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| **Meeting Date** | **26 April 2022** | **Agenda Item** | **3.1** |
| **Report Title** | Healthcare Acquired Infections Update Report | | |
| **Report Author** | Delyth Davies, Head of Nursing, Infection Prevention & Control | | |
| **Report Sponsor** | Gareth Howells, Executive Director of Nursing & Patient Experience | | |
| **Presented by** | Delyth Davies, Head of Nursing, Infection Prevention & Control | | |
| **Freedom of Information** | Open | | |
| **Purpose of the Report** | This paper provides the Committee with an update on progress against the Health Board's upcoming priorities and actions to prevent infection and avoid harm. | | |
| **Key Issues** | • The Improvement Plan for Infection Prevention & Control was presented to the Management Board on 9th March 2002. The plan has been revised to reflect discussions at the Management Board and details the upcoming priorities and actions for the year ahead.<br>• Service Group will work to develop their action plans in April and it is anticipated that these will be presented to Management Board in May.<br>• The End of Year position against the Tier 1 infections has been published and, from these, the infection reduction goals for 2022/23 will be proposed for the Health Board, in line with the aims of the Infection Prevention Improvement Plan. The reduction goals will be broken down for each Service Group and circulated to assist Service Groups in the development of their action plans.<br>• To support Service Groups, the IP&C Service Group Support Structures have been revised to reflect the current resource and cross-cover and this has been circulated to all Service Groups for clarity in relation to the named IP&C lead.<br>• A COMMS strategy is developing to ensure all staff are aware of, and understand the priority and required focus for preventing avoidable harm through infection prevention, and delivering safe, quality care to our patients. | | |
| **Specific Action Required** | **Information** ☐ | **Discussion** ☐ | **Assurance** ☒ | **Approval** ☐ |
| **Recommendations** | Members are asked to:<br>Note reported progress to date in relation to the Infection Prevention Improvement Plan. | | | |

# Infection Prevention and Control Report

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| | | **Agenda Item** | 3.1 |
| **Freedom of Information Status** | | Open | |
| **Performance Area** | Healthcare Acquired Infections Update Report | | |
| **Author** | Delyth Davies, Head of Nursing, Infection Prevention & Control | | |
| **Lead Executive Director** | **Gareth Howells**<br>**Executive Director of Nursing & Patient Experience** | | |
| **Reporting Period** | 31 March 2022 | | |

## Summary of Current Position

The **End of Year (EOY) position** in relation to Tier 1 Infections is shown below.

| Infection | 2021/22 End of Year Cases | Comparison with previous year |
|---|---|---|
| ***C. difficile*** | **196** | 23% ↑ |
| ***Staph. aureus* bacteraemia** | **139** | 14% ↑ |
| ***E. coli* bacteraemia** | **288** | 20% ↑ |
| ***Klebsiella spp.* bacteraemia** | **94** | 8% ↓ |
| **Ps. aeruginosa bacteraemia** | **24** | 26% ↑ |

The Health Board's performance in relation to these key infections has been variable, and past improvements have not been sustained.

The Health Board is committed to reducing infection and associated harm and has identified upcoming priorities and actions as laid out in the Infection Prevention Improvement Plan. Following discussions at Management Board in March, the plan has been revised to reflect discussion by its members. The revised plan was resubmitted for Management Board approval in April.

To reduce the incidence of *C. difficile* infection, bloodstream infections, and tackle the development of antimicrobial resistance, the Health Board also has to be sighted on, and implement strategies to reduce other infections. Key to achieving this is the application of, and adherence to, evidence-based IPC practices, including a focus on priority areas such as line management, urinary catheter management, utilising the science of improvement. Key to success will be robust clinical leadership, a system of reward and recognition for excellence, a supportive approach to help other clinical areas to achieve success, and visible medical leadership in infection prevention.

