Meeting Date	29 April 2025	**Agenda Item**	2.5
Report Title	**Infection Prevention and Control**		
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Report Sponsor	Delyth Davies, Head of Nursing, Infection Prevention & Control		
Presented by	Joanne Walters, Deputy Head of Nursing, Infection Prevention & Control		
Freedom of Information	Open		
Purpose of the Report	This is an assurance report that provides an update on incidence, progress and actions relating to healthcare associated infections (HCAIs) within Swansea Bay University Health Board for the reporting period Quarter 4, to the end of March 2025.		
Key Issues	• Hospital onset case numbers for the four infections exceeded the Targeted Intervention de-escalation criteria during the quarter. • Internal infection improvement goals were achieved for *E. coli* and *Pseudomonas aeruginosa* bacteraemia (these met the national improvement goals published in WHC 2024/038 for 2024/25 also). • *C. difficile* cases continue to increase. The health board has the highest incidence of *C. difficile* in Wales. • A lack of decant facility is impacting on the ability clean to the required health board standard the rooms where cases of *C. difficile* have been identified. This increases risks to patients subsequently admitted or transferred to these rooms. • The number of *C. difficile* Periods of Increased Incidence (PII) continues to be a significant concern, as is the number of genomically and epidemiologically linked transmission events (outbreaks). • Additional pre-empt patients on wards currently is a regular occurrence; this over-crowding increases the risk of infection transmission. • The health board continues to face significant challenges relating to healthcare associated infection risks, which are recorded in the health board's Risk Register.		
Specific Action Required *(please choose one only)*	**Information**	**Discussion**	**Assurance**	**Approval**
	☐	☐	☒	☐
Recommendations	The Infection Prevention & Control Strategic Group is asked to: • **NOTE:** the health board's end of year position in relation healthcare associated infections, and that the internal and national infection improvement goals were achieved in relation to *E. coli* and *Pseudomonas aeruginosa* bacteraemia. • **NOTE:** the performance of the health board to Targeted Intervention for performance in relation to HCAIs.			

	• **NOTE:** the health board continues to have the highest incidence of *C. difficile* infection and *Klebsiella spp*. bacteraemia in Wales. • **NOTE:** the continued increase in numbers of cases, and the numbers of periods of increased incidence, and outbreaks of *C. difficile* cases seen in Quarter 4, and the continuation of the Gold *C. difficile* High Incidence Management Group**.** • **NOTE:** progress on Infection Prevention & Control Improvement Plan to 31st March 2025. • **NOTE:** a decrease in overall compliance in IPC Level 2 training to 78.88% compliance reported at 31st March 2025. • **NOTE:** the challenges and risks within the health board currently and mitigations recorded in the risks recorded in the health board's Risk Register.

INFECTION PREVENTION AND CONTROL

1. INTRODUCTION

This report provides an overview of Swansea Bay University Health Board (SBUHB) progress against Welsh Government Targeted Intervention de-escalation criteria. The health board additionally had internal reduction goals for healthcare-associated infections (HCAIs), and the report provides a summary of progress against these internal goals also. The reporting period is 1st April 2024 – 31st March 2025.

The key HCAIs are:

a) *Clostridioides difficile* infection
b) *Staphylococcus aureus* bacteraemia
c) Gram negative bacteraemia *(Escherichia coli, Klebsiella spp*., *Pseudomonas aeruginosa*).

An update in relation to infection-related incidents and outbreaks that occurred between 1st January and 31st March 2025 is provided also.

The report provides a summary of the activities carried out across the health board in relation to the prevention, control and management of infection. The report also identifies key risks, and makes recommendations to address areas requiring action or improvement.

2. Progress on key healthcare associated infections (HCAI)

2.1 Progress against Targeted Intervention

The health board's monthly progress against the Targeted Intervention de-escalation criteria for hospital onset, healthcare associated infections (HCAI) is presented in Table 1. Hospital Onset (HO) infections are defined as a positive microbiology result for a sample collected on day 3 or more of a hospital admission (day 1 being the first day of the admission to an in-patient location).

Table 1.

