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Bwrdd Iechyd Prifysgol
Bae Abertawe
Swansea Bay University
Health Board



Meeting Date	26 July 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	<ul style="list-style-type: none"> Year-on-year reductions in the following infections: <i>C. difficile</i> (11%), <i>E. coli</i> bacteraemia (22%) and <i>Klebsiella spp.</i> bacteraemia (15%). Continued increase in <i>Staph. aureus</i> bacteraemia is concerning, with Morriston Service Group cases accounting for much of the increase. Active leadership and participation is required by all staff. Service Group priorities for Quarter 2: <ul style="list-style-type: none"> Improved focus to clarify for Service Groups and individuals what is expected of them in relation to responsibilities and in reducing healthcare associated infections. Service Groups to identify key wards/areas with the highest incidence of infection. Proposal for a line insertion team in Singleton for insertion of PICC lines oncology and haematology patients. Primary Community & Therapies Group to review processes by which assurance can be given that infections undergo a process of scrutiny. Morriston Hospital Service Group is expected to achieve faster improvements on the infection position, including a plan to reduce the number of patients awaiting the creation of a permanent arteriovenous fistula. The following actions are proposed by the IP&C team for July 2022: <ul style="list-style-type: none"> Identification of appropriate Clinical Codes and scoping feasibility of using these to identify target infections. Develop an educational package for optimal specimen collection, commencing with urine sampling (action by 31.07.22). Review of roles and responsibilities in relation to IP&C to be undertaken, which will clarify expectations of staff. 			
Specific Action Required	Information	Discussion	Assurance	Approval
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Recommendations	<p>Members are asked to:</p> <p>Consider initial progress to the end of June 2022 against the Health Board's Infection Prevention Improvement Plan, and agree Quarter 2 priorities and actions for July 2022.</p>			

Infection Prevention and Control Report

		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 Executive Director of Nursing & Patient Experience		
Reporting Period	30 June 2022	Report prepared on	6 July 2022

Summary of Current Position

This paper will present a summary of the overarching position in relation to the number of cases of infection within the Health Board, and by Service Group, to the end of June 2022.

Health Board and Service Group progress against the Tier 1 infection reduction goals to the end of June 2022 is shown in [Appendix 1](#).

A summary position for the Health Board is shown in the table below, identifying the cumulative position for the financial year 2022/23, the monthly case numbers, and the average monthly goal.

Table 1: Health Board Summary Position for June 2022

Infection	Cumulative Cases to end of June 2022	Monthly total: June 2022	Average monthly reduction goal (max.)
<i>C. difficile</i> (CDI)	40	16	<8 (annual maximum: <95 cases)
<i>Staph. aureus</i> bacteraemia (SABSI)	40	9	<6 (annual maximum: <71 cases)
<i>E. coli</i> bacteraemia (EcBSI)	68	16	<21 (annual maximum: <251 cases)
<i>Klebsiella</i> spp. bacteraemia (KIBSI)	22	8	<6 (annual maximum: <71 cases)
<i>Ps. aeruginosa</i> bacteraemia (PAERBSI)	8	4	<2 (annual maximum: <21 cases)

A summary position for Service Groups is shown in the table below, identifying the number of cases in the reporting month, with cumulative totals for the financial year to date shown in brackets.

Table 2: Service Group Summary Position for June 2022

	CDI	SABSI	EcBSI	KIBSI	PAERBSI
PCTSG - CAI	9 (15)	2 (18)	11 (42)	2 (5)	1 (3)
PCTSG - HAI	0 (1)	0 (0)	0 (1)	0 (0)	0 (0)
MH&LD – HAI	0 (0)	0 (0)	0 (1)	0 (0)	0 (0)
MORR – HAI	5 (18)	4 (15)	3 (15)	3 (10)	3 (5)
NPTH - HAI	0 (1)	1 (1)	0 (0)	0 (1)	0 (0)
SH - HAI	2 (5)	2 (6)	2 (9)	3 (6)	0 (0)

