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Bwrdd Iechyd Prifysgol
Bae Abertawe
Swansea Bay University
Health Board



Meeting Date	12 December 2019	Agenda Item	2.6
Report Title	Infection prevention and control		
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Report Sponsor	Gareth Howells, Director of Nursing		
Presented by	Lisa Hinton, Assistant Director of Nursing IPC		
Freedom of Information	Open		
Purpose of the Report	This is an assurance report provides an update on prevalence, progress and actions for healthcare associated infections (HCAIs) within Swansea Bay University Health Board for the reporting period.		
Key Issues	<ul style="list-style-type: none"> • SBUHB remain under targeted intervention for HCAIs. In this reporting period we are over trajectory in terms of targets. A C.Diff control group was set up in November to address Health Board wide improvements. • Steps have been taken to ensure that practice in relation to environmental decontamination is standardised across the Health Board. UVc environmental decontamination will be available on each of the three acute sites from January 2020 and the guidance to standardise escalation of cleaning to enhanced technologies is being presented to ICC in December 2019. • Increasing incidence of <i>C. difficile</i> in Morriston and Singleton. Reduction initiatives that have been successful previously, e.g. antimicrobial restriction and improved antimicrobial stewardship, would not have the same impact, and reduction improvement efforts are compromised, when there is over-crowding of wards as a result of increased activity and the use of pre-emptive beds, and where there are staffing vacancies, and reliance on temporary staff, and where activity levels are such that it is not possible to decant bays to effectively clean patient areas where there have been infections. • Lack of decant facilities, when occupancy is at acceptable levels on acute sites, compromises effectiveness of the '4D' cleaning/decontamination programme. • Outbreak of extensively antibiotic resistant bacteria in Ward G continues, involving 14 confirmed cases, and more than 300 patient contacts, who will require identification on readmission and rescreening to prevent risk of onward and ongoing transmission. Mitigation – closure of ward, establishment of a HB Outbreak Control Group, extended case-finding screening on linked wards/units, ward-based Infection Prevention & Control (IPC) training sessions; increased daily IPC clinical presence on ward. 		

	<ul style="list-style-type: none"> • In consideration of the >300 patient contacts identified as a result of the Ward G outbreak, the current Welsh Clinical Portal does not have a facility to alert ward staff to patients with bacteria and infections of concern, who require isolation and screening on admission. Mitigation – the Infection Prevention & Control Team will raise this issue via Informatics to be raised on an All Wales basis. • IPC resource – no resource to provide 7 day service or to provide service to Primary Care. Support attained to increase IPC resource to extend to Primary Care and provide a 7 day service. Additional posts were reviewed by Vacancy Control Panel on 25.11.19 and adverts to go out December 2019. • Singleton Hospital does not meet the National Minimum Hours for cleaning. Morriston are carrying significant domestic hour vacancies. A scoping exercise has been undertaken to identify the current requirements across the Health Board and a report will be presented to SLT in December with recommendations. Mitigation - sharing the resource available, reducing the risk in some areas by increasing the risk in others. • The incident and RCA process for HCAs continues to be challenging to navigate and does not lend itself to effective investigation, improvements and learning. However, from December 2019 onwards the infection control team will initiate the incident report for certain bacteraemia so this will improve reporting, onwards investigation and learning. • Compliance with training requirements remains a focus for improvement. A training plan is under development for 2020 with bespoke training being offered as part of the suite of training. <p>Escalation from ICC:</p>			
Specific Action Required <i>(please choose one only)</i>	Information	Discussion	Assurance	Approval
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommendations	<p>Members are asked to:</p> <ul style="list-style-type: none"> • APPROVE/ ENDORSE <p><u>Items for information will not be allocated time for consideration within the Board/Committee meeting.</u></p>			

INFECTION PREVENTION AND CONTROL

1. INTRODUCTION

This report aims to provide an update on prevalence, progress and actions for HCAs within SBUHB for the period 1 October – 18 November 19 in relation to the following healthcare associated infections (HCAI):

- a) *Clostridium difficile* infection
- b) *Staph. aureus* bacteraemia
- c) Gram negative bacteraemia (*E. coli*, *Klebsiella* spp., *Pseudomonas aeruginosa*)

It provides a retrospective overview of the activities carried out to progress the prevention, control and management of infection within SBUHB; during this reporting.

It also aims to identify key risks, making recommendations to address any areas requiring action or improvement.

2. BACKGROUND

In 2018/19, the ABMU Health Board 2018/19 cumulative incidence of the infections detailed below was the highest in Wales, and higher than the Welsh Government infection reduction goals for NHS Wales.

However, given the position that the Health Board had been in in 2017/18, within the IMTP for 2018/19 the Health Board agreed with Welsh Government a three-year commitment to achieving the following infection reduction:

- *Clostridium difficile* infection: 15% reduction against the 2017/18 position;
- *Staph. aureus* bacteraemia: 10% reduction against the 2017/18 position;
- *E. coli* bacteraemia: 5% reduction against the 2017/18 position.

The agreed three-year reduction targets for Swansea Bay University Health Board have been recalculated to take into consideration the disaggregation that occurred as a result of the Bridgend Boundary Change. The overall Swansea Bay UHB Health Board progress against the 2019/20 IMTP HCAI Reduction Improvement Goals, up to 18 November 2019, is detailed in **Appendix 1**. In addition to Health Board progress against the IMTP monthly profiles, the charts also show the maximum number of cases (by monthly average) for Swansea Bay UHB to achieve the National Infection Reduction Goals for the NHS in Wales, in line with the recently published Welsh Government circular, WHC/2019/019 - 8 July 2019, *AMR & HCAI IMPROVEMENT GOALS FOR 2019-20*.

Considerable improvements have been made to reduce the rates of HCAs, however reductions in infection rates as a result of improvement interventions will be shown over a period of months and not immediately.