	Targeted Intervention - De-escalation	Q1 2024/25 Actual	Q2 2024/25 Actual	Q3 2024/25 Actual	Q4 2024/25 Actual			
HCAI TI Criteria 2024/25	Av. Monthly HO TI Criteria (Max. av. monthly cases)	Q1 TI - HO Cases to 30.06.24	Q2 TI - HO Cases to 30.09.24	Q3 TI - HO Cases to 31.12.24	Jan-25 Hospital Onset Total cases (actual)	Feb-25 Hospital Onset Total cases (actual)	Mar-25 Hospital Onset Total cases (actual)	Q4 TI - HO Cases to 31.03.25
SBUHB HCAI *C. difficile* 2024/25 TI Criteria	6	21	34	41	19 (+13)	11 (+5)	15 (+9)	45
SBUHB HCAI *Staph. aureus* bacteraemia 2024/25 TI Criteria	3	12	13	14	4 (+1)	5 (+2)	3	12
SBUHB HCAI *E. coli* bacteraemia 2024/25 TI Criteria	4	15	14	17	9 (+5)	8 (+4)	4	21
SBUHB HCAI *Klebsiella spp.* bacteraemia 2024/25 TI Criteria	4	12	14	15	8 (+4)	3 (-1)	5 (+1)	16

The health board exceeded the maximum number of cases for the quarter for the four infections monitored under the targeted intervention. The maximum number of cases for *Klebsiella spp*. was not exceeded during February. In March, the maximum number of cases for *E. coli* and *Staph. aureus* bacteraemia was not exceeded. Quality Improvement initiatives continue across primary and secondary care settings including:

- Programme of infection prevention education and audit undertaken by Infection Prevention & Control Specialist Nurse for care homes, who is collaborating also with the healthy bladder and bowel team to reduce catheter-associated urinary tract infections.
- Improving sampling: reducing inappropriate use of dipstick tests to diagnose or exclude urinary tract infections in the older person (age category >65 years), and in catheterised patients.
- Denture Daisy education programme delivered by the Oral Health Coordinator across inpatient and care home settings. The programme raises awareness of improving oral and denture hygiene, which can help reduce the risk of pneumonia.
- A review of cleaning standards for *C. difficile*, using a risk-based approach.
- Hospital-acquired pneumonia (HAP) audit, available in the Audit Management and Tracking (AMaT) system. This has been undertaken in Morriston and has commenced in Neath Port Talbot.
- Risk stratification review for *C. difficile* is progressing through the informatics team.
- Continued education around 72-hour antimicrobial therapy review for prescribers.
- Mattress Storage Task & Finish group has been established, with representation from all service groups and support service teams.
- Implementation of a history of previous *C. difficile* alert flag in Hospital Electronic Prescribing and Medicines Administration System (HEPMA), to alert prescribers to patients at risk.
- The development of a digital application to support the standardisation of HCAI case reviews is currently in the testing phase.

During Quarter 4, service group's HCAI Improvement Plans continued to be monitored centrally through the monthly Executive HCAI Scrutiny Group meetings, co-chaired by the Deputy Executive Medical Director and Acting Executive Director of Nursing and Patient Experience.

2.2 Progress against internal health board reduction goals for key Healthcare Associated Infections (HCAIs): 1st April 2024 – 31st March 2025

Progress against the **internal health board HCAI reduction goals** (based on the Welsh Government 2023/24 improvement goals) is shown in Table 2. These continue to be monitored and reported within the health board, to maintain a focus on infection reduction for patients in primary care, community, and hospital settings.

Table 2: Internal health board HCAI reduction goals. Cumulative cases to end of March 2025

Infection	Cumulative Cases to end of March 2025	Internal improvement goal trajectory to end of March 2025	Actual cases versus internal reduction goal (+/-)
C. difficile (CDI)	276	95	(+181)
***Staph. aureus* bacteraemia (SABSI)**	134	71	(+63)
***E. coli* bacteraemia (EcBSi)**	224	234	(-10)
***Klebsiella spp.* bacteraemia (Kl BSI)**	120	71	(+49)
Ps. aeruginosa bacteraemia (PAERBSI)	18	21	(-3)

A summary position for service groups is shown in Table 3. This identifies the cumulative number of cases up to the end of March 2025, with the annual increase or reduction shown in brackets.

