



**GIG  
CYMRU  
NHS  
WALES**

Bwrdd Iechyd Prifysgol  
Bae Abertawe  
Swansea Bay University  
Health Board



## Infection Prevention and Control Report

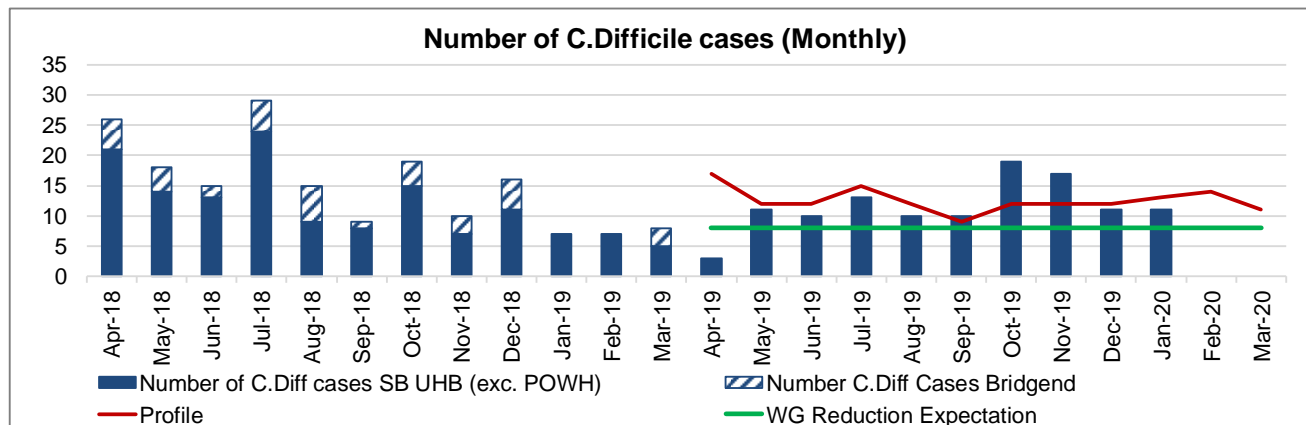
|                                      |   |     |
|--------------------------------------|---|-----|
|                                      | <b>Agenda Item</b>  | 2.2 |
| <b>Freedom of Information Status</b> | Open  |     |
| <b>Performance Area</b>              | Healthcare Acquired Infections Update Report                        |     |
| <b>Author</b>                        | Delyth Davies, Head of Nursing Infection Prevention & Control       |     |
| <b>Lead Executive Director</b>       | <b>Gareth Howells, Director of Nursing &amp; Patient Experience</b> |     |
| <b>Reporting Period</b>              | 13 February 2020  |     |

### Summary of Current Position

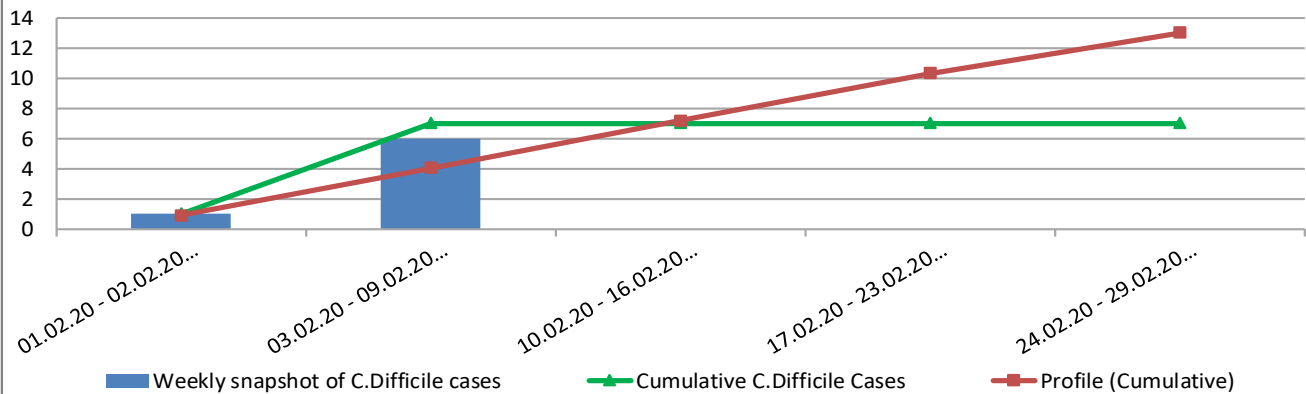
#### Cumulative infection incidence in comparison with other Welsh Health Boards:

