Meeting Date	18th April 2019 Quality & Safety Committee	Agenda Item	3.1
Report Title	Infection Control Report		
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Report Sponsor	Lisa Hinton, Assistant Director of Nursing for Infection Prevention & Control		
Presented by	Gareth Howells, Director of Nursing & Patient Experience		
Freedom of Information	OPEN		
Purpose of the Report	This contents of this report were presented on 25th March to the Health Board's Infection Prevention & Control Committee, which is a sub-group of the Quality & Safety Committee. This is an assurance report provides an update on prevalence, progress and actions for healthcare associated infections (HCAIs) within ABMU for the financial year 2018/19 to 28th February 2019. Additionally, the report includes concerns identified by the Infection Prevention & Control Committee that require escalation to the Quality & Safety Committee. Namely: • Lack of dedicated decant facilities within acute hospital sites • Insufficient funded cleaning hours at Singleton Hospital to meet the minimum National Standards of Cleaning • Lack of appropriate domestic services supervisory staff to undertake the required level of audit to provide assurance • Insufficient Estates Officers within the Health Board to undertake the role of Responsible Person to satisfy national standard requirements • Insufficient funding to provide the appropriate level of cleaning of ventilation grilles, to meet requirements of maintaining a safe and clean patient care environment.		
Key Issues	Antimicrobial resistance (AMR) is an International concern. Antimicrobial stewardship and a reduction in Hospital Acquired Infection are both pivotal to improve patient outcomes and to reduce AMR. The drive for improved patient outcomes in relation to Healthcare Associated		

	Infection require the Service Delivery Units to introduce Quality Improvement initiatives that will assist us to achieve the required infection reduction targets set by the Welsh Assembly Government.			
Specific Action Required *(please ✓ one only)*	**Information**	**Discussion**	**Assurance**	**Approval**
			✔	
Recommendations	The Health Board is asked to: • Note reported progress against healthcare associated infection reduction priorities up to 28th February 2019. • Note the healthcare associated infection concerns escalated from the Infection Prevention & Control Committee to the Quality & Safety.			

INFECTION CONTROL QUALITY AND SAFETY COMMITTEE MAIN REPORT

1.0 Situation

1.1 Purpose
To provide an update on prevalence, progress and actions for healthcare associated infections (HCAIs) within ABMU for the financial year 2018/19 to date.

1.2 Key issues
- Significant improvements in infection rates at ABMU, but there is a need for more consistency to achieve reductions in infection rates under targeted intervention.
- The challenges in relation to staffing within the infection control team continues to put pressure on the service, especially in Primary Care and Community Services.
- No UVc cleaning within Singleton or Neath Port Talbot hospitals and the need to embed HPV cleaning across all sites.
- Lack of decant facilities which would enable ward areas to be closed while estates works are completed is having an impact on the ability to further reduce rates of infection.
- Compliance with training requirements remains low and increases in training for level one infection control training are required across all staff groups.
- Identified leads are required for all site on decontamination in order to provide a robust governance structure for standardised decontamination across the Health Board.

2.0 Background

ABMU are under targeted intervention for HCAIs as they have one of the highest rates of infection within Wales. The Health Board has committed to achieving the following infection reduction priorities within its Annual Plan 2018/19:

- *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.

There have been considerable improvements made to reduce the rates of HCAIs, but there remains a challenge in managing these reductions over a 12-month period and not immediately. Within this, there is a need to ensure patients do not come to harm while the required reductions are achieved.

The Health Board face significant challenges due to current demands on services and capacity alongside known pressures during the winter from infections such as influenza and Norovirus placing delivery units under additional pressure.

The estate and lack of isolation facilities make managing patients with known or suspected infections a challenge which is impacted during periods of high escalation.

Assessment

3.1 *HCAIs*

Significant progress has been made in reducing rates of HCAIs however the Health Board are not on trajectory to achieve the reduction targets for staph aureus bacteraemias. A breakdown of cases can be seen in table 1. Appendix 1 shows the HCAI update report.

Measure	Welsh Government Target	IMTP Profile February	Cases February 2019	Total number of cases YTD	Number of cases above or below trajectory
C. difficile	136 cases (max.) 26/100,000 pop.	15	7	171	47 ⬇
Staph. aureus bacteraemia	105 cases (max.) 20/100,000 pop.	19	16	175	8 ⬆
E. coli bacteraemia	352 cases (max.) 67/100,000 pop.	39	31	463	1 ⬆

Table 1.

3.2 Key achievements

- For the month of February, the Health Board were below trajectory for all HCAIs under targeted intervention.
- There were zero hospital acquired cases of *Clostridium difficile* infection in:
  - Neath Port Talbot Hospital Delivery Unit for the third consecutive month;
  - Princess of Wales Hospital Delivery Unit for the second consecutive month;
  - Singleton Hospital Delivery Unit for the first time since May 2017.
- The revised environmental reactive and pro-active cleaning programme, with the focus on a '**4D**' programme: **D**eclutter, **D**ecant, **D**eep-clean and **D**isinfect, was implemented from 18th February.
- Ultraviolet-C environmental decontamination technology was re-introduced in Morriston from 18th February.