Table 3: Service Group Annual Comparison to end of March 2025

	CDI	SaBSI	EcBSI	KlBSI	PAER BSI
SBUHB - Total	276 (↑10%)	134 (↓6%)	224 (↓13%)	120 (↑28%)	18 (↓14%)
PCTSG - CAI	71 (↓12%)	49 (↓22%)	119 (↓5%)	39 (↓17%)	6 (↑50%)
PCTSG - HAI	5 (↑2 cases)	2 (↑2 cases)	1 (↓1 case)	1 (=)	0 (=)
MH&LD – HAI	3 (↑2 cases)	0 (=)	2 (↑2 cases)	1 (↑1 case)	0 (=)
MORR – HAI	146 (↑11%)	56 (↑27%)	60 (↓26%)	50 (↑47%)	9 (↓10%)
NPTH - HAI	16 (↑167%)	1 (↓75%)	9 (↑13%)	6 (↑100%)	1(↑1 case)
SH - HAI	31 (↑41%)	21 (↓25%)	23 (↓23%)	18 (↑125%)	5 (↓60%)
Other HB Cases Identified in SBUHB	4 cases	5 cases	10 cases	5 cases	0 cases

Charts showing the position of the health board and service group progress against the infection improvement trajectories, up to 31st March 2025, are detailed in **Appendix 1**.

Appendix 2 provides a comparison with other acute health boards in Wales in relation to incidence of these infections per 100,000 population and per 1,000 admissions. Compared with other health boards in Wales, Swansea Bay has the highest incidence per 100,000 population for *C. difficile* infections and *Klebsiella spp.* bacteraemia.

In the absence of published improvement goals from Welsh Government at the start of the 2024/25 financial year (FY), the health board utilised those set for 2023/24 as internal goals in the development of the health board and service group Infection Improvement Plans. Progress against these internal goals to the end of 2024/25 is reported.

a) Clostridioides difficile

At the end of Quarter 4, the annual internal infection reduction goal has been exceeded by 181 cases. There has been a 10% increase in case numbers when compared with the number of cases in the same period in 2023/24. Numbers of *C. difficile* infection have increased year-on-year, with an almost doubling of patients affected in the 6 years from 2019.

All of the service groups, with the exception of Primary Care, Community & Therapies Service Group, have seen an increase in the case numbers this year. Of the 276 positive cases to date, 74% were categorised as hospital-acquired infections (HAI). The majority of the HAI cases were attributed to Morriston Hospital. It is important to note that, during 2024/25, Morriston accounted for more than 65% of admitted patient care activity and had the highest bed occupancy in inpatient settings within the health board.

Four cases of *C. difficile* identified on, or soon after admission to Morriston Hospital, were from patients who reside within the boundaries of other health boards.

The health board continues to have the highest incidence of *C. difficile* infection compared with other Welsh acute health boards (71.72/100,000 population). This is significantly higher than the Wales average of 47.39/100,000 population. All acute health boards in Wales have seen an overall increase in case numbers compared with the previous financial year. Although the rate of increase for the health board is the second lowest when compared with the other health boards in Wales (range 1% - 88%), the SBUHB incidence (71.72) is 39% higher than the health board with the second highest incidence (51.73), and is more than double the health board with the lowest incidence (35.58), as shown in the chart in Appendix 2.

All healthcare associated *C. difficile* toxin positive cases are reviewed by the Service Group Director-led HCAI scrutiny panels to establish if the patient infection episodes were managed appropriately, and to determine if the infection episode could have been prevented. It is important that themes from the case reviews are analysed, and that all learning is shared with care providers and those who make decisions on patient care planning. The Deputy Head of Nursing for IPC and Digital Platform Managers within the Digital Services team have developed an application for the HCAI case reviews. This will enable case reviews to be standardised, for the information to be stored centrally. This will enable feedback to the care providers on any learning identified from the reviews. It is also hoped that by undertaking thematic analysis, opportunities for improvement projects can be identified. The application is currently in an initial testing phase and will then extend to a wider user testing phase.

b) *Staph. aureus* bacteraemia

The internal improvement goal was exceeded by 63 cases, however, there has been an overall 6% annual reduction in case numbers. All service groups, with the exception of Morriston, had less cases reported in 2024/25 than in 2023/24. Sixty percent of the cases are considered to be hospital-acquired infections (HAI). The most common sources identified were skin and soft tissue infections (26%) and line-associated infections (22%). Two cases with line-associated bacteraemia were identified in dialysis patients who do not reside in, or receive care within, the boundaries of Swansea Bay. Community-acquired infections (CAI) accounted for 40% of all reported cases, with the most common source being identified as skin and soft tissue infections (35%).

c) Gram negative bacteraemia *(E. coli, Klebsiella spp*., *Pseudomonas aeruginosa*),

The health board achieved the internal infection reduction goal (≤ 234 cases), with a total number of 224 cases in 2024/25. This represented a 13% annual reduction in cases. Within the 224 total, there were ten cases that were identified in patients residing outside the boundaries of the health board, but who had an *E. coli* bacteraemia diagnosed within the first two days of admission to Morriston Hospital.