Achieving a sustained improvement will be compromised as the Health Board continues to face significant challenges due to current demands on services and capacity. The design of the estate, disinvestment in planned and preventative maintenance, and lack of isolation facilities make managing patients with known or suspected infections a challenge. Additionally, Singleton Hospital is not funded to meet the National Minimum Standards of Cleanliness hours. Compounding the above is the lack of dedicated decant facilities on hospital sites, which compromises effective decontamination of patient care areas, and impacts on the provision of clean and safe patient care environments.

3. GOVERNANCE AND RISK ISSUES

3.1 HCAs

Measures	WG National Target for NHS Wales (WHC/2019/019 - 8 July 2019)	IMTP Profile October 2019	October 2019 (to 31/10/19)	Total number of cases YTD (to 31/10/19)	Number of cases above or below cumulative IMTP trajectory
<i>Clostridium difficile</i>	< 9 cases/month 25/100,000 pop.	12	19	76	↓ 13
<i>Staph. aureus</i> bacteraemia	<7 cases/month 20/100,000 pop.	11	13	81	↓ 3
<i>E. coli</i> bacteraemia	< 22 cases/month 67/100,000 pop.	40	25	183	↓ 88
<i>Klebsiella spp.</i> bacteraemia	<8 cases/month	13	4	50	↓ 17
<i>Pseudomonas aeruginosa</i> bacteraemia	<2 cases/month	2	1	20	↑ 6

Measures	WG National Target for NHS Wales (WHC/2019/019 - 8 July 2019)	IMTP Profile November 2019	November 2019 (to 18/11/19)	Total number of cases YTD (to 18/11/19)	Number of cases above or below cumulative IMTP trajectory
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<i>Clostridium difficile</i>	< 9 cases/month 25/100,000 pop.	12	15	91	↓ 10
<i>Staph. aureus</i> bacteraemia	<7 cases/month 20/100,000 pop.	15	5	89	↓ 10
<i>E. coli</i> bacteraemia	< 22 cases/month 67/100,000 pop.	32	9	192	↓ 111
<i>Klebsiella spp.</i> bacteraemia	<8 cases/month	9	4	54	↓ 22
<i>Pseudomonas aeruginosa</i> bacteraemia	<2 cases/month	5	1	21	↑2

***C.difficile* toxin positive cases**

The Health Board is under trajectory in this area, currently achieving the reductions in line with the Tier 1 targets.

Management following a C.Diff toxin positive case remains a responsibility of the Delivery Unit with the support of the infection control team. Alongside the review of the incident reporting system, an integrated action plan will be generated within the Datix system for each infection.

Due to the increased incidents of *C.difficile* infections in October and November a *C.difficile* control group was initiated in November 2019 and an improvement plan is being developed.

Appendix 1 shows a breakdown of *C.difficile* infections by month and these have been broken down by Delivery unit.

Staph Aureus bacteraemia

The Health Board is under trajectory in this area, currently achieving the reductions in line with the Tier 1 targets however this needs to be an area of focus as the aim is for a zero tolerance for MRSA bacteraemias.

Appendix 1 shows a breakdown of MRSA bacteraemias by month and these have been broken down by Delivery Unit.

E.coli*, *Pseudomonas aeruginosa* and *Klebsiella spp.

In 2018 Public Health Wales introduced mandatory surveillance of *E.coli*, *Pseudomonas aeruginosa* and *Klebsiella spp.* The Health Board is maintaining performance in this area, currently achieving the reductions in line with the Tier 1 targets.

Work is underway to look at how we can review the learning and share good practice.

Appendix 1 shows a breakdown of *E.coli*, *P.aeruginosa* and *Klebsiella* cases by month and these have been broken down by Delivery Unit.

3.2 Key achievements

Within the last 12 months the following key achievements have been instrumental in reducing rates of HCAs:

- Year-on-year HCAI reductions in HCAI, with the exception of *Staph. aureus* bacteraemia and *Pseudomonas aeruginosa* bacteraemia.
- ARK (Antibiotic Review Kit) –now being utilised on all wards in Morriston.
- Successful Matron Development Day held on 14 October, focusing on Infection Prevention & Control.
- Continued effort to implement the ‘4D’ programme: **D**ec clutter, **D**ecant, **D**ee p-clean and **D**is infect, although the lack of dedicated decant facilities impacts on the effectiveness of this programme.
- Commenced a trial of ultraviolet C (UV-C) decontamination of ward environments in Singleton Hospital, however, this relies on patients being relocated during the process.
- A revised process where the infection control team will alert via Datix for certain HCAs has been agreed for pilot by the All Wales Datix User Group, and approved at the Board’s Infection Control Committee on 28 June 2019. Local amendments are being made to HCAI related Datix codes in the Health Board Datix system to facilitate improved reporting.

3.3 Actions

3.31 Progress Summary of the Annual Work Plan

The Infection Prevention Control Team and other key individuals continuously undertake work on the annual work plan for the areas of which they are responsible.

The plan is divided into 5 key work streams which incorporate 21 separate actions. The RABC rating system used in the annual work plan provides a visual aid regarding progress made against a particular stream (red, amber, blue and green); refers to the different stages of each objective’s action points.

See **appendix 2** for the up to date work plan. The IPCT are on target to deliver the majority of the 5 objectives.

The table below provides an indicator of the progress made in this reporting period:

Objective	Number of actions	B – On plan	A – Slippage in plan	R – Objectives at risk/not achieved	C – Objective complete
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1. Support Delivery Units in reducing HCAIs	9	1	3		5
2. Improve the quality of information on HCAI	6		4		2
3. Review the Infection Prevention & Control (IPC) workforce	4		1		3
4. Support primary care to improve uptake rates of the MenACWY vaccine	1		1		
5. Establish whether children across the HB receive their primary immunisations at the recommended ages.	1				1
Total	21	1	9		11

3.4 Decontamination

- The Health board's action plan in response to the All Wales Endoscopy Decontamination Survey (AWDS), has been correlated.
Notable progress in the following areas has been made:
 - An agreement has been made to move Nasendoscope decontamination for Ward T and SDMU to HSDU in Morriston hospital. This should be up and running by January 2020.
 - The transfer of the UV unit from HSDU in Morriston, to the ENT department in Neath Port Talbot Hospital (NPTH) has taken place.
 - A meeting has been scheduled to discuss suitable alternative storage options to replace the need for a new drying cabinet within Singleton theatres.
- Following the Revised Health Board standard for personal protective equipment, all areas have received the order codes for the long sleeve gowns and long sleeve gloves. The updated report with progress on actions can be found in appendix 3. – H&S update paper
- A poster demonstrating the new PPE requirements for endoscope decontamination has been distributed to all areas. This can be found in appendix 4.
- SBUHB's decontamination lead has been sent the draft report following the All Wales dental decontamination survey. Once amendments have been made, the official report will be re-distributed to the Health Board.
- Meetings with Singleton and Primary Care delivery unit leads have taken place. Discussions regarding the decontamination reporting and assurance structure formed the basis of these meetings with clear direction being put forward by the units.