Progress against Infection Prevention Improvement Plan to 30.06.22

- To the end of June 2022, the Health Board had not achieved the reduction in infection in line with the proposed trajectories. However, to the end of June 2022, there had been year-on-year 11% reduction in the number of cases of *C. difficile*, a 22% reduction in the number of *E. coli* bacteraemia cases, and a 15% reduction in the number of *Klebsiella spp.* bacteraemia cases. There had been a 33% increase in cases of *Pseudomonas aeruginosa* bacteraemia, although numbers are small and not linked. Of concern is the continued increase *Staph. aureus* bacteraemia cases. Whilst there has been a 14% increase across the Health Board, there has been improvement in the number of community acquired cases and in those associated with Singleton Hospital. Cases associated with Morriston Hospital have been significantly higher year-on-year (6 cases in the first quarter 2021/22, compared with 15 cases in the 2022/23 first quarter). Strategies for reducing risks of *Staph. aureus* bacteraemia are being reviewed by Service Groups, with the IP&C Team support, including the use of daily chlorhexidine bathing (which is currently used universally for all patients in Trauma & Orthopaedics).
- The Leadership Touch Point event on 23 June was well attended, with positive engagement with wider teams. The event provided a background to the Health Board's current position in relation to infections, with break-out rooms for discussion relating to what individuals could do within their roles to improve infection prevention & control standards.
- The Improvement Plan has been RAG-rated and updated to show progress by the end of Quarter 1 (Appendix 2).

Service Group priorities for Quarter 2:

- Improved focus is required to clarify for Service Groups and individuals what is expected of them in relation to responsibilities and in reducing healthcare associated infections.
- Service Groups must identify key wards/areas with the highest incidence of infection and implement quality improvement programmes that will reduce the risks of infection.
- Strategies to reduce infections would include a proposal for a line insertion team in Singleton that would reduce the time that oncology and haematology patients wait for insertion of PICC lines.
- Primary Community & Therapies Group will be expected to review processes by which assurance can be given that community acquired infections undergo a process of scrutiny. Infection rates at Morriston Hospital have deteriorated during Quarter 1.
- The expectation for Morriston Hospital Service Group is that there will be a concerted focus to achieve faster improvements on the infection position, including a plan to reduce the number of patients awaiting the creation of a permanent arteriovenous fistula.

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, leading to additional patients being on wards (over-occupancy) for periods of time. The increasing inpatient population occurs at a time of increased staff shortages, which an increasing patient-to-staff ratio.
- Healthcare associated infections extend length of stay, which adds to current service pressures.

- Historically, infection reduction initiatives have been compromised by the following: staffing vacancies, or shortages caused by sickness absence, with reliance on temporary staff; lack of isolation facilities; 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.

Actions in progressing Infection Prevention Improvement Plan (what, by when, and by whom)

Action: Identification of appropriate Clinical Codes and scoping feasibility of using these to identify target infections. **Target completion date:** set back to 31.07.22 due to increasing COVID pressures. **Lead:** Head of Nursing IP&C, Clinical Coding Supervisor and Digital Intelligence.

Action: Develop an educational package for optimal specimen collection, commencing with urine sampling. **Target completion date:** 31.07.22. **Lead:** Head of Nursing, IP&C.

Action: Review of roles and responsibilities in relation to IP&C to be undertaken, which will clarify expectations of staff. **Target completion date:** 31.07.22. **Lead:** Head of Nursing, IP&C, Assistant Director of Nursing (IPC lead) and Deputy Director of Nursing.