Morriston Service Group achieved the highest level of reduction (26%), Neath Port Talbot & Singleton Service Group a 16% reduction, and Primary Care, Community & Therapies Service Group a 5.5% reduction in *E. coli* bacteraemia.

The distribution of hospital and community acquisition are recorded as 43% and 57% respectively. Urinary Tract Infections (UTIs) are the most common primary source for all of the cases (59%). Forty six percent of the HAI cases were associated with UTI, while in the Community, 68% of the cases were related to the urinary tract. The health board-wide quality priority campaign continues to focus on the importance of hydration & nutrition to prevent dehydration and associated complications, such as infections, constipation, and other life-threatening conditions. An All-Wales UTI Prevention Group, chaired by the Public Health Wales HARP Team, has been established to facilitate all-Wales collaboration on infection prevention strategies aimed at reducing the incidence of urinary tract infections in primary and secondary care settings.

The total number of *Klebsiella spp*. bacteraemia cases exceeded the internal goal (≤ 71 cases). There were 120 cases to the end of March 2025, which represented an overall 28% annual increase in case numbers. The total number of cases reported included 5 cases identified in patients who reside outside the boundaries of the health board, but who had a *Klebsiella spp.* bacteraemia diagnosed within the first two days of admission to Morriston Hospital.

The distribution of hospital and community acquisition is 63% and 37% respectively. The urinary tract continues to be the most common primary source of infection for all *Klebsiella* bacteraemia (41%), followed by hepatobiliary disease (22%). In the hospital setting, 36% of the cases have the urinary tract reported as the primary source, followed by hepatobiliary disease (18%). The most common primary sources of community-acquired cases were the urinary tract (50%), and hepatobiliary disease (27%).

The health board achieved the internal infection reduction goal for *Pseudomonas aeruginosa* bacteraemia (≤ 21 cases), with a total number of 18 cases in 2024/25. This was a 14% annual reduction in cases. The distribution of hospital and community acquisition is 67% and 33% respectively. The most common primary source for all of the infections is the urinary tract (33%), with respiratory infection reported as the second most common source (22%). The most common primary sources of community-acquired cases were the urinary tract (33%), and skin and soft tissue infections (17%). The most common primary sources of hospital-acquired cases were the urinary tract (34%), and the respiratory tract (25%).

National infection improvement goals

Improvement goals for 2024/25 were published in a Welsh Health Circular in September 2024 (WHC (2024) 038). The end of year position for the infection improvement goals is shown in Table 4. **Table 4: Progress against WHC (2024)038 Improvement Goals, by acute health board, April 2024 – March 2025**.

The health board achieved the improvement goals for *Pseudomonas*, *E coli* and MRSA bacteraemias.

GREEN: On trajectory to achieve 2024/25 FY IG
ORANGE: Lower than baseline trajectory, but not yet on trajectory to achieve 2024/25 FY IG
RED: Not on trajectory to achieve 2024/25 FY IG
BLACK: No longer possible to achieve 2024/25 FY IG

	C. difficile		*E. coli*		*Klebsiella spp.*		*P. aeruginosa*		*S. aureus*	
HB	**HO**	**CO**	**All**	**HO**	**All**	**HO**	**All**	**HO**	**MRSA HO**	**MSSA HO**
Aneurin Bevan UHB	137	138	376	95	115	39	42	17	10	58
Betsi Cadwaladr UHB	165	191	538	118	136	35	25	6	3	37
Cardiff and Vale UHB	111	99	286	78	120	45	41	26	8	54
Cwm Taf Morgannwg UHB	64	94	364	72	103	27	14	6	2	29
Hywel Dda UHB	79	105	380	58	106	18	24	8	3	37
Swansea Bay UHB	137	138	224	57	121	50	18	8	3	47

HO = Number of hospital onset cases HB has from Apr 24 to last month
CO = Number of community onset cases HB has from Apr 24 to last month
All = Number of overall cases HB has from Apr 24 to last month

3. Infection Prevention & Control Improvement Plan

3.1. Overarching 2024/25 Infection Prevention Improvement Plan

The infection prevention improvement plan for 2024/25 focussed on core themes to support improvement and reduce episodes of harm caused by healthcare associated infections (HCAI).

