



**GIG  
CYMRU  
NHS  
WALES**

Bwrdd Iechyd Prifysgol  
Bae Abertawe  
Swansea Bay University  
Health Board



## Infection Prevention and Control Report

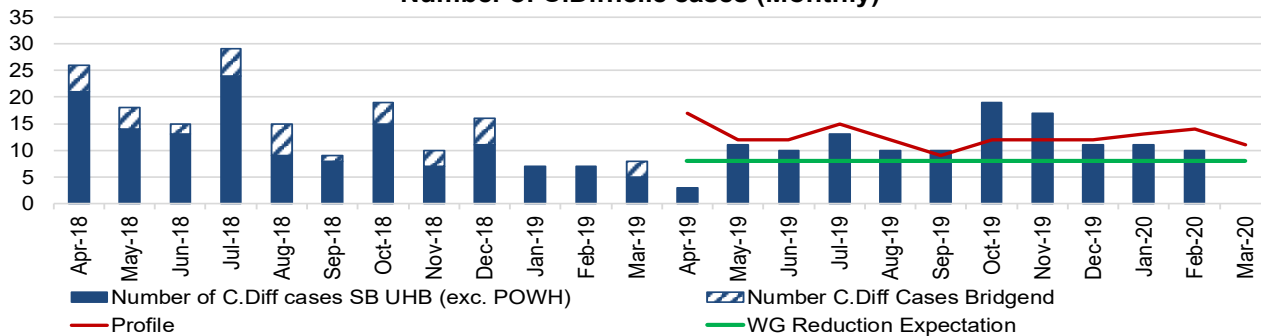
	<b>Agenda Item</b>
<b>Freedom of Information Status</b>	Open
<b>Performance Area</b>	Healthcare Acquired Infections Update Report
<b>Author</b>	Delyth Davies, Head of Nursing Infection Prevention & Control
<b>Lead Executive Director</b>	Gareth Howells, Director of Nursing & Patient Experience
<b>Reporting Period</b>	18 March 2020

### Summary of Current Position

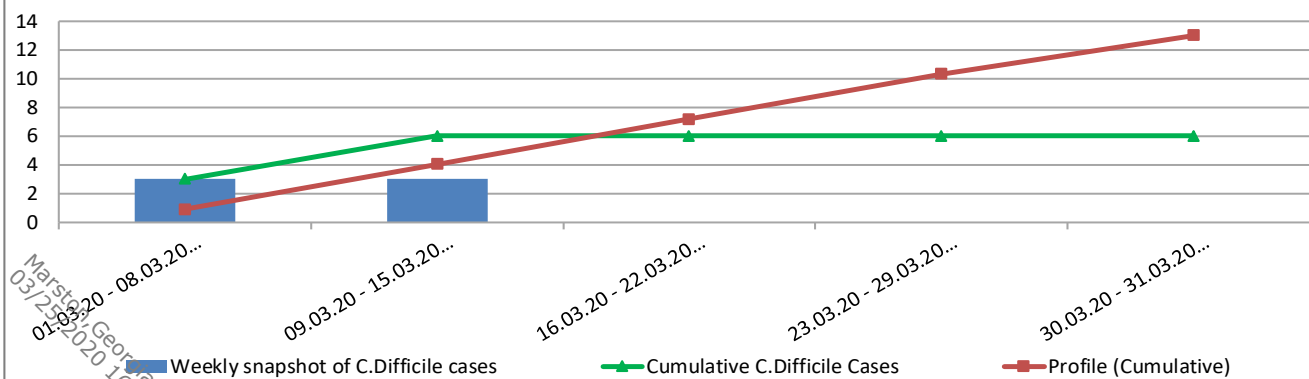
**Cumulative infection incidence in comparison to 29.02.20 with other Welsh Health Boards (weekly cases in March are shown in the second graph of each pair):**

- *C. difficile* – 2<sup>nd</sup> highest incidence in Wales.
- *Staph. aureus* bacteraemia – highest incidence in Wales.
- *E. coli* bacteraemia – 3<sup>rd</sup> highest incidence in Wales.
- *Klebsiella spp.* bacteraemia – 3<sup>rd</sup> lowest incidence in Wales.
- *Pseudomonas aeruginosa* bacteraemia – 2<sup>nd</sup> highest incidence in Wales.