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

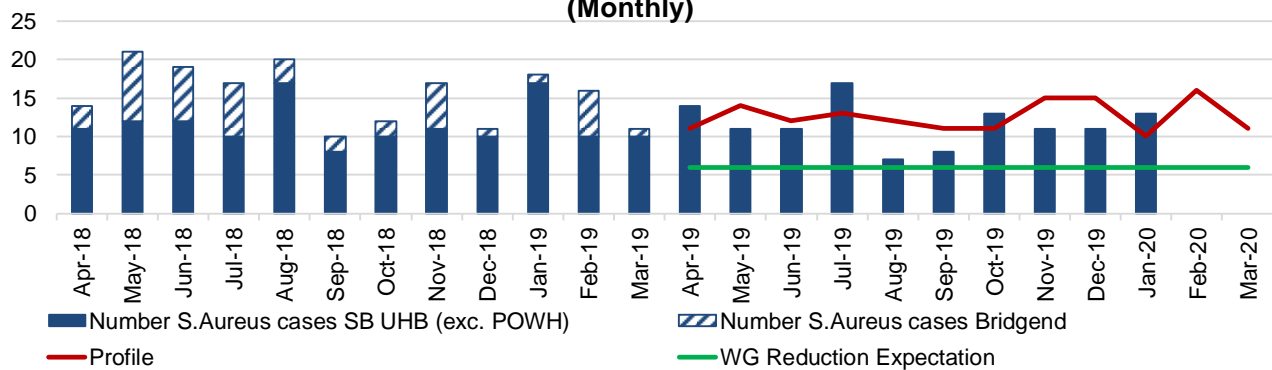
Appendix 1 gives an infection prevention and control assessment and action plan.



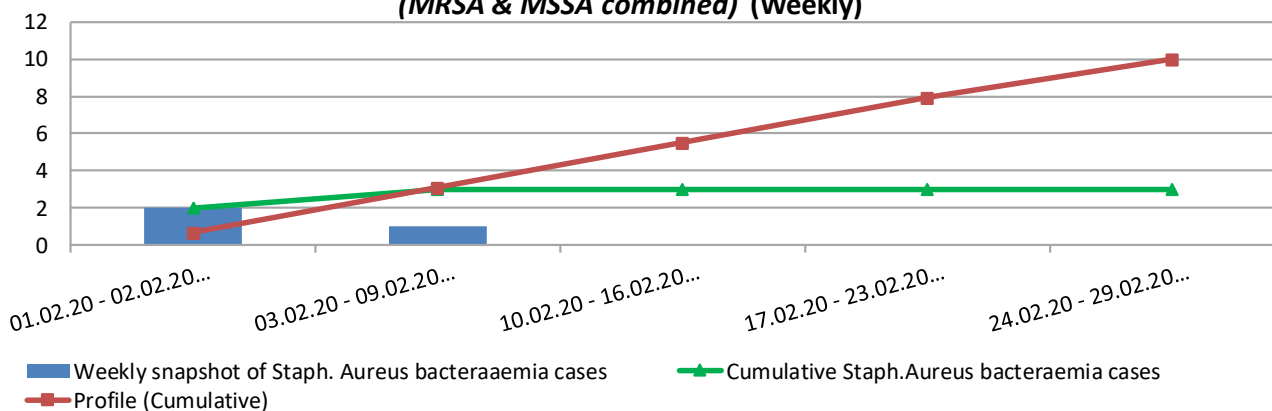
**Number of C.difficile cases (Weekly)**