Progress to the end of Quarter 4 is presented in **Appendix 3** (separate document).

4. Outbreaks and clusters, untoward incidents, Periods of Increased Incidence (PII), and ward/bay closures from diarrhoea and vomiting

4.1. Periods of Increased Incidence (PII)

A period of increased incidence (PII) is triggered when two hospital-acquired cases of *C. difficile* are attributed to the same ward location within a 28-day time period. For reporting PII in Swansea Bay, this includes both toxin positive and toxin negative cases.

Table 5 in **Appendix 4** includes the details of the wards where PIIs were detected during Quarter 4 of this year. The number of Pii has decreased this quarter.

- Quarter 1 23 PIIs, involving 64 patients;
- Quarter 2 27 PIIs, involving 94 patients;
- Quarter 3 33 PIIs, involving 105 patients;
- Quarter 4 22 PIIs, involving 85 patients.

Whole Genome Sequencing (WGS) is performed by the anaerobic reference lab in Cardiff on all *C. difficile* positive samples. If cases have the same genomic cluster code, they are considered to be genetically related and may indicate that a transmission event has occurred. When the WGS cluster code is shared by two or more cases, and epidemiological links are established (linked in time and place), these are reported as probable outbreaks.

WGS results take approximately two weeks to be reported to the health board, which means that linked cases are identified and reported retrospectively. In some instances, the WGS results may identify cases with the same cluster code that are not associated with a PII. In these instances, a further review of the patient pathway is undertaken to establish if there are other epidemiological links in time or place.

WGS results available at the time of reporting indicate that the majority of the cases were not genomically linked. Whilst there is a level of reassurance that transmission in hospital does not account for the majority of cases, the increasing numbers of cases of *C. difficile* seen within the health board, along with the high numbers of PII and genomically-linked transmission events, is concerning.

Six probable transmission events (outbreaks) were identified for wards in PII during Quarter 4. By reviewing the patients' timelines and pathways, epidemiological links have been established, i.e. the patients have been on the same ward, either at the same time, or within a specific period of time. The transmission events with epidemiological links were associated with Neath Ward D, and Morriston's Gowers Ward, Ward K, Ward H, Ward W, Ward L and AMU Assessment Unit.

Genomic sequencing results for samples sent by SBUHB during 2024/25 have been diverse. Although there have been genomically linked cases during the year, and cases linked in time and place, there have also been a significant number (174) of different cluster codes involving only one case each, and 204 cases that have been unique Single Case cluster codes. This suggests that there are many diverse sources of exposure to *C. difficile* within hospital and community settings. As such, there must be a greater focus on maintaining the balance of the gut microbiome and improvements in the prescribing and review of antimicrobials, proton pump inhibitors, and laxatives.

It is not always possible to establish how or where patients with genomically linked clusters may have acquired the same *C. difficile* strain. The IPCT and the SBU Regional Health Protection Team are collaborating to develop a surveillance questionnaire that might be used to try and identify potential commonalities linked to environment, lifestyle and risk factors not already identified.

4.3. Genomically linked *C. difficile* clusters:

The WGS results received during Quarter 4 have been reviewed to identify any epidemiological links between individual cases previously reported, which might identify outbreaks retrospectively.

Table 6 in **Appendix 4** provides the details of WGS genomic cluster codes where there were two or more patients identified to have the same WGS cluster code. Six of the twelve-clusters have been found to be epidemiologically linked in time and place, and are categorised as outbreaks of limited extent, involving hospital transmission events.

4.4. Incidents and outbreaks

There have been 87 separate ward infection incidents in health board hospitals between January and March 2025. Forty of these 87 ward incidents involved single cases only and resulted in bay closure. **Table 7** in **Appendix 5** provides a summary of the 47 infection-related incidents and outbreaks (not associated with *C. difficile*), where two or more confirmed cases were identified. This is shown by service group during the reporting period, and includes the causative organism where it has been confirmed, and the number of patients affected. There was an increase in the number of ward closures associated with Norovirus outbreaks (8) during the quarter The majority of the incidents (17) during Quarter 4 were as a result of COVID-19, with Influenza also causing significant disruption (14).

The insufficient single room accommodation across acute inpatient settings resulted in an inability to isolate all patients with infectious symptoms (suspected and confirmed cases). This potentially led to exposure of other patients, closure of bays, and in some instances outbreaks occurring. Daily Infection Control Safety Huddle meetings continue to be held to manage these situations, and the Infection Prevention & Control team provides clinical teams with support to assess the incident, and advice on the appropriate control measures. At these Infection Control Safety Huddles, those present undertake risk assessments of isolation capacity and use, to support the prioritisation of single room utilisation, and to determine where it would be appropriate to cohort suitable patients to improve capacity to maintain safe patient flow.

5. Education & Training

Training compliance

The IPCT, along with local training practice leads, continues to deliver IPC training and updates to both clinical and non-clinical staff employed by the health board. This is in addition to any online training undertaken by staff.

The tables in **Appendix 6** identify the numbers of staff (with percentage compliance where available) that have undertaken IPC-related training to 31st March 2025.

Level 1 and Level 2 Infection Prevention & Control Training (Table 8 and Table 9):

- Compliance to 31st March 2025 for Level 1 training was 89.11% and for Level 2 training was 78.88%.

Hand Hygiene Practice Assessment and Hand Hygiene Assessors (Table 10)

- Over the last 12-month period (1st April 2024 to 31st March 2025), 2,631 staff have had a hand hygiene practice assessment, with the assessment undertaken by the IPC nurses, or by the department-based Hand Hygiene Assessors.
- ESR reports Hand Hygiene Competence compliance within the health board as 26.67%. This information in ESR is considered unreliable and service groups may wish to consider alternative methods of recording practice assessments (Table 11).
- Over the last three years (1st April 2022 to 31st March 2025), the IPCT has trained 613 Hand Hygiene Assessors within the service groups. Detailed information regarding Hand Hygiene Assessors is available for each service group.

Aseptic Non-Touch Technique (ANTT) (Table 12)

- Compliance with ANTT training to 31st March 2025 is recorded in ESR as 30.60% for the ANTT e-learning course, and competence assessment compliance as 17.37%.
- Training reports from ESR uses **all** health board staff as the denominator for compliance. Not all health board staff are required to undertake ANTT e-learning or competency assessment, therefore the compliance percentage is not a true representation of compliance. Service groups may wish to consider alternative methods of recording compliance.

HCID PPE Training (Table 13)

- Since October 2024, five staff have attended the HCID PPE Train the Trainers course in Mexborough. Swansea Bay UHB now has 4 qualified HCID PPE Trainers (one has subsequently left the organisation).
- Classes have now been set up on ESR to record all HCID PPE Training records, and to date the HCID PPE training has been provided to 36 members of staff.

7. Assurance

Reporting

- The Quality & Safety Group receives quarterly assurance reports relating to infection prevention and control. In addition, any issues for escalation would be taken to the Quality & Safety Group outside of the quarterly reporting schedule.
- The assurance reports are formally presented to the Quality & Safety Committee quarterly.

- The performance tracker, showing performance against the Tier 1 infection reduction expectations, is circulated weekly to the Executive Team and Service Group Directors and is available on the IPC SharePoint site.
- The Targeted Intervention performance tracker is circulated to the Executive Leads for HCAI, and performance is reported formally at monthly Targeted Intervention and Integrated Quality, Planning and Delivery meetings with Welsh Government.
- Senior IP&C staff attend each Service Group Infection Control Group. The IP&C Matrons and the Matron, Decontamination Operational Lead, together with Band 7 Infection Control Nurses, ensure support is provided to the Service Group Triumvirates.
- The IPC team actively participates in healthcare associated infection review panels within Service Groups, liaising closely with service group IP&C leads and clinical staff from each ward/department.
- The senior members of the IPCN team, along with other Corporate Nurses, participate in Quality & Safety assurance visits across the health board to review Safe & Effective Care provision.

8. Infection Prevention Team Audit Programme

There is ongoing collaboration between the IPC team and the Audit Management and Tracking (AMaT) project team to design new IPC-related audits for use across the health board. Acute inpatient settings are now undertaking monthly audits using the IPC Standard Precautions in the Care Environment audit tool.