Actions

- Once the delivery units have their decontamination structure in place, delivery unit decontamination meetings, which will feed into the Health Board's decontamination meeting, should take place. This will ensure good practice is shared and any areas of non-compliance are identified locally and improvement options highlighted.

3.5 Outbreaks, untoward incidents, Pii and ward/bay closures from diarrhoea and vomiting

During this reporting period from 1 October – 18 November

Ward G had previously been closed for 22 days due to a confirmed outbreak of Carbapenemase Producing Organism (CPO) *Klebsiella sp.* and concurrent Vancomycin Resistant Enterococcus (VRE) outbreak. Epidemiologists are undertaking an extensive search to map the extent of the outbreak. The IP&C team have identified and flagged over 600 potential patients who may have had contact with ward G and associated patients since May the 1st. These patients will be screened for CPO on future admissions.

A Health board wide *Clostridium difficile* control group has met to discuss the challenges around managing the increased incidences of *Clostridium difficile* at Morriston, Singleton and Gorseinon hospitals. Each Directorate/Locality will report on progress of their respective *C. difficile* Improvement Plan at these weekly meetings. All actions will be determined, implemented, and managed by the Directorate/Locality Management teams, led by the senior Management Team Lead for HCAI. The group will report directly to the Infection Control Committee.

Periods of increased incidences (Pii) have been identified in 10 locations across the health board (HB) where 2 or more *C difficile* PCR positive cases were identified within a 28 day period. The Anaerobic Reference Unit in Cardiff (ARU) provide information on individual Ribotypes for each case.

The following areas have been affected by infection control issues. The infection prevention and control team (IPCT) continue to visit wards/departments affected daily to review patients and support clinical teams as well as sending out HB wide communications.

Delivery unit/speciality	Reason for closure/organism.	Date of Pii/incident	Patients affected	Outcome	Pii ended/Ward Opened
Morriston ITU	C-diff	04/09/2019	6	014 x3 2 distinct and 1 outstanding	Extended Pii until 04/12/2019
Morriston DU Ward G	<i>Kleb.</i> CPO & VRE	05/09/2019	7 OXA's & 3 VRE	Open to admissions 29/09/2019	Not finalised. Weekly screening

					continues for contacts and Admission screens for pre outbreak patients.
Morrison Ward C	C-diff	09/09/2019	4	Distinct ribotyping	Extended Pii until 10/10/2019
Singleton Ward SAU	C-diff	02/10/2019	4	3 x different 1x outstanding	11/11/2019
Singleton DU Ward 6	C-diff	12/10/2019	3	3 distinct ribotypes	10/11/2019
Singleton Ward 8	C-diff	14/10/2019	3	3 distinct ribotypes	12/11/2019
NPTH Ward C	Confirmed Noro Virus	14/10/2019	17	Ward closed for 14 days resulting in 15 lost bed days	29/10/2019
Singleton Ward 8	Probable Noro Virus	17/10/2019	2	Bay closed for 4 days resulting in 4 lost bed days	21/10/2019
Morrison Ward G	C-diff	20/10/2019	3	2 distinct & 1x outstanding	12/11/2019
Morrison Ward B	Confirmed Noro virus	24/10/2019	11	Ward Closed for 6 days resulting in 10 lost bed days	31/10/2019
Gorseinon West Ward	Confirmed Noro Virus	24/10/2019	15	Ward closed for 19 resulting in 94 lost bed days	11/11/2019
Gorseinon West Ward	C-diff	24/10/2019	6 cases linked	Pii /outbreak meeting ongoing	Extended Pii ending 22/11/2019
Morrison WARD J	C-diff	24/10/2019	2	Distinct ribotypes	22/11/2019
NPTH Ward D	Confirmed Noro virus	25/10/2019	4	Ward closed for 3 days resulting in 4 lost bed days	31/10/2019
SINGLETON WARD 12	Confirmed Noro Virus	28/10/2019	12	Ward closed for 10 days	07/10/2019

				resulting in 95 lost bed days	
Morrison DU SDMU	C-diff	02/11/2019	2	Outstanding	30/11/2019
Morrison Ward V	C-diff	14/11/2019	2	Outstanding	14/12/2019
Morrison Ward D	Confirmed Noro Virus	17/11/2019	5	Ward closed ongoing 17/11/2019	Open once > 72 hours symptom free

The ICPT visit wards/departments affected daily to review patients and support clinical teams as well as sending out Trust wide communications. Delivery units are asked to present a brief presentation on lessons learned to ICC on a rotational basis.

Risks

There are 27 'Accepted' Risks – 1 of these risks was opened between 1.10.19 and 18.11.19 and 4 have passed the review date.

New risk

There is one new risk for review by ICC around the lack of decant facilities. The Committee is asked to review and update the approval status.