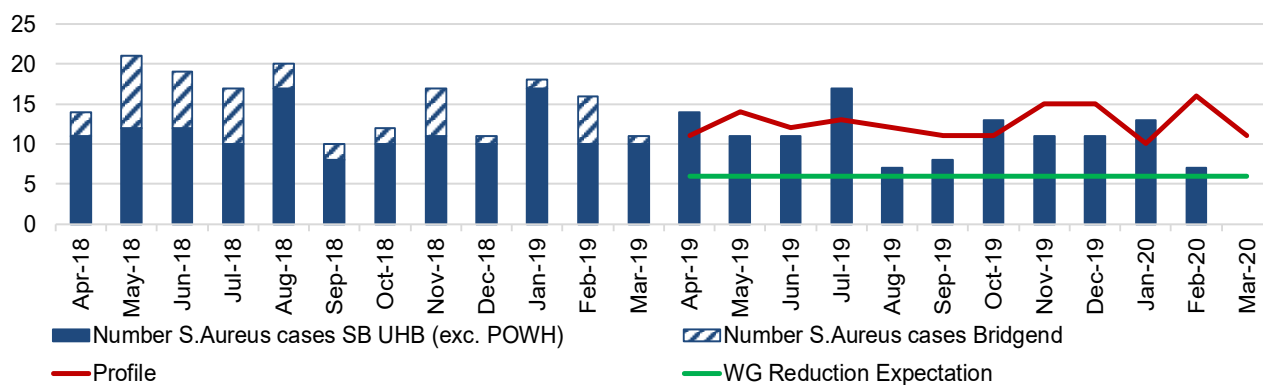
**Number of C.Difficile cases (Monthly)**



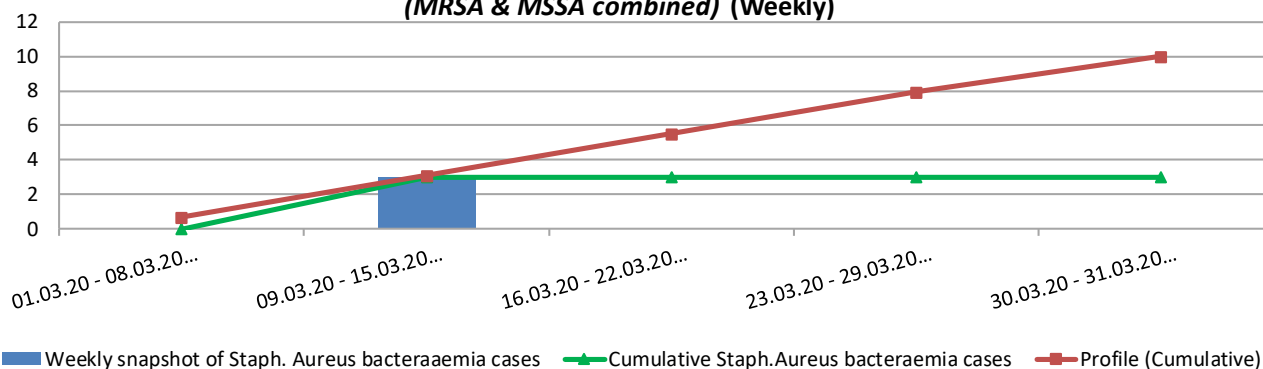
**Number of C.difficile cases (Weekly)**



