

Infection Prevention and Control Assessment

February 2020

Introduction

Swansea Bay University Health Board are under targeted intervention for HCAs.

Staph. aureus bacteraemia

Swansea Bay have the highest incidence in Wales. Focused work is required to analyse the source of these in order to direct interventions for improvement.

In January 2020 Primary Care Community Services, Morriston, Neath Port Talbot and Singleton Hospitals were over trajectory.

Between 1 December – 1 February 2020 the following Pii and outbreaks occurred:

Noro virus

There are high levels of Norovirus within our community which impacts on our hospitals.

The health board has had over 17 incidences and outbreak of Noro Virus. The health board has been hit hard with ward and bay closures due to Noro virus. This year has presented with a high incidence of vomiting which is known to disseminate the virus widely. This has also affected the number of staff reported as part of the ward outbreaks.

Clostridium difficile

Periods of increased incidences (Pii) have been identified in **9** 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.

Hotspots

Singleton

Clostridium difficile

Singleton Ward 12 have had 2 cases of 695, therefore a transmission event cannot be ruled. We are awaiting a further result for this period of increased incident on Ward 12.

Influenza

Singleton NICU had 4 cases of concern with one positive Influenza A (H3)

Morriston

Clostridium difficile

Ward J Morriston have had 2 cases of 078 and outstanding ribotypes. Ward G have had four cases of healthcare acquired *Clostridium difficile* with outstanding ribotyping.

Influenza

Morrison Ward F reported 3 cases. Anglesey ward reported 2 cases of healthcare acquired influenza A cases.

Outbreaks of extensively antibiotic resistant organisms.

Outbreak of extensively antibiotic resistant bacteria related to Ward G continues, involving 2 concurrent outbreaks of different multi-drug resistant organisms; 12 patients with the same multi-drug resistant *Klebsiella pneumoniae*; 3 patients with the same multi-drug resistant *Enterobacter cloacae*. Three additional cases have been identified in February 2020, and further testing is being undertaken to confirm whether these are linked to the outbreak strain. The outbreak has included patients in at least 3 separate wards (Ward G, Ward V and Ward B), with a possible involvement of the Surgical Decision Making Unit, which is being investigated. This indicates that the potential for ongoing transmission remains indicating that ongoing transmission continues to be an issue despite control measures. Screening of contacts continues. This ongoing situation has the potential to cause a very significant challenge for 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.

We are currently investigating an increased incidence of multi resistant *Pseudomonas* on Powys Ward and the Burns unit.

Health board wide Pii and Outbreaks

| Delivery Unit/ Speciality | Reason for Closure/Organism | Ward Name | No. of Patients affected | Outcome | Triggered: Predicted End date |
|------------------------------|---|-----------|---|--|--|
| Morrison | Concurrent Oxa 48 like Carbapenemase Producing Organisms(CPO) Outbreak and | Ward G | 32 patients of interest | <i>Klebsiella Pneumoniae</i> CPO (12 meeting case definition) <i>Enterobacter Cloacae</i> (3)Awaiting further typing to out rule further transmission | September :Ward Currently Closed Further typing |
| Singleton | <i>C-difficile PII</i> | SAU | 2 | Distinct types | 07/11/19: 05/12/19 |
| Singleton | <i>C-difficile PII</i> | 12 | 4 | 2x 695, 1 x 011, 1x outstanding | Pii Nov. extended :06/02/2020 |
| Morrison | <i>C-difficile PII</i> & Noro Virus | Ward D | 3 C-diff/ 19 probably Noro virus (8 Confirmed) | Two samples not able to be typed 1x 012. Approx. 50 lost bed days incurred | Pii 25/11/19:24/12/19 Ward opened 06/12/2019 |
| Morrison | <i>C-difficile PII</i> | SDMU | 3 | Distinct types | Pii Nov. extended to :30/12/20 |