## Progress against Infection Prevention Improvement Plan to 31.03.22

- The Improvement Plan has been revised; Version 2 is attached in **Appendix 1**.
- The Director of Nursing has been asked by the Chief Nurse to present the Improvement Plan at the Executive Nurse Directors' meeting in May.
- The improvement initiatives are evidence-based and incorporate best practice guidance. The initiatives are not novel, and the improvement plan involves a drive to "back to basics".
- Preparations for the associated communications strategy have commenced.
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- For April, there is a specific focus on Governance:
  - All Service Groups have established their Service Group Infection Control Committees, and are ensuring that all directorates are aware of the Improvement Plan and are clear about expectations.
  - Service Groups are establishing processes of post-infection rapid review and high level scrutiny and learning specific for *Staph. aureus* bacteraemia and *C. difficile* infections, in the first instance, with local teams presenting their hot debriefs of each infection to the Group Medical and Nursing Directors.
  - Processes are established for Service Group Medical and Nursing Directors to present findings from the scrutiny process, and lessons learned, monthly to the Executive Medical and Nursing Directors. The first round of these meetings has taken place and will continue monthly.
- There has been a successful recruitment campaign to the Infection Prevention & Control Team that will mitigate the workforce shortages. The existing 230 hours vacancy/maternity leave shortages position will improve and by May, the team will have recruited into posts, which will see an improvement of 150 hours. Additionally, the Head of Nursing has extended the temporary increase from part-time to full-time hours, adding an additional 16.5 hours. The appointment of the DIPC will return 37.5 hours of senior strategic leadership.
- The Job Description for the Director of Infection Prevention & Control has been completed and the details, including number of sessions, is being worked through. The intention is for this to be a medical post and the Health Board is looking to appoint a microbiologist to this role.
- There are a number of key areas for improvement which include:
  - Reduce incidence of the following key infections: *Staph. aureus* and Gram negative bacteraemias, and *C. difficile* infection, incorporating strategies to reduce other healthcare associated infections.
  - Reinvigorating evidence-based improvement methodologies, such as the use of care bundles, for the insertion and maintenance of invasive devices.
  - Improve safety of patient care environment, with a focus on minimum standards of cleanliness, and scoping House Keeper/Domestic roles and reviewing processes of auditing when a higher level of deep clean is required.
  - Review strategic and operational Corporate IP&C workforce, ensuring sustainability
  - Digital Intelligence resource to support the delivery of key improvement actions
  - Strengthen IPC resources within Service Groups.
  - Effective communication strategy making IPC everyone's business.
- Service Groups have reviewed and agreed the plan presented to date. The plan will continue to evolve and be enhanced, and there is an expectation of improved 'grip and focus'. Service Groups have started work on their localised improvement plans that reflect the upcoming priorities and actions. These are likely to be submitted to May's Management Board.
- Ambitious infection improvement goals (aligned to those set by Welsh Government) have been proposed. The table on the following page identifies the proposed infection reduction goals and the percentage reduction required to achieve those goals, including the monthly maximum numbers of cases per infection are shown in the table on the following page. Progress will be reported monthly.
- The overall Health Board infection improvement goals will be broken down for each Service Group and circulated to assist them in the process of developing their action plans.
- Associated directorates, divisions and the Corporate Infection Prevention & Control Team will also develop plans to support the delivery of the Improvement Plan.

**Monthly SBUHB profiles for Tier 1 infections to achieve infection reduction improvements in 2022/23.**

| | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | **Max.** cases to achieve goal | **Required percentage annual reduction** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *C. difficile* | 7 | 8 | 9 | 8 | 8 | 9 | 8 | 7 | 8 | 8 | 8 | 7 | **95** | 52% |
| *Staph. aureus* bacteraemia | 8 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | **71** | 49% |
| *E. coli* bacteraemia | 22 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 20 | 20 | **251** | 13% |
| *Klebsiella spp*. bacteraemia | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | **71** | 24% |
| *Pseudomonas aeruginosa* bacteraemia | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | **21** | 13% |

## Challenges, Risks and Mitigation

- Current pressures on Health Board services, both in the community and in hospitals, is extreme, as are the pressures on providing social care packages. The results of these pressures are that numbers of medically fit for discharge patients have increased, which results in increased length of stay for many patients. The demand for unscheduled acute care remains, leading to increased demand for inpatient beds. Surge capacity is being utilised on all inpatient sites. The increasing inpatient population occurs at a time of increased staff shortages, which an increasing patient-to-staff ratio.
- COVID-19 cases within acute inpatient settings remains a challenge, with continuing evidence of transmission events. The consequences to disruption of services are significant.
- Historically, infection reduction initiatives have been compromised by the following: staffing vacancies, or shortages caused by sickness absence, with reliance on temporary staff; over-occupancy because of increased activity; use of pre-emptive beds; and increased activity such that it is not possible to decant bays to clean effectively patient areas where there have been infections.

## Initial Action Being Taken in progressing Infection Prevention Improvement Plan (what, by when, and by whom)

**Action:** Development and circulation of proposed Health Board, and Service Group, infection improvement goals for 2022/23. **Target completion date**: 30.04.22. **Lead:** Head of Nursing, IP&C.

**Action:** Development of an IP Improvement Plan communications strategy. **Target completion date:** 30.04.22. **Lead:** Interim Director of Communications and Assistant Director of Nursing.

**Action:** Development of Service Group-specific action plans to support the delivery of the Improvement Plan. **Target completion date:** 30.04.22. **Lead:** Service Group Directors.

**Action:** Clarify existing central IP&C Service Group support structure. **Target completion date:** 30.04.22. **Lead:** Head of Nursing, IP&C.

**Action:**

## 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 *Clostridioides 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. Estimated costs related to healthcare associated infections, from 01 April 2021 to the end of March 2022 is as follows: *C. difficile* - £1,950,000; *Staph. aureus* bacteraemia - £980,000; *E. coli* bacteraemia - £335,700; therefore, a total cost of **£3,265,700**.

## Recommendations

Members are asked to:

- consider the Health Board's revised Infection Prevention Improvement Plan, and note initial progress to the end of March 2022.