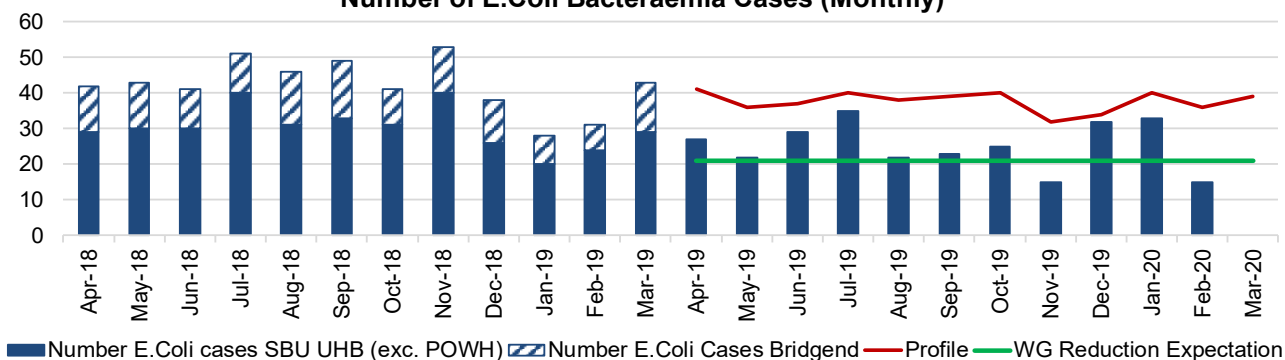
**Number of Staph.Aureus Bacteraemia Cases (MSSA & MRSA combined) (Monthly)**



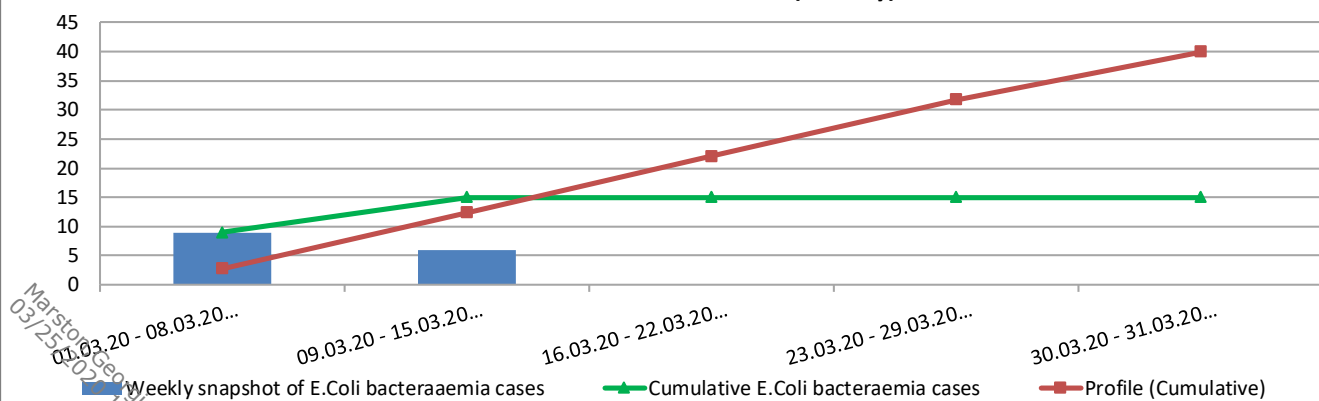
**Number of Staph. aureus bacteraemia (MRSA & MSSA combined) (Weekly)**

