a business case should be written in order that the HPV service can be progressed.

Detailed Recommendation

The Infection Prevention & Control Team recommends that the current fleet of HPV machines are replaced as the equipment is at the end of its life.

The number of machines available in the Trust should be doubled to 10.

5 should be located at York Hospital and used for out-of-hospital units if required. The other 5 should be located at Scarborough Hospital and used at Bridlington Hospital if required.

The number of HPV operatives should be reviewed. The Trust needs to be able to provide the HPV service 24 hours a day, 365 days a year. The numbers of HPV operatives should reflect this.

Whilst the above recommendations are being employed, it is highly recommended that the Trust use an external company to engage in a program of proactive HPV over all sites. This should be prioritised by the IPC Team.

Annex B

Infection Prevention (IP) Governance Structure