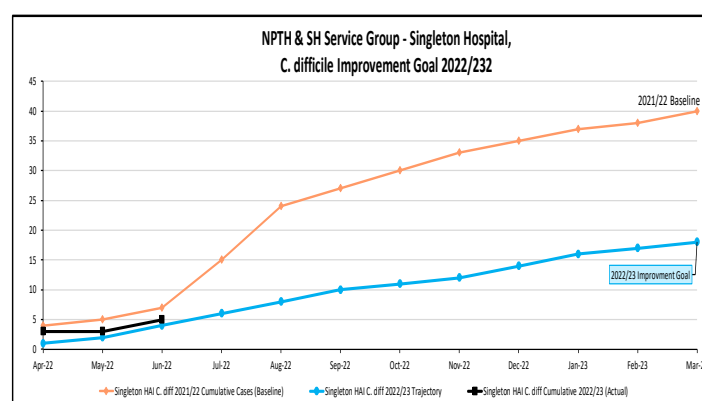
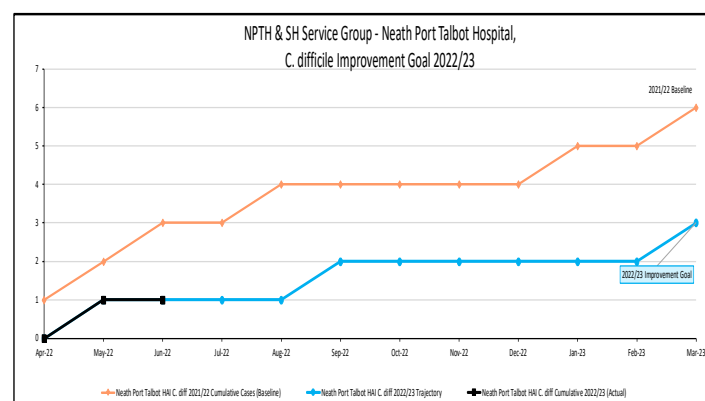
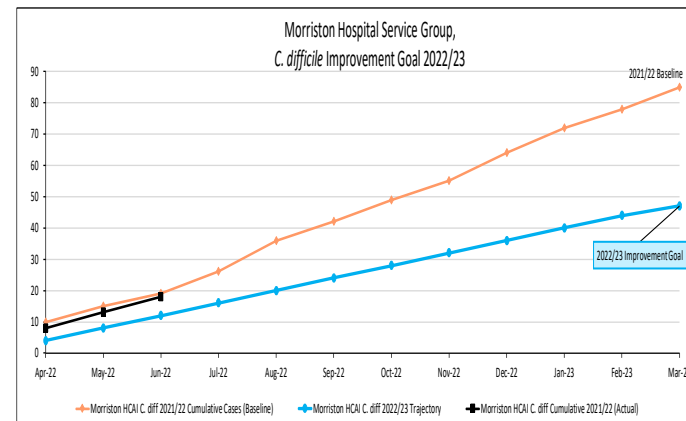
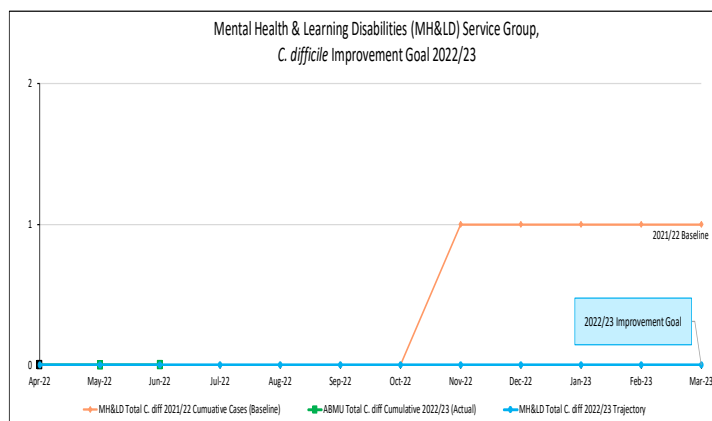
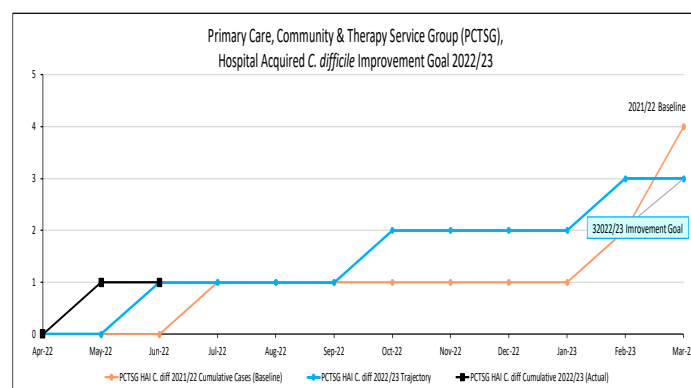
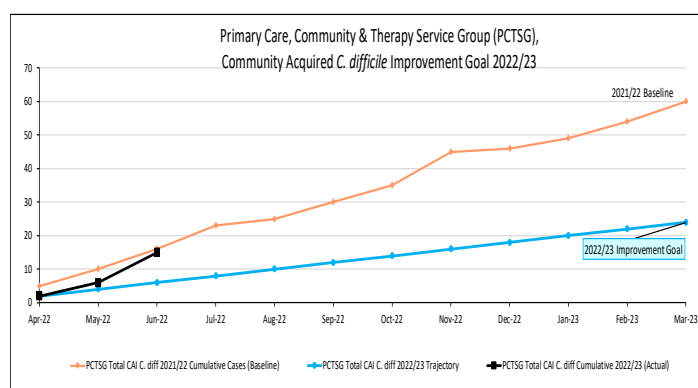