Title	Opened	Approval status	Risk (in brief)	Delivery Unit/Directorate	Risk level (current)
Lack of decant facilities	08/11/2019	New risk	There is no dedicated decant facility on the Morrison hospital site and at present, no facility for decant at Singleton. There are increasing numbers of HCAs and the lack of decant means areas are unable to be cleaned thoroughly and we are unable to use advanced technologies such as UVc and HPV increasing the risk of transmission. Where reductions in HCAI rates have been successful previously, actions included the use of decant, hospital wide cleaning and introduction of HPV. This reduces the burden of C diff in the environment and is critical in bringing the situation under control.	Nursing & Patient Experience	High Risk

Risks passed review date

There are 13 risks past their review date. These are outlined below:

Opened	Review date	Title	Delivery Unit/Directorate	Unit	Specialty
31/12/2010	29/03/2019	Contamination & condition of labour ward delivery mattresses and beds	Singleton Hospital Service Delivery Unit	Singleton Hospital	Obstetrics
30/04/2019	30/05/2019	non-compliance with infection control precaution standards	Singleton Hospital Service Delivery Unit	Singleton Hospital	
09/05/2019	09/06/2019	Use of Fans	Singleton Hospital Service Delivery Unit	Singleton Hospital	
31/01/2013	28/06/2019	Infection Control/Cross Infection limited isolation facilities	Singleton Hospital Service Delivery Unit	Singleton Hospital	Site Management
12/05/2017	30/08/2019	Removal of UV and HPV cleaning	Planning	Princess of Wales Hospital	Hotel Services - Domestic/Care taking
20/02/2019	31/08/2019	Food Hygiene Compliance	Mental Health and Learning Disabilities Delivery Unit	Caswell Clinic	

12/05/2017	01/09/2019	Cleaning Hours Singleton Hospital	Planning	Singleton Hospital	Hotel Services - Domestic/Care taking
22/11/2018	30/09/2019	Risk of variations in decontamination practice due to no dedicated decontamination lead	Nursing & Patient Experience	Health Board Headquarters, Baglan	Infection Control
25/07/2013	31/10/2019	Clinical risk infection control potential for cross infection	Singleton Hospital Service Delivery Unit	Neath Port Talbot Hospital	Endoscopy
18/08/2016	31/10/2019	NPTH Endoscopy Decontamination room: Existing layout and work area.	Singleton Hospital Service Delivery Unit	Neath Port Talbot Hospital	Endoscopy
19/06/2019	31/10/2019	Lack of access to Microbiology support	Primary and Community Services	GP Practice	
06/09/2019	31/10/2019	Insufficient cleaning time allocated to CSSU to meet minimal cleaning standards	Morrison Hospital Service Delivery Unit	Morrison Hospital	Cardiology
14/03/2014	01/11/2019	Infection control risk in relation to Hepatitis B and TOE probes	Morrison Hospital Service Delivery Unit	Morrison Hospital	Cardiothoracic

High/moderate risks for review

Opened	Title	Unit	Specialty	Risk (in brief)	Controls in place	Rating (current)
01/11/2011	Lack of adequate high cleaning within theatres	Morrison Hospital	Theatres	<p>Cross infection due to lack of/inadequate cleaning within theatres. Specification does not include all areas of theatre. Monthly cleaning audits undertaken. August 2006 - result of audit forwarded to Estates Department - resources not available to undertake high cleaning and maintenance. November 2006 request repeated, resources not available.</p> <p>Previously routine maintenance being undertaken on allocated monthly governance days. However the number of days have been reduced per year. This will have an impact on the access and availability to theatres</p>	<p>Team of domestic staff clean theatres during the night</p> <p>Introduction of revised planned preventative maintenance and cleaning programme to be introduced from April 2018.</p>	Amber - Moderate
19/07/2014	Risk of cross Infection due to lack of dedicated treatment room on wards A, B & W	Morrison Hospital	Orthopaedics	Risk of cross infection from redressing of wounds in patients bays rather than evidenced best practice as per infection control policy.	Strict aseptic technique procedures are in place, patients with infected wounds or colonisation to be nursed in cubicle	Amber - Moderate
14/10/2014	No isolation facility within Cardiac HDU, also bed spaces too close together	Morrison Hospital	Cardiothoracic	<p>Unable to isolate patients with infections who require level 2 care therefore exposing patients to infections such as Clostridium Difficile, Norovirus and MRSA. Unable to leave empty beds between infected patients and others due to demand on Cardiothoracic Surgical level 2 beds > 92% bed occupancy. Losing level 2 capacity impacts on the</p>	<p>Local awareness of poor infection control facilities. Occasionally patients with an infection are kept back in the cubicle in CITU until they can be transferred to a cubicle on Cyril Evans ward. However this then has an impact on level 3 capacity.</p>	Amber - Moderate

				ability to meet cancer standards and RTT for Cardiac Surgery. Unable to close HPV area due to high demand on level 2 beds.		
08/07/2015	Lack of Cubicles for isolation purposes within surgical Directorate	Morrison Hospital	General Surgery	Lack of cubicles on Surgical wards	Where ever possible pateints are risk assessed for the requirement for a cubicle	Amber - Moderate
18/08/2016	NPTH Endoscopy Decontamination room: Existing layout and work area.	Neath Port Talbot Hospital	Endoscopy	Manually cleaned scopes awaiting AER Processing (which are still "Dirty") are kept in a stack on the clean side increasing the risk of a dirty scope being picked up and used on a patient without being processed. Gloves and Aprons used on the clean side to handle clean scopes are kept in the dirty area. Swabs used to dry scopes kept on the hand washing sink with water dripping onto them. Single use valves used on clean scopes kept in dirty area. The only hand washing sink is located in clean area. No working surfaces available in the clean area. Laminated worktop surrounding sinks have started to delaminate exposing chipboard which has started to expand absorbing water. Single Stainless Steel Sinks fixed into place which can be too low	<ul style="list-style-type: none"> • All Staff are aware of limited space in room • Limit Number of staff in Area • Team members to Co ordinate when they require to be in the Room • All staff to escalate any issues to Nurse in Charge 	Amber - Moderate