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|-----------|--|-------------------|------------------------------------|-----------------------------------|---|
| NPTH | Noro Virus | Ward G | 8 x Staff, 11 Pts. | 4 x Noro virus | 29/11/2019: 16/12/2019 opened |
| Morrison | Increased incidence of Pseudomonas | Powys ward | 3 | Possible transmission event | Nov; Investigation in to source ongoing |
| Morrison | Influenza and Diarrhoea | Ward F | 8 patients & 10 staff | 3x Inf A 1x Noro Virus | 03/12/19:11/12/19 |
| Morrison | <i>C-difficile PII</i> | Ward A | 2 | Distinct types | 04/12/19: 02/01/20 |
| Morrison | Noro Virus | Ward R | 12 Pts, 6 staff | 4 Noro Virus | 04/12/19:16/12/19 |
| Morrison | <i>C-difficile PII</i> | Ward R | 2 | Distinct types | 05/12/19: 02/01/20 |
| Singleton | <i>C-difficile PII</i> | Ward 8 | 3 | Distinct types | 06/12/19: 11/01/20 |
| Morrison | Noro Virus | Ward J | 11 pts, 7 staff | 2x Noro Virus | 08/12/19:16/12/19 |
| NPTH | Noro Virus | Ward F | 3 pts, 1 staff | 2x Noro Virus | 09/12/19:14/02/19 |
| Singleton | Influenza | Singleton NICU | 4 suspected (1 confirmed) | 1x influenza A(H3) | 09/12/19:12/12/2019 |
| Morrison | <i>C-difficile PII</i> | Ward T | 2 | Distinct types | 10/12/19: 19/01/20 |
| NPTH | Influenza | Ward B | 4 suspected, o staff | 2x Influenza A (H3) | 18/12/19:31/12/19 |
| Morrison | Influenza | Anglesey Ward | 3 pts 1 Staff | 2x Influenza A (H3) | 21/12/19: 02/01/20 |
| Morrison | Noro Virus | Dan Danino | 11 pts 7 staff | Noro | 21/12/19:06/01/20 |
| NPTH | Noro Virus | Ward B | 3 pts, 1 staff | Probable Noro Virus | 02/01/20:09/01/20 |
| Morrison | <i>C-difficile PII</i> | Ward J | 3 | 015/078/ Outstanding | 03/01/20: 21/02/20 |
| Morrison | Noro Virus | AMAU East | 19 pts, 5 Staff | 10x Noro Virus | 09/01/20:05/02/20 20/01/20:23/01/20 28/01/20:29/01/20 |
| Morrison | Noro Virus | AMAU West | 15 pts 28staff | 10 + Noro Virus | 10/01/20: Currently Closed |
| Morrison | Noro Virus | Clydach | 11 pts, 0 Staff | 9 Noro Virus | 10/01/20: 22/01/20 |
| Morrison | Noro Virus | Ward F | 9pts, 5 Staff | 4 Noro Virus | 11/01/20:20/01/20 |
| NPTH | Noro Virus | Ward E | 8 pts, 8 staff | 2 Noro virus | 13/01/20: 24/01/20 |
| Morrison | Influenza | Anglesey Ward | 2 pts | influenza (H3) | 16/01/20: 22/01/20 |
| Morrison | <i>C-difficile PII</i> | Ward G | 4 | 4 X Outstanding ribotyping | 16/01/20:21/02/20 |
| Cefn Glas | Noro Virus | Gwelfor Ward | 4 Pts | Probable Noro Virus | 22/01/20:30/01/20 |

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| Morrison | Noro Virus | Ward J | 26 pts, 5 Staff | 11 Noro Virus | 23/01/20: Currently Closed |
| Morrison | Noro Virus | Ward S | 14 pts, 4 staff | 5x Noro Virus | 27/01/20: Currently Closed |
| Morrison | Noro Virus | Ward A | 4 pts | 1x Noro Virus | 26/01/20:29/01/20 |
| Morrison | Noro Virus | SDMU Bed area | 6 pts,2 staff | 2x Noro Virus | 27/01/20: 04/02/20 |
| Morrison | Noro Virus | Anglesey Ward Bay C | 6 pts | 2xNoro Virus | 01/02/20: Currently Closed |

Risks

There are three, risk level high accepted risks on the risk register relating to infection prevention and control. These are as follows:

- Failure to achieve infection control targets set by Welsh Government – this relates to being under targeted intervention.
- Lack of decant facilities – plans are currently under development to ascertain potential short and long terms solutions for both Morrison and Singleton Hospitals.
- Variations in access to enhanced technologies for environmental decontamination across the HB – the revised 4D cleaning process was implemented in February 2019 and updated December 2019 to take into account the escalation to advances technologies. The HB has agreed to fund two UVc machines for Singleton resulting in each acute site having access to their own UVc technology for environmental decontamination.

Actions

| Action | Person responsible | Date for completion |
|--|-----------------------------------|---------------------|
| HB to purchase 2 x UVc environmental decontamination machines for Singleton Hospital | Lisa Hinton/Joanne Jones | 31.03.20 |
| Identify and recruit to domestic hours to meet National Minimum standards of cleanliness | Joanne Jones | 31.03.21 |
| Identify and develop business case for short and long term decant facility for Morrison Hospital | Mark Madams/Amanda Davies | 31.03.20 |
| Identify and develop business case for short and long term decant facility for Singleton Hospital | Christine Williams/Tony Wiltshire | 31.03.20 |
| Initiate Morrison planning meeting for a delivery unit led site wide improvement plan and management group to oversee this is being created. | Lisa Hinton/Mark Madams | 29.02.20 |
| Maintain current C.Diff control group in place for the Health Board following increasing numbers of C.Diff resulting in Piis at Singleton, Morrison, Community and primary care services alongside the C.Diff improvement plan | Lisa Hinton | 13.02.20 |

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| Review and refresh outbreak control group for the outbreak of extensively antibiotic resistant bacteria at Morriston Hospital. | Lisa Hinton | 07.03.20 |
| Develop a plan for de-escalation from pre-emptive beds and present to SLT. | Brendan Healy | 31.03.20 |
| Alert concerns regarding medical engagement with standard infection control precautions with medical director | Lisa Hinton | 13.02.20 |
| Clarify roles of infection control team and delivery unit in terms of day to day infection control responsibilities | Lisa Hinton | 31.03.20 |
| Continue to offer and deliver bespoke and opportunistic infection control training to staff | Joanne Walters | 31.03.20 |
| Focused work is required to analyse the source of <i>Staph. aureus</i> bacteraemia in order to direct interventions for improvement. | Delyth Davies/Hibo Asad | 30.04.20 |
| Increase establishment for IPC team. Recruit into vacant posts. | Lisa Hinton | 01.05.20 |
| Review service provision of infection control to ensure it meets the needs of the whole HB for the future. | Lisa Hinton/Delyth Davies/Jo Walters | 30.04.20 |