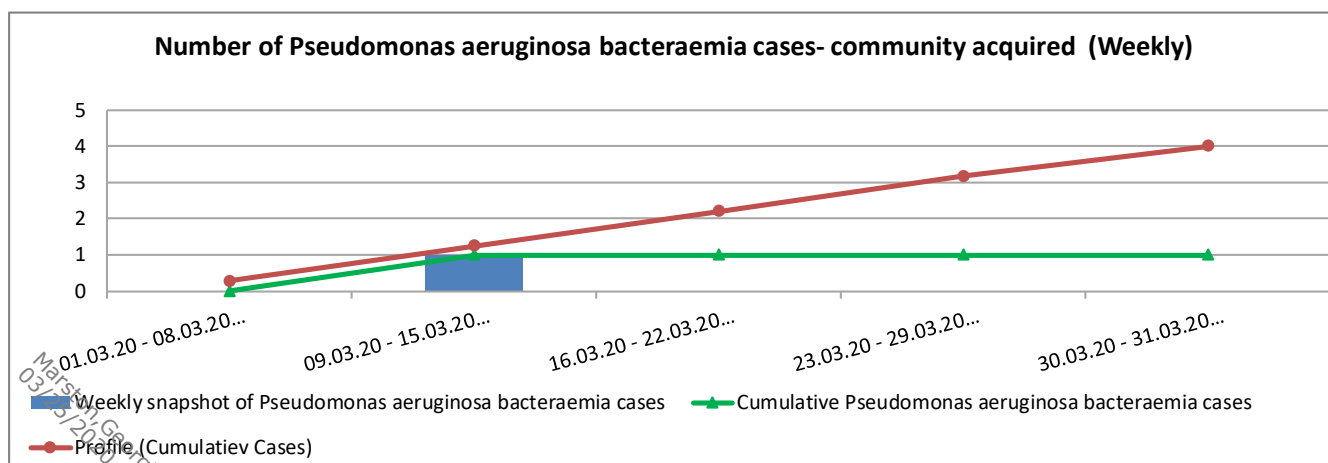
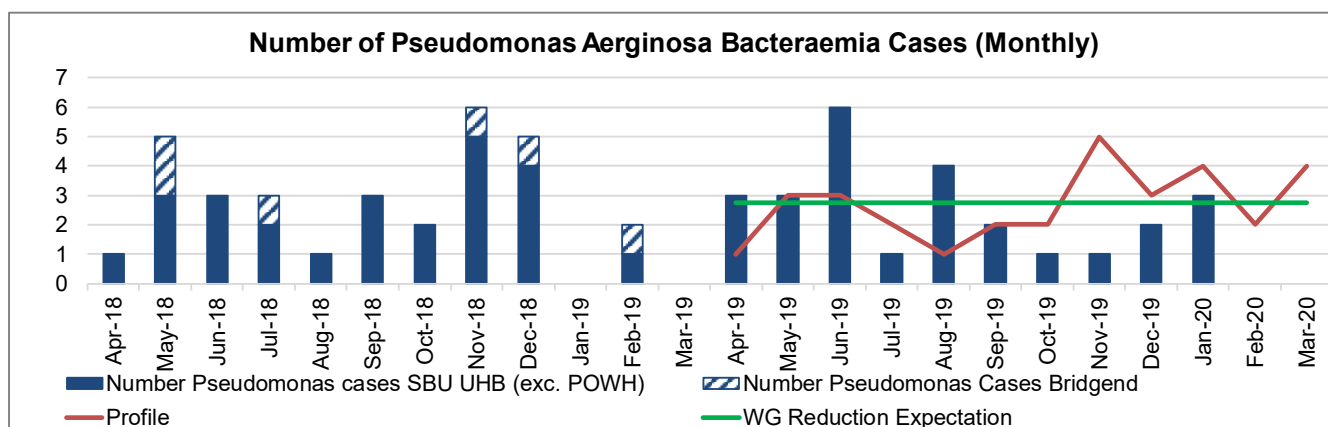