				for taller members of staff. Exposed Waste Pipe Work has openings.		
12/05/2017	Removal of UV and HPV cleaning	Princess of Wales Hospital	Hotel Services - Domestic/Care taking(all Health Board sites)	Update 8/4/19 UVC has been reintroduced in Morriston Hospital The red cleans have not taken place since HPV/UV has been out of action This affects all sites	Alternative arrangement were put in place with the use of chti chlor. Revised arrangements have been shared across the HB but HPV yet to be reintroduced	Amber - Moderate
12/05/2017	Cleaning Hours Singleton Hospital	Singleton Hospital	Hotel Services - Domestic/Care taking(all Health Board sites)	Singleton Hospital Domestic hours do not meet the minimum requirements for NSOC 34.5 hours short per ward per week approx 350 hours per week	Good supervisory cleaning team Easy to clean areas Ward based catering service At the time the area was risk assessed and it was agreed that additional funding would be diverted to higher priority areas	Amber - Moderate
20/02/2019	Food Hygiene Compliance	Caswell Clinic		We are breaching legislation, around food hygiene compliance, due to the fact that a very small percentage of staff across the DU is sufficiently trained at the required standard to prepare and assist food and also serve the food to the patient groups.	For SS - Caswell is complete, across other areas the 'cook and chill' food is being served via hotel services but there is a move away from that due to the impact on the patient.	Amber - Moderate

19/06/2019	Lack of access to Microbiology support	GP Practice		<p>Lack of access to Microbiology support for Primary & Community Services.</p> <p>The infection control team provide specialist services across the Health Board. this includes acute services, primary care, mental health, learning disabilities, district nursing services and dental.</p> <p>There is no dedicated infection control nurse to support community services and therefore there is limited proactive prevention activity and very little resource to support. It is clear than a high proportion (over 50% of E.Coli for example) are community acquired so this impacts on the ability to reduce the overall infection rates.</p>	<p>Primary Care follow NICE Clinical Guideline CG139.</p> <p>Dental Services follow WHTM 01-05</p> <p>Community Hospital follows ABMU Infection Control Policies</p>	Amber - Moderate
06/09/2019	Insufficient cleaning time allocated to CSSU to meet minimal cleaning standards	Morrison Hospital	Cardiology	<p>CSSU now being utilised as a 24 hour Monday to Friday Service and often used on weekends due to surge capacity and decanting for other wards who require deep cleaning. Currently there are only 2 hours per day allocated for cleaning Monday to Friday. Minimum requirement is 4 hours per day plus 4 hours on the weekend. Due to the lack of cleaning hours CSSU is failing in achieving the necessary levels of cleanliness. There are concerns that currently not even getting 2 hours of cleaning</p>	<p>Meeting requested with head of domestic services to raise concerns about current level of cleaning being received. Funding for additional hours been costed and been submitted to HoN for request for support</p>	Amber - Moderate
01/11/2011	Infection Control	Morrison Hospital	General Surgery	<p>Adverse consequences for patients of hospital acquired infection.</p>	<p>All incidents of infection investigated with RCA methodology. Ward managers/</p>	Amber - Moderate

				Significant financial implications of HAI.	matrons and senior matrons attend infection prevention MDU Infection Prevention meeting on a monthly basis. Monthly reports sent re infection rates for wards	
31/01/2013	Infection Control/Cross Infection limited isolation facilities	Singleton Hospital	Site Management	Limited isolation facilities in wards. WAG expect zero tolerance of infection control and during Infection Control outbreaks there are limited isolation facilities resulting in temporary ward closures. There is a risk of non achievement of target reductions due to the environmental and management of infection control across hospital sites. Limited hand washing facilities in our patient department.	Work within Infection Control Policies. Outbreak & Bed Management Policies. Hand hygiene audits and training.	Amber - Moderate
22/11/2018	Risk of variations in decontamination practice due to no dedicated decontamination lead	Health Board Headquarters, Baglan	Infection Control	Lack of Appointed Person for decontamination on Swansea sites Endoscopy NPTH ENT NPTH- decon currently taking place in consultation/ treatment room & not in designated decon room. Scopes stored in box & not hung vertically. Wipe system in place, should move to validated system e.g. UV Nasendoscopes in Ward T & SDMU should be decontaminated off the unit via validated system (suggestion- Ward T to go to Head & neck (hvs) SDMU to go to Cardiac) Drying cabinets in theatres (sdu & mdu) should be replaced as not secure in mdu & not required in sdu	Newly appointed decontamination lead November 2018 Decontamination lead is reviewing areas and identifying areas of good practice and areas for improvement Reports on decontamination included within infection control reports	Amber - Moderate

				<p>due to low number of scopes used & cabinet old</p> <p>Urology both sites to go to trophon system for tr probes</p> <p>Pow cardiac- TOE, still using Stella bath</p>		
22/11/2018	<p>Insufficient numbers of infection control nurses will impact on support available to delivery units and achievement of targets</p>	<p>Health Board Headquarters, Baglan</p>	<p>Infection Control</p>	<p>Current vacancies within the infection control team impact on the ability to provide a robust and consistent service to the delivery units. This may result in increased numbers of patients with HCAs.</p> <p>In addition, there are singleton posts within the team that are not maintained during periods of absence. This affects the continuation of the service and there is no resilience to ensure these roles continue.</p>	<p>New appointment to assistant director of nursing infection prevention and control and decontamination lead posts November 2018.</p> <p>New band 3 to commence 17 December 2018.</p> <p>Recruitment to head of nursing IPC November 2018.</p> <p>Review of current vacancies and budget to ensure vacancies are filled with staff at the correct band and post within the current budget.</p>	<p>Amber - Moderate</p>

02/10/2019	Patients at risk of increased injury severity from metal bins	Morrison Hospital		<p>Ward S has recently had a patient fall on to an edge of a metal bin (INC 115320) in a toilet this caused a significant skin laceration requiring plastics to suture, luckily on this occasion the CT was clear however this highlighted the risk not just for ward S but also Ward D who have frail elderly patients at a higher risk of falls that could result in significant injuries.</p> <p>Most of the bins on the ward are potentially condemnable based on infection control and if replacing with the falls risk on these wards high, plastic soft bins are required to reduce the risk.</p> <p>As matron I will audit all bins on ward D and S and report back to HoN.</p>	Consider placement of bins to lower risk areas.	Amber - Moderate
20/12/2011	Control of Infection - link D& V outbreaks.	Morrison Hospital	Cardiology	<p>Due to lack of cubicles and adequate toilet facilities on CSSSU, inability to isolate leads to an increased risk of patients during outbreaks of increased infection</p>	<p>Policies and procedures for the control of infection in place. Reporting mechanisms available on a hospital-wide base. Close links with the LHB Infection Control Team.</p> <p>Staff aware to submit IR1 if they are unable to isolate patients or if there is a delay in doing so</p>	Amber - Moderate