The IPC annual audit programme includes undertaking annual and biannual audits of Standard Precautions Practice. During Q4, sixty audits were completed in AMaT with compliance scores ranging from 32 to 100%. The areas audited receive immediate verbal feedback and then complete their own action plan in AMaT.

- 14 audits had compliance scores <69% (Red)
- 21 audits achieved compliance scores 70-84% (Amber)
- 25 audits achieved compliance scores 85-100% (Green)

Thirty-nine additional audits were undertaken in response to a *C. difficile* PII or other infection-related incidents, and where concerns are observed or escalated. These audits review the compliance with Standard Infection Control Precautions in relation to the care environment and practice. The compliance scores range between 53.33% to 100%. When these audits are undertaken, ward staff are encouraged to accompany the IPCN to enable immediate feedback. Where the staff do not have capacity to join the audit, feedback is given at the end of the audit, with the final audit report being circulated by email.

- 9 audits recorded compliance scores <69% (Red),
- 11 audits recorded compliance scored 70-84% (Amber),
- 19 audits recorded compliance 85-100% (Green).

9. Infection-related Incidents and Risks in DATIX

Risk Register

On the 11the April 2025, there were two new infection-related risk reported (4067 and 4129); there were 15 open and accepted infection-related risks on the Risk Register.

Table 14: Open and Accepted infection-related risks on the Risk Register

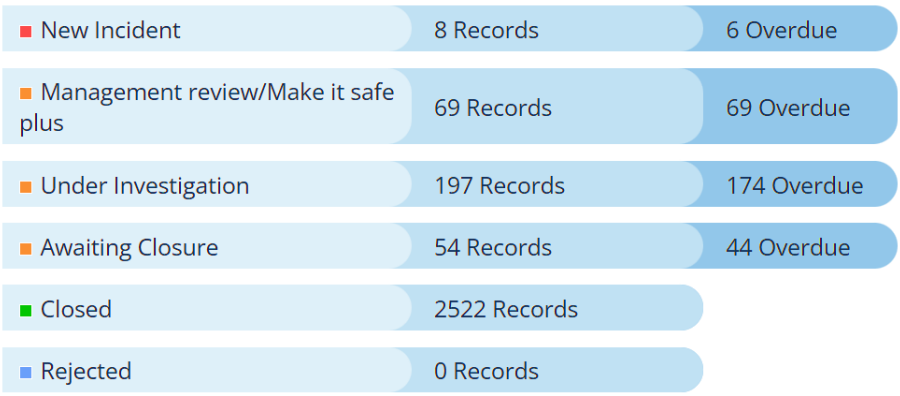
Infection-related risks on the Risk Register	Total
Executive Director of Nursing	6
Morriston Hospital Service Delivery Unit	7
Singelton Hospital, Neath Port Talbot Hospital Service Group	2
Total	**15**

Of the 15 open and accepted infection-related risks on the Risk Register, three had passed the review date. There has been email communication with all relevant Risk Handlers to request a review and update of overdue risks, the detail of which can be found in **Table 15**.

Table 15: Overdue review of infection-related risks, by Service Group	Overdue Review	Risk Register ID
Singelton Hospital, Neath Port Talbot Hospital Service Group	**1**	3778
Morriston Hospital Service Delivery Unit	**2**	797, 3515

Infection-related incidents

At 16th April, RLDatix system identified the following infection-related incidents:



CHALLENGES, RISKS AND MITIGATION

HCAI

- Lack of a dedicated decant facility (**Datix Risk ID 2210**). There are still no permanent decant facilities available across the health board, which impacts on ability to decant bays and wards to undertake deep cleaning maintenance and refurbishment.
- Increased risk to patients for acquisition of *C. difficile* infection (**Datix Risk ID 2286**). Morriston has completed HPV disinfection of 20 wards across the hospital.

  A Gold *C. difficile* High Incidence Management Group has been established, meeting at least monthly, with representation from each service group and support services. A review to determine if existing systems could support a risk stratification identification process for acquisition of *C. difficile* is underway. A digital application is under further development for HCAI case reviews; this should be available to pilot during in the next quarter. An update position paper on HCAI and *C. difficile* will be submitted to Management Board in May 2025.
- Service pressures across the acute sites, and in Morriston especially, preclude the ability to undertake a regular pro-active programme of 4D cleaning, and compromise the ability to undertake reactive 4D cleaning following episodes of infection such as *C. difficile*.
- The limited availability of single room isolation facilities continues to present a challenge to the appropriate management of patients with suspected or confirmed infections, resulting in a risk of extended exposure of other patient contacts to the risk of transmissible infections, such as MRSA and other multi-drug resistant organisms. Additionally, due to the competing demands for single rooms, there can be a delay in isolating patients while staff await confirmation of an infection prior to moving patients, which may add to the exposure risk for other patients and an extended period where organisms continue to contaminate the environment – **HBR 4 (Datix Risk ID – 739, 1750, 535, 797**).
- The high numbers of clinically optimised patients awaiting packages of care continues to put increased pressure on bed capacity in the acute sites. The additional patients “boarding” on most wards throughout Morriston continues. Surge beds are also in use in Gorseinon, staffed by bank and agency staff. Additional beds in existing multi-bedded rooms further reduces space between beds. These factors increase the risk of infection transmission due to non-compliance with bed spacing guidance (**Datix Risk ID – 2488**).
- Bed spacing and ventilation within the majority of inpatient wards poses an ongoing risk in relation to transmission of infections, including COVID-19 and other seasonal viral infections, including influenza, Respiratory Syncytial Virus, parainfluenza, and Norovirus (**Datix Risk ID 2488**).

10. 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 (**HBR 4**), and has resulted in an escalation from Enhanced Monitoring to Targeted Intervention.

11. 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 2024 to 31 March 2025, is as follows: *C. difficile* - £2,760,000; *Staph. aureus* bacteraemia - £938,000; *E. coli* bacteraemia - £257,200; therefore, a total cost of **£3,955,200**.

12. RECOMMENDATION

The Infection Prevention & Control Strategic Group is asked to:

- **NOTE:** the health board's end of year position in relation healthcare associated infections, and that the internal and national infection improvement goals were achieved in relation to *E. coli* and *Pseudomonas aeruginosa* bacteraemia.
- **NOTE:** the performance of the health board to Targeted Intervention for performance in relation to HCAIs.
- **NOTE:** the health board continues to have the highest incidence of *C. difficile* infection and *Klebsiella spp*. bacteraemia in Wales.
- **NOTE:** the continued increase in numbers of cases, and the numbers of periods of increased incidence, and outbreaks of *C. difficile* cases seen in Quarter 4, and the continuation of the Gold *C. difficile* High Incidence Management Group**.**
- **NOTE:** progress on Infection Prevention & Control Improvement Plan to 31st March 2025.
- **NOTE:** a decrease in overall compliance in IPC Level 2 training to 78.88% compliance reported at 31st March 2025.
- **NOTE:** the challenges and risks within the health board currently and mitigations recorded in the risks recorded in the health board's Risk Register.

Governance and Assurance		
Link to Enabling Objectives *(please choose)*	**Supporting better health and wellbeing by actively promoting and empowering people to live well in resilient communities**	
	Partnerships for Improving Health and Wellbeing	☐
	Co-Production and Health Literacy	☐
	Digitally Enabled Health and Wellbeing	☐
	Deliver better care through excellent health and care services achieving the outcomes that matter most to people	
	Best Value Outcomes and High-Quality Care	☒
	Partnerships for Care	☐
	Excellent Staff	☐
	Digitally Enabled Care	☐
	Outstanding Research, Innovation, Education and Learning	☐
Health and Care Standards		
(please choose)	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

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. (*Trust and CCG level impact of E. coli BSIs* accessed online at: https://improvement.nhs.uk/resources/preventing-gram-negative-bloodstream-infections/).

Estimated costs related to healthcare associated infections, from 01 April 2024 to the end of March 2025 is as follows: *C. difficile* - £2,760,000; *Staph. aureus* bacteraemia - £938,000; *E. coli* bacteraemia - £257,200; therefore, a total cost of **£3,955,200**.

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 30th January 2025
Appendices	**Appendix 1**. HB & SG Infection reduction trajectory charts. **Appendix 2**. All Wales comparison - Incidence of Tier One infections – March 2025. **Appendix 3**. HB Improvement Plan 2024_25 to end Q4, 2024/25. **Appendix 4**. PII and WGS clusters for Quarter 4, 2024/25. **Appendix 5**. Incidents and outbreaks of infection, Quarter 4, 2024/25. **Appendix 6**. Infection Prevention & Control-related Education.