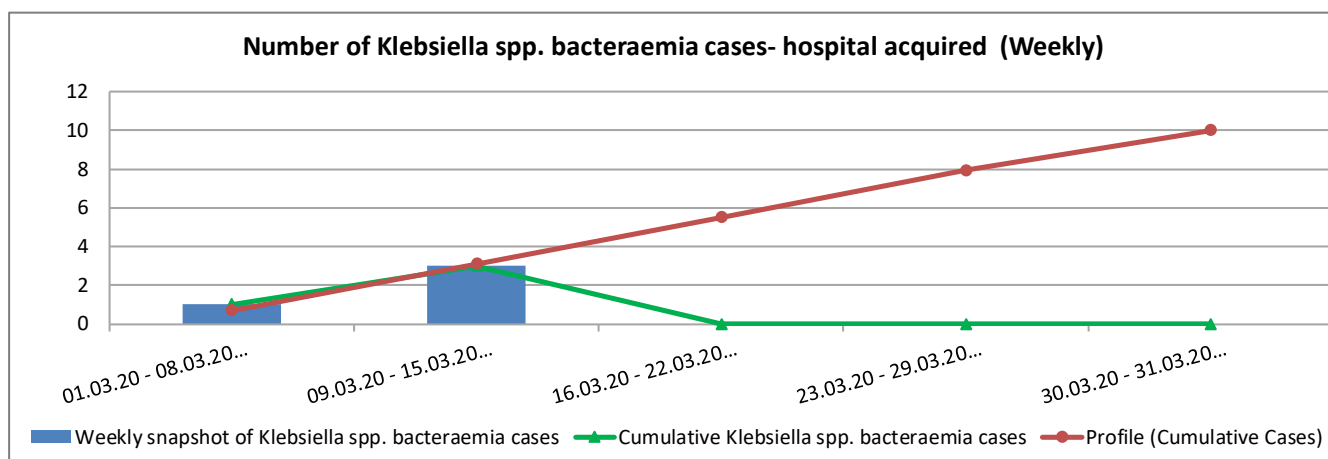
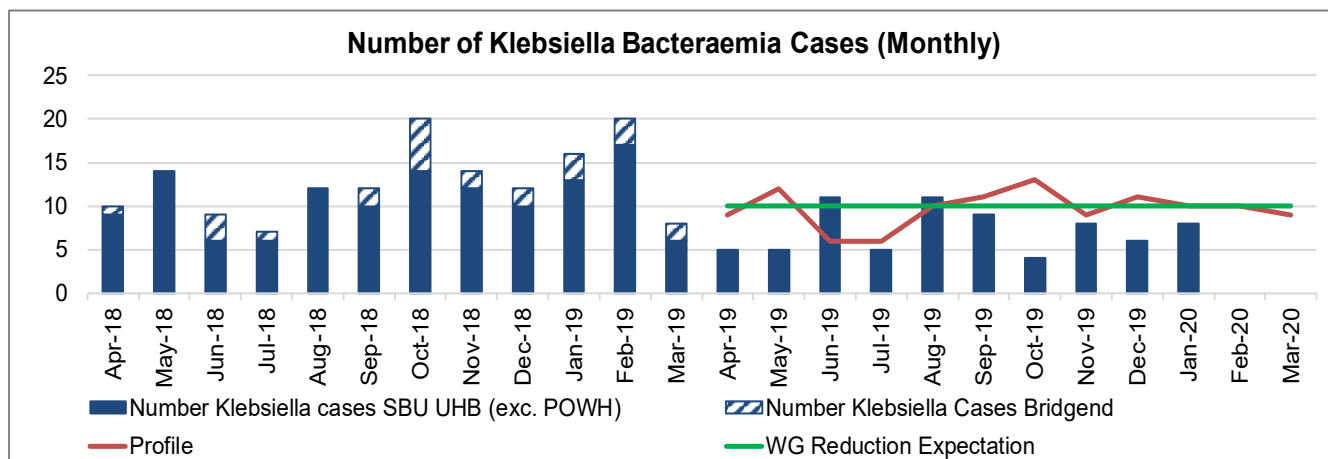