22/11/2018	There is no dedicated infection control resource to robustly support community services	Health Board Headquarters, Baglan	Infection Control	<p>The infection control team provide specialist services across the Health Board. this includes acute services, primary care, mental health, learning disabilities, district nursing services and dental.</p> <p>There is no dedicated infection control nurse to support community services and therefore there is limited proactive prevention activity and very little resource to support. It is clear that a high proportion (over 50% of E.Coli for example) are community acquired so this impacts on the ability to reduce the overall infection rates.</p>	Specialist advice available for support as required for community	Amber - Moderate
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26/01/2016	Failure to achieve infection control targets set by Welsh Government	Health Board Headquarters, Baglan	Infection Control	<p>Failure to achieve infection control targets set by Welsh Government</p> <p>Health care acquired infections (HCAI) cause patients harm. HCAI also results in increased socio-economic burden,length of stay, with subsequent loss of available beds. As a result of the high number of HCAs across the Health Board, AMBU are under targeted infection for the following infections and as a results are monitored and reported upon regularly: Clostridium difficile Staph. aureus bacteraemia E. coli bacteraemia Due to the lack of resources within the infection control team and other factors including environmental, cleaning, and decontamination the Health Board is not consistently remaining under target for performance in these three key infections.</p>	<ul style="list-style-type: none"> •Regular monitoring on infection rates •Policies, procedures and guidelines in place •Regular reporting through internal processes •ICNet information management system for infections is in place •Infection control team support the clinical teams for issues relating to infection control •A permanent infection control doctor has been recruited •Recruitment is ongoing and the decontamination lead and assistant director of nursing in infection control have been appointed •Bug stop quality improvement programme •Incident reporting 	High
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					<p>Regular surveillance and monitoring of infection rates</p> <p>Infection Prevention & Control Policies & Procedures / SOPs in place, reflecting Welsh National Model Policies for IP&C</p> <p>Regular reporting through internal processes</p> <p>ICNet information management system for infections is in place</p> <p>Infection control team support the clinical teams for issues relating to infection control</p> <p>A permanent infection control doctor has been recruited</p> <p>Recruitment is ongoing and the decontamination lead and assistant director of nursing in infection control have been appointed</p> <p>Bug stop quality improvement programme</p> <p>Incident reporting</p> <p>Infection Control Doctor - 2 sessions/week</p> <p>Comprehensive improvement programmes in place</p>	
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22/11/2018	Patient environments may not be adequately cleaned following a patient with infection	Health Board Headquarters, Baglan	Infection Control	The implementation of HPV/UV is not undertaken across the Health Board. This is the most effective way of reducing the risk of cross infection by cleaning using these products after a patient with an infection has occupied a space.	Some sites have sourced external contractors to provide this service however it is not in all delivery units and is not a seven day service Thorough cleaning is undertaken of areas following a patient with an infection	High
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Incidents

There are 83 overdue incidents relating to IPC on Datix which is reduction in overdue incidents from ICC in October 2019. These can be broken down as follows:

Delivery Unit	Year Incident Reported no. incidents		
	2017	2018	2019
Mental Health & Learning Disabilities	0	0	1
Primary and Community Services	0	0	4
Morriston Hospital SDU	1	1	41
Singleton Hospital SDU	0	2	31
Neath Port Talbot SDU	0	0	2

3.6 Education & Training

Training compliance

Infection Prevention and Control - Level 1 - 3 Yearly to 31 October 19

Staff Group	Compliance %
Add Prof Scientific and Technic	88.28%
Additional Clinical Services	85.83%
Administrative and Clerical	79.71%
Allied Health Professionals	90.15%
Estates and Ancillary	61.22%
Healthcare Scientists	83.13%
Medical and Dental	35.12%
Nursing and Midwifery Registered	86.19%
Students	66.67%

The IPCT along with colleagues from the Education and Training department, local training practice leads and other continue to provide and deliver IPC training and updates alongside the online training to both clinical and non-clinical staff employed by the Trust. The IPCT continue to deliver many face-to-face teaching and ad-hoc/bespoke session requests made by services directly.

The IPCT are planning to hold an IPC conference in April 2020 for SBUHB. Applications for posters to be displayed at this conference are now being sought. This is available to all staff across the Health Board to share their work.

An education programme for 2020 will be published in due course offering greater access to face to face training for all staff groups.

3.7 Assurance

3.71 Reporting

The Assistant Director of Nursing Infection Prevention and Control submits assurance reports to the Quality and Safety Committee and monthly submissions directly to the Health Board on the Tier 1 targets.

Each Infection Control Nurse leads within a delivery units and liaises closely with clinical staff from each ward/department which includes attending regular delivery unit infection control meetings.

3.72 Audit

Internal audit

Between May and July 2019 internal audit reviewed IPC and an action plan was developed. Good progress has been made and the majority of actions have been closed. See appendix 5 for the updated action plan.

Hand hygiene


Monthly hand hygiene audits are undertaken and are monitored by the Delivery Units. Work is underway to include this information on the ward to Board dashboards. An update on progress with this will be provided by informatics at ICC in December 2019.

Patient experience

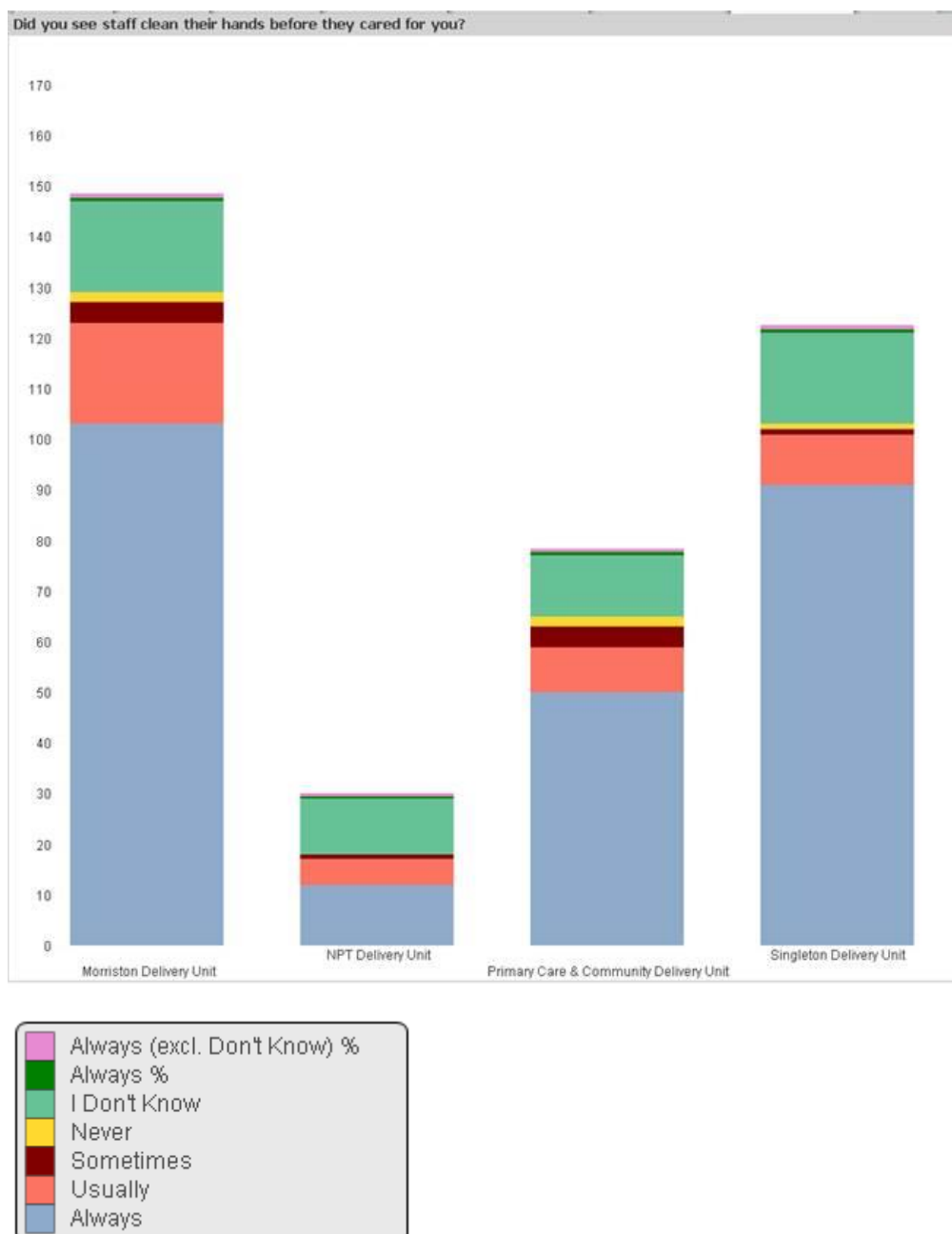
Patient experience surveys of cleaning and hand washing is undertaken within the Health Board wide patient surveys conducted on an ad hoc basis.

Data from cleanliness section on Qlik view. Combined date range 1st October – 18th November shows the following per delivery unit:

Question on the All Wales Survey: How clean is it?

How Clean Is It?					
 Delivery_Unit	Very Clean	Fairly Clean	Not Very Clean	Not Clean At All	Very Clean %
Morrison Delivery Unit	129	18	1	0	87%
NPT Delivery Unit	28	1	0	0	97%
Primary Care & Community...	68	8	1	0	88%
Singleton Delivery Unit	116	6	0	0	95%

Question on the All Wales Survey: Did you see staff clean their hands before they cared for you?



The infection control team have worked with the patient experience team to develop a bespoke patient experience survey around infection control. This survey will be piloted within 4 wards at Morriston hospital From December 2019 for a minimum three month period. This will be evaluated and a Health Board wide approach to patient surveys will be identified and feedback will be included within this report.

3.73 Service improvement

Policies and SOPs

The IPCT are undertaking some work to move over to the Public Health Wales Policies for IPC, removing previous policies and developing SOPs as required for SBUHB. The majority of this work is now complete and these were approved at ICC in October 2019. These policies are now all within the IPC Share Point which is available now for all staff to access.

Datix, incident reporting and investigations

The IPCT are working with the Datix team to review Datix and improve the reporting and investigating within the system. The revised codes for this were approved at the Datix user group on 24 June 2019. The pilot of these new codes commenced 1 August 2019. As of 1 December 2019 the IPC team initiate incident reports for the following:

- Clostridium difficile
- Bacteraemias where the identified organism is Staph. aureus, E. coli, Klebsiella spp. or Pseudomonas aeruginosa
- Periods of Increased incidence of infection
- Outbreaks of infection

ICNet

The Infection Prevention and Control Team are working with ICNet to improve information about patients with infections provided. This work is ongoing and is led at a National level within which SBUHB are part of the relevant groups.

3.74 High Consequence Infectious Disease Response

FFP3 fit testing

SBUHB Respiratory Protection Stock Management Coordinator is accredited to deliver fit testing to staff who can become fit testers. Fit testers are trained and cascade fit testing is underway.

A Health Board Wide Audit was undertaken In September its aim was to offer reassurance that as a HB we were in a position of preparedness and to highlight areas that required support from the Respiratory Protection Coordinator.

The Audit was undertaken at the end of October.

This snap shot for month end of October has highlighted –

- 1 loss of a FFP3 Mask Trainer
- An increase of 5 FFP3 Trainers within the annual retraining compliance
- An increase of 15% of Trainers that **are not** cascading the FFP3 Mask Fit Testing.
- 22% (**74 of 353**) FFP3 Mask Trainers no longer wish to continue as trainers

Where there has been some improvement on the cascading of FFP3 Mask Fit Testing there does remain some areas of concern. Following a cascading audit that was carried out at month end October –

- 17 areas within Morriston Delivery Unit are below 40% FFP3 Mask Fit Test Compliance
- 7 areas within Singleton Delivery Unit are below 40% FFP3 Mask Fit Test Compliance

- Community Services, Mental Health and Learning Disabilities all have lower than 40% FFP3 Mask Fit Test Compliance
- There are no areas of concern for Neath and Port Talbot Delivery Unit

The training schedule is advertised on the Learning and Education part of the Intranet.

After a successful trail of ward based pre booked education session in Neath Port Talbot Delivery Unit this is also being rolled out on the Singleton Site for the Month of January

Current compliance figures for FFP3 of trainers can be seen below:

September Audit	Total	%	October Audit	Total	%	Change < >
Total number of Trainers	354		Total number of Trainers	353		Decrease 1 <
Trainers in compliance	96	28%	Trainers in compliance	101	28%	Same
Trainers not in compliance	179	51%	Trainers not in compliance	173	49%	Decrease 2 % >
Trainers actively cascading	89	25%	Trainers actively cascading	98	27%	Increase 2 % >
Trainers not actively cascading	125	35%	Trainers not actively cascading	176	50%	Increase 15 % <
Trainers Assessed	209	59%	Trainers Assessed	214	60%	Increase 1 % >
Trainers not Assessed	74	21%	Trainers not Assessed	65	18%	Decrease 3% >
Does not want to be a trainer	79	22%	Does not want to be a trainer	74	22%	Same

Key	
Positive increase >	
Negative decrease <	
Same (=) Remains unchanged	

4 GOVERNANCE AND RISK ISSUES

Healthcare associated infections are associated with poor patient outcomes, and are significant quality and safety issues. Continuing failure to achieve the infection

reduction improvements is an unacceptable position for our patients, for the Health Board and Welsh Government and is likely to be a consideration in a decision to escalate to Special Measures.

5 FINANCIAL IMPLICATIONS

A Department of Health impact assessment report (IA No. 5014, 20/12/2010) stated that the best estimate of costs to the NHS associated with a case of *Clostridium difficile* infection is approximately **£10,000**. The estimated cost to the NHS of treating an individual cost of MRSA bacteraemia is **£7,000** (the cost of MSSA bacteraemia could be less due to the availability of a wider choice of antibiotics). In an NHS Improvement indicative tool, the estimated cost of an *E. coli* bacteraemia is between **£1,100** and **£1,400**, depending on whether the *E. coli* is antimicrobial resistant. (*Trust and CCG level impact of E.coli BSIs* accessed online at:

<https://improvement.nhs.uk/resources/preventing-gram-negative-bloodstream-infections/>).

Using these estimates, and the number of cases of these infections within the Health Board in 2019/20 (from 1 April 2018 to 31st March 2019), the estimated financial impact of these healthcare associated infections is shown below.

6 RECOMMENDATION

The Quality & Safety Committee is asked to note the contents of this assurance report.

Governance and Assurance		
Link to Enabling Objectives (please choose)	Supporting better health and wellbeing by actively promoting and empowering people to live well in resilient communities	
	Partnerships for Improving Health and Wellbeing	<input type="checkbox"/>
	Co-Production and Health Literacy	<input type="checkbox"/>
	Digitally Enabled Health and Wellbeing	<input type="checkbox"/>
	Deliver better care through excellent health and care services achieving the outcomes that matter most to people	
	Best Value Outcomes and High Quality Care	<input checked="" type="checkbox"/>
	Partnerships for Care	<input type="checkbox"/>
	Excellent Staff	<input type="checkbox"/>
	Digitally Enabled Care	<input type="checkbox"/>
	Outstanding Research, Innovation, Education and Learning	<input type="checkbox"/>
Health and Care Standards		
(please choose)	Staying Healthy	<input type="checkbox"/>
	Safe Care	<input checked="" type="checkbox"/>
	Effective Care	<input type="checkbox"/>
	Dignified Care	<input type="checkbox"/>
	Timely Care	<input type="checkbox"/>
	Individual Care	<input type="checkbox"/>
	Staff and Resources	<input type="checkbox"/>
Quality, Safety and Patient Experience		
Effective infection prevention and control needs to be everybody's business and must be part of everyday healthcare practice and be based on the best available evidence so that people are protected from preventable healthcare associated infections.		
Financial Implications		
<p>Cost per case of:</p> <p><i>Clostridium difficile</i> infection - approximately £10,000; (YTD £910, 000)</p> <p><i>Staph. aureus</i> bacteraemia - up to 7,000; (YTD £623, 000)</p> <p><i>E. coli</i> bacteraemia – between £1,100 (antibiotic sensitive strains) and £1,400 (antibiotic resistant strains) (YTD £222, 600)</p> <p>Cumulative costs from 1 April to 30 November September 2019 for all three organism is approximately £1, 755, 600.</p> <p>Ongoing costs associated with contracted HPV services (e.g. Bioquell) for high-level environmental decontamination (£9, 000 pcm at Morriston Hospital). This ceased 17.11.19</p>		
Legal Implications (including equality and diversity assessment)		
Potential litigation in relation to avoidable healthcare associated infection.		
Staffing Implications		
None identified.		
Long Term Implications (including the impact of the Well-being of Future Generations (Wales) Act 2015)		

A healthier Wales: preventing infections	
Report History	Previous meeting 23 August 2019
Appendices	Appendix 1: Health Board and Service Delivery Unit Monthly Performance. Appendix 2: IPC Annual work plan Appendix 3: Updated decontamination standards of PPE paper Appendix 4: Poster: the new PPE requirements for endoscope decontamination Appendix 5: Internal audit action plan