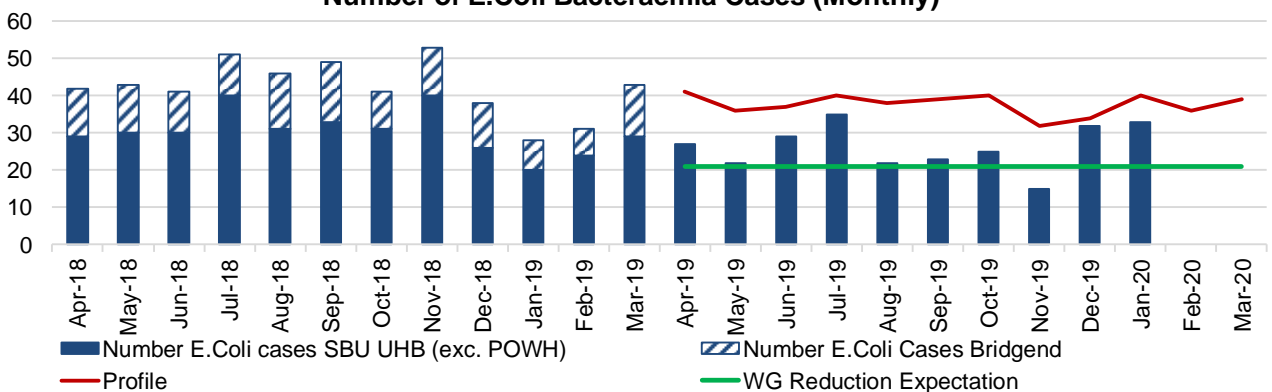
**Number of Staph.Aureus Bacteraemia Cases (MSSA & MRSA combined) (Monthly)**



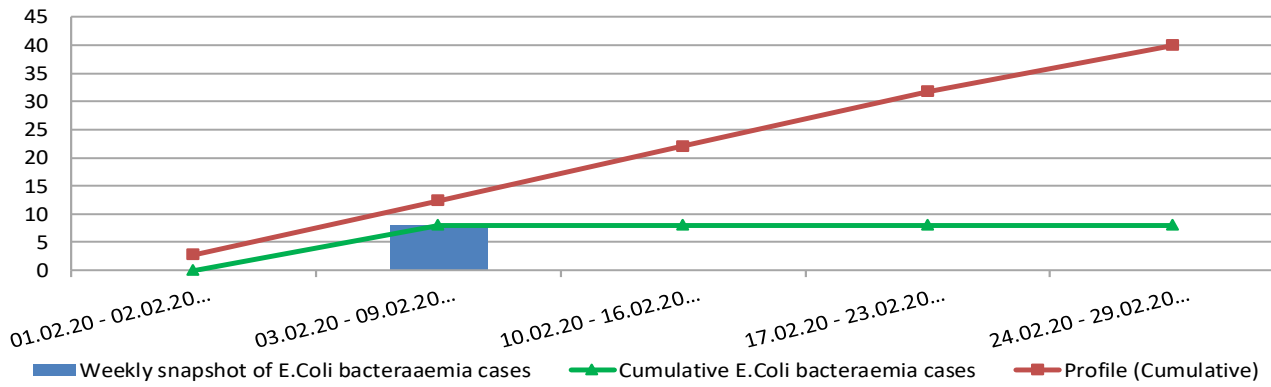
**Number of Staph. aureus bacteraemia (MRSA & MSSA combined) (Weekly)**



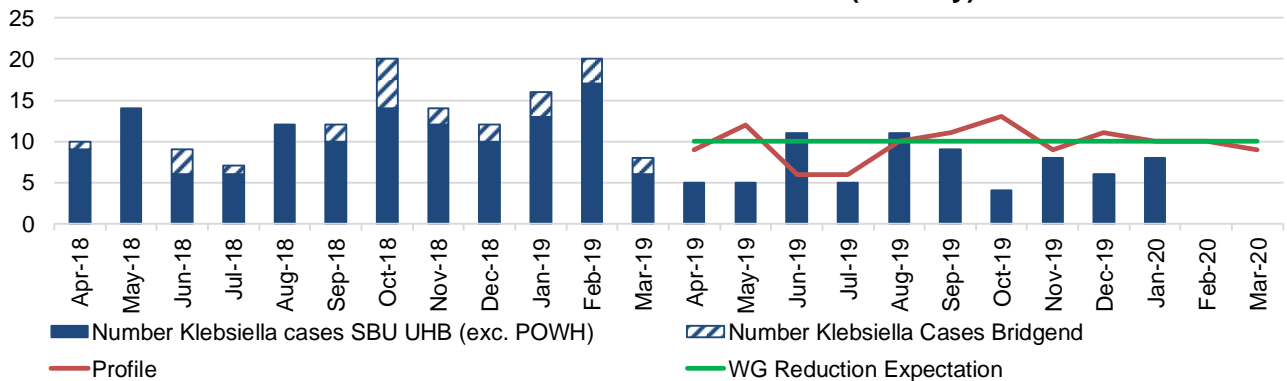
**Number of E.Coli Bacteraemia Cases (Monthly)**