**Number of E.Coli Bacteraemia Cases (Monthly)**



**Number of E.coli bacteraemia (Weekly)**





## Achievements

- To 18<sup>th</sup> March 2020, approximate year-on-year HCAI performance (compared with position to 31/03/19) in HCAI - *C. difficile*:  $\geq 5.4\%$ ↑; *Staph. aureus* bacteraemia:  $\leq 7\%$ ↓; *E. coli*:  $\leq 13\%$ ↓; *Klebsiella spp.*:  $\leq 36\%$ ↓; *Pseudomonas aeruginosa*:  $\geq 12\%$ ↑. The *C. difficile* situation continues to worsen; this is predominantly due to the position in Morriston Delivery Unit.
- ARK (Antibiotic Review Kit) – now being utilised on all wards in Morriston.
- Agreement for maintenance and servicing contracts for UV-C for a two year period.
- The Infection Prevention & Control Nurses continue to initiate Datix incident reporting of hospital acquired cases of targeted infections. These incident reports are continued, investigated and closed by the relevant Delivery Unit staff.

## Challenges, Risks and Mitigation

- Challenging to sustain improvements in reduction of targeted infections.
- Morriston Delivery Unit has not sustained a recovery in relation to *C. difficile*. The activity and pressures on the site are impacting on recovery efforts.
- Reduction initiatives are compromised by 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.
- Shortfall in cleaning hour provision on acute sites due to vacancies, sickness. Mitigation – agreed investment to increase cleaning hours in Morriston and Singleton Hospital.
- With staffing shortages, accessing IPC training can be challenging for staff.
- Outbreak of extensively antibiotic resistant, carbapenemase producing organisms (CPO), *Klebsiella pneumoniae*, related to Ward G continues. To 16<sup>th</sup> March, the number of cases was as follows:
  - 15 confirmed *Klebsiella pneumoniae* with the same genetic strain (ST307);
  - 3 probable *K. pneumoniae* with the same resistance mechanism, awaiting sequence typing;
  - 5 possible *K. pneumoniae* case, currently awaiting resistance mechanism and sequence typing.

As of 16<sup>th</sup> March, 10 of these cases remain in hospital: 7 in Morriston Hospital; 3 in Singleton Hospital.

The Delivery Unit Operational Outbreak group meets weekly and reports to the Health Board Strategic Outbreak group which meets weekly also. The extension of the outbreak continues to impact on the provision of general surgery and trauma and orthopaedic surgery. This ongoing situation has the potential to cause a very significant challenge for staff. It is a significant concern that new cases continue to be identified, and that previous cases are being readmitted, and that currently there are two acute sites in which this outbreak strain may severely impact on staff and patients in the short, medium and long term. Increases in the numbers of these very extensively resistant bacteria compromises the ability to successfully treat patients who have infections, leading to potentially poor outcomes for patients.

There is a more critical requirement for a decant facility at Morriston, to assist in the control of this CPO outbreak.

- There have been several confirmed COVID-19 patients within the Health Board, and may suspected cases, all of which are placing significant additional strain on services. The Infection Prevention & Control Team has commenced 7-day working, which provides support for Delivery Units with infection related risk assessments. Preparedness training continues and the Infection Prevention & Control Team is providing additional hand hygiene and cascade training to nominated Primary Care & Community Services staff in 'Donning and Doffing' appropriate Personal Protective Equipment to enable community staff to safely care for suspected and confirmed cases.

### Action Being Taken (what, by when, by who and expected impact)

#### **Domestic staff recruitment**

- **Action:** Recruitment process for additional cleaning staff progressing. **Target completion date:** September 2020. **Lead:** Support services manager. **Impact:** Increased domestic staffing to provide cleaning hours required.

#### **Meeting national minimal standards of cleanliness**

- **Action:** Following the presentation to SLT on 5<sup>th</sup> February 2020, there was agreement to fund additional cleaning hours. The next steps will determine the staging of funding and recruitment of additional staff. **Target completion date:** March 2021. **Lead:** Support services manager. **Impact:** Agreed staged approach to increasing funding for increased domestic staffing to provide cleaning hours required to meet national minimum standards

#### **Decant\***

- **Action:** Solutions for decant to be identified for Morriston and Singleton. **Target completion date:** September 2020. **Lead:** Assistant Director of Nursing IPC and Service improvement capital planning. **Impact:** Solution for decant to be identified and proposals for a solution to be presented to SLT.