3.3 Actions

- Continue with the "grip and focus" required to maintain the Health Board improvements with IPC
- Review of UV-C and Hydrogen Peroxide Vapour (HPV) decontamination programmes Health Board wide.
- Review of infection control team post boundary changes to ensure the service meets the requirements of the organisation.
- Work with the estates team and the delivery units to establish a work plan of environmental improvements

- As part of the Bridgend Boundary change, safely hand over the Bridgend IPC service to Cwm Taf University Health Board.
- To review the information provided to delivery units to assist the prevention of infections.
- To revisit the post infection review process and ensure it focuses on learning and improvements.
- Review of the Root Cause Analysis (RCA) process to refine the process and therefore ensure more thorough investigation and shared learning.

3.4 Decontamination
- The All Wales Endoscopy Decontamination Survey report should be received by the end of April. Each Delivery Unit has commenced progress against their respective action plans. Notable progress in the following areas has been made:
    - Meetings have taken place to discuss the move to an automated process for Nasendoscope decontamination for Ward T and SDMU in Morriston hospital and the ENT department in Neath Port Talbot Hospital.
    - A new drying cabinet has been received by HSDU in Morriston Hospital. This will be up and running shortly and replace the current storage in the theatre department.
    - The remaining washer disinfector in Morriston theatres will be decommissioned at the end of the month. All scope decontamination will then take place in HSDU.
    - Singleton Radiology Department have recommenced use of Hydrogen Peroxide gas disinfectors (Trophons) for the decontamination of Ultra-sound probes.
    - A capital bid has been put forward to purchase a SureStore® vacuum pack system for Singleton HSDU. If successful, this will replace the requirement for a new drying cabinet to be installed within Singleton theatres.
- Singleton Delivery Unit held its inaugural, site-based decontamination meeting. This was productive and many actions were progressed. This meeting will report into the Health Board's Decontamination Sub Group.

3.5 Decontamination Actions
- Morriston Delivery Unit to nominate an Operational Decontamination Lead, responsible for establishing the Morriston Decontamination meetings. This group would monitor progress against Morriston's Decontamination Action Plan. This group also would report into the Health Board's Decontamination Sub Group.

3.6 Training

Infection Prevention and Control - Level 1 - 3 Yearly to 28 February 19

Staff Group	Compliance %
Add Prof Scientific and Technic	86.25%
Additional Clinical Services	81.49%
Administrative and Clerical	71.62%
Allied Health Professionals	84.89%
Estates and Ancillary	61.72%
Healthcare Scientists	79.23%
Medical and Dental	27.02%
Nursing and Midwifery Registered	81.78%

3.0 CONCERNS ESCALATED BY THE INFECTION PREVENTION & CONTROL COMMITTEE

3.1 Lack of dedicated decant facilities within acute hospital sites, which would provide the facility for:
- deep cleaning/decontamination following infections,
- refurbishment and service reconfiguration without exposing patients to potential risk during building work;
- planned preventative maintenance in relation to electrical, medical gases and fire safety, and maintaining the integrity and safety of the patient care environment;
- surge capacity at times of extreme service pressures, e.g. during winter, or following a fire incident (as experienced recently in Singleton Hospital).

3.2 Insufficient funded cleaning hours at Singleton Hospital to meet the minimum National Standards of Cleaning (the other acute sites are funded to deliver the minimum standards).

3.3 Lack of appropriate domestic services supervisory staff to undertake the required level of audit to provide assurance that patient care areas are being effectively cleaned.

3.4 Insufficient Estates Officers within the Health Board to undertake the role of Responsible Person (in relation to Decontamination, Specialist Ventilation, Electrical Safety, Medical Gases, etc.) in order to satisfy national standard requirements (detailed within relevant national Health Technical Memoranda).

3.5 Insufficient funding to provide the appropriate level of cleaning of ventilation grilles, to meet requirements of maintaining a safe and clean patient care environment.

4.0 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.

5.0 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 2018/19 (from 1 April 2018 to 28 February 2019), the estimated financial impact of these healthcare associated infections has been calculated as:

	Total Number of cases	Cost per case (approx.)	Total cost
Clostridium difficile	171	£10,000	£1,710,000
Staph. aureus bacteraemia	175	£7,000	£1,225,000
E. coli bacteraemia (antibiotic sensitive)	363	£1,100	£399,300
E. coli bacteraemia (multi-resistant)	100	£1,400	£140,000
Total impact HCAI			£3,474,300

6.0 RECOMMENDATION

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

Governance and Assurance

Link to corporate objectives *(please ✔)*	Promoting and enabling healthier communities	Delivering excellent patient outcomes, experience and access	Demonstrating value and sustainability	Securing a fully engaged skilled workforce	Embedding effective governance and partnerships
		✔			

Link to Health and Care Standards *(please ✔)*	Staying Healthy	Safe Care	Effective Care	Dignified Care	Timely Care	Individual Care	Staff and Resources
		✔					

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

Cost per case of:
Clostridium difficile infection - approximately £10,000;
Staph. aureus bacteraemia - up to 7,000;
E. coli bacteraemia – between £1,100 (antibiotic sensitive strains) and £1,400 (antibiotic resistant strains).
Cumulative costs from 1st April to 28th February 2019 for all three organism is approximately £3,474,300.
Ongoing costs associated with contracted HPV services (e.g. Bioquell) for high-level environmental decontamination.
Cost associated with Local Laboratory testing for Influenza (Public Health Wales will confirm).

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 21st February 2019
Appendices	Appendix 1 – Health Board and Service Delivery Unit Monthly Performance.