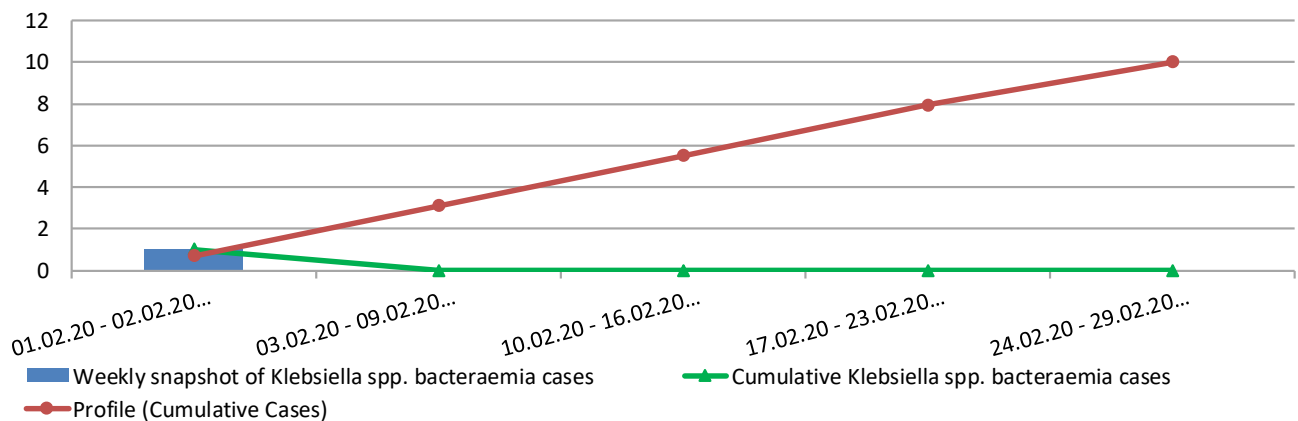
**Number of E.coli bacteraemia (Weekly)**



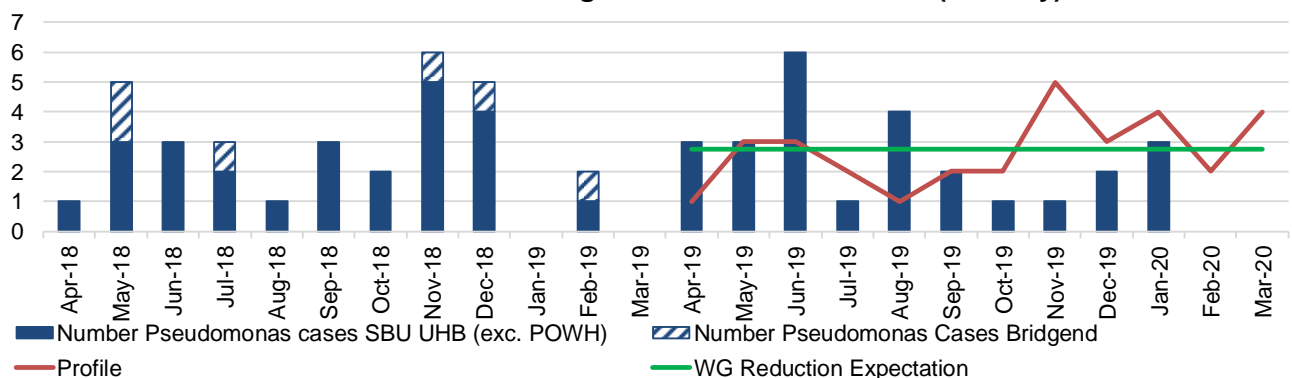
**Number of Klebsiella Bacteraemia Cases (Monthly)**