#### **Access to training**

- **Action:** The All Wales standard precautions training remains available, supplemented by the IPCT and some educators who deliver this face-to-face. In addition, the IPCT deliver bespoke sessions to groups of staff or individuals. Sessions planned and programme of training to be implemented throughout 2020 and improve compliance with training. **Target completion date:** December 2020. **Lead:** Matron for IPC. **Impact:** Improved practice in relation to IPC.

#### **UV-C technology**

- **Action:** The two UV-C machines for Singleton have been delivered and onsite training is to be agreed. **Target completion date:** March 2020. **Lead:** Support services manager. **Impact:** UV-C enhanced technology to be present on each site for environmental decontamination.

#### **C.Diff Control Group\***

- **Action:** In addition to the Board-wide **C. difficile Control Group**, a meeting is planned Morriston Delivery Unit's Nurse Director, Heads of Nursing, the Assistant Director of Nursing IPC, and the Head of Nursing IPC to look at how a DU specific HCAI improvement plan can support a coordinated approach to address key areas and to discuss the assurances required going forwards. **Target completion date:** September 2020. **Joint Leads:** Unit Nurse Director for Morriston, and Assistant Director of Nursing IPC. **Impact:** Delivery Unit specific improvement plan to steer improvement actions.

#### **Morriston Hospital-wide CPO outbreak**

- **Action:** an operational Hospital Outbreak Control Group meets regularly to monitor ongoing outbreak of extensively resistant bacteria in Morriston. This group is overseen by a recently established, high level Health Board Outbreak Control Group. Difficult decisions on admitting patients to Trauma and Orthopaedic wards will need to be made by the Delivery Unit and by the Health Board. **Target completion date:** On closure of the outbreak. **Lead:** Unit Nurse Director for Morriston. **Impact:** Outbreak closure and ongoing maintenance of standards.

## COVID-19

- **Action:** The Infection Prevention & Control Team will continue to support Delivery Units as they prepare for COVID-19 cases. Additional hand hygiene and PPE Donning & Doffing Train the Trainer sessions are being held so facilitate each Delivery Unit in having significant numbers of trainers available as and when cases increase and are admitted. Each Delivery Unit must identify key individuals to coordinate and oversee the training, PPE supplies, and coordinate patient pathways to provide assurance that both staff, patients' and visitors' safety can be maintained. Additionally, the Infection Prevention & Control Team is reviewing the team resources and how best these are configured to meet current demands, whilst additionally supporting the wellbeing of members of the IPC team.

\* A number of target completion dates have been set back due to current COVID-19 prioritisation.

## Financial Implications

Estimated HCAI costs: *Clostridium difficile* infection – approx. **£10,000**; MSSA/MRSA bacteraemia approx. **£7,000**; *E. coli* bacteraemia - between **£1,100** and **£1,400** (multi-resistant). Based on the cumulative cases of these HCAI (from 1 April 2019 to 18<sup>th</sup> March 2020), the estimated financial impact would be approximately **£2,606,300**.

A paper published in 2012 estimated the clinical and economic burden of *Clostridium difficile* infection, and estimated that the additional bed days per case of *C. difficile* infection was 21 days. Using this estimate, the additional bed days as a result of the cumulative cases of *C. difficile* infection that occurred in inpatients (n=101) in SBUHB hospitals is calculated as approximately **2,121 bed days** (estimated cost approx. **£875,973**, based on Welsh Government 2013 estimate of a hospital bed at £413/day).

## Recommendations

Members are asked to:

- Note reported progress against HCAI priorities up to 18<sup>th</sup> March and agree actions.

Marston, Georgia  
03/25/2020 16:22:13