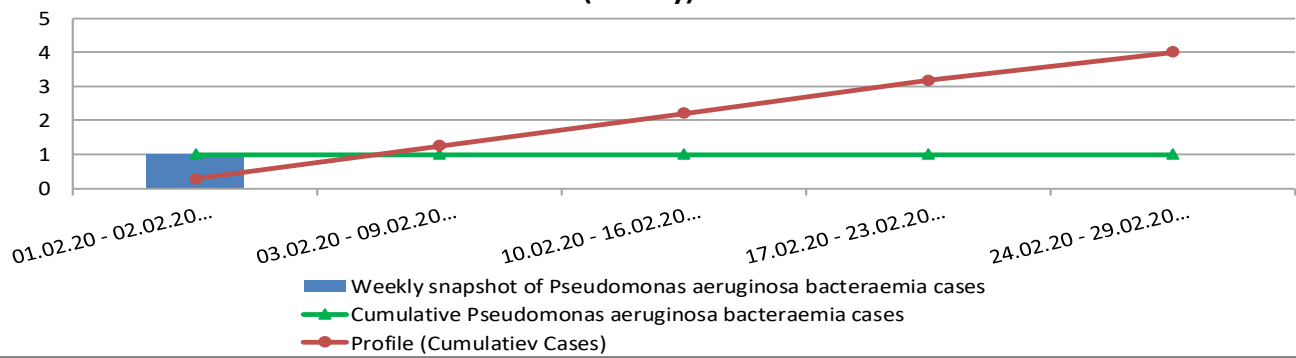
**Number of Klebsiella spp. bacteraemia cases- hospital acquired (Weekly)**



**Number of Pseudomonas Aerginosa Bacteraemia Cases (Monthly)**



**Number of Pseudomonas aeruginosa bacteraemia cases- community acquired  
(Weekly)**



| Achievements  |
|---|
| <ul style="list-style-type: none"> <li>• To 31st January 2020, year-on-year HCAI reductions in HCAI (<i>C. difficile</i>: 3%↓; <i>E. coli</i>: 13%↓; <i>Klebsiella spp.</i>: 29%↓; <i>Staph. aureus</i> bacteraemia: 1%↓), with the exception of <i>Pseudomonas aeruginosa</i>: 8%↑).</li> <li>• ARK (Antibiotic Review Kit) – now being utilised on all wards in Morriston.</li> <li>• Agreement for maintenance and servicing contracts for UV-C for a two year period.</li> <li>• The Infection Prevention &amp; 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.</li> </ul>   |
| Challenges, Risks and Mitigation  |
| <ul style="list-style-type: none"> <li>• Challenging to sustain improvements in reduction of targeted infections.</li> <li>• 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.</li> <li>• Lack of decant facilities, when occupancy is at acceptable levels on acute sites, compromises effectiveness of the '4D' cleaning/decontamination programme.</li> <li>• Shortfall in cleaning hour provision on acute sites due to vacancies, sickness. Mitigation – agreed investment to increase cleaning hours in Morriston and Singleton Hospital.</li> <li>• With staffing shortages, accessing IPC training can be challenging for staff.</li> <li>• 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 <i>Klebsiella pneumoniae</i>; 3 patients with the same multi-drug resistant <i>Enterobacter cloacae</i>. 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.</li> </ul> |
| Action Being Taken (what, by when, by who and expected impact)  |
| <p><i>Domestic staff recruitment</i></p> <ul style="list-style-type: none"> <li>• <b>Action:</b> Recruitment process for additional cleaning staff progressing. <b>Target completion date:</b> September 2020. <b>Lead:</b> Support services manager. <b>Impact:</b> Increased domestic staffing to provide cleaning hours required.</li> </ul> <p><i>Meeting national minimal standards of cleanliness</i></p> <ul style="list-style-type: none"> <li>• <b>Action:</b> 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. <b>Target completion date:</b> March 2021. <b>Lead:</b> Support services manager. <b>Impact:</b> Agreed staged approach to increasing funding for increased domestic staffing to provide cleaning hours required to meet national minimum standards</li> </ul> <p><i>Decant</i></p> <ul style="list-style-type: none"> <li>• <b>Action:</b> Solutions for decant to be identified for Morriston and Singleton. <b>Target completion date:</b> March 2020. <b>Lead:</b> Assistant Director of Nursing IPC and Service improvement capital planning. <b>Impact:</b> Solution for decant to be identified and proposals for a solution to be presented to SLT.</li> </ul>  |

#### 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:** Funding identified for the purchase of two UV-C machines for Singleton. **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:** March 2020. **Joint Leads:** Unit Nurse Director for Morriston, and Assistant Director of Nursing IPC. **Impact:** Delivery Unit specific improvement plan to steer improvement actions.

#### Ward G outbreak

- **Action:** Hospital Outbreak Control Group meets regularly to monitor ongoing outbreak of extensively resistant bacteria on Ward G. Difficult decisions on admitting patients to Ward G 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.

### 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 9<sup>th</sup> February 2020), the estimated financial impact would be approximately **£2,368,200**.

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=91) in SBUHB hospitals is calculated as approximately **1,911 bed days** (estimated cost approx. **£789,243**, 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 09 February 2020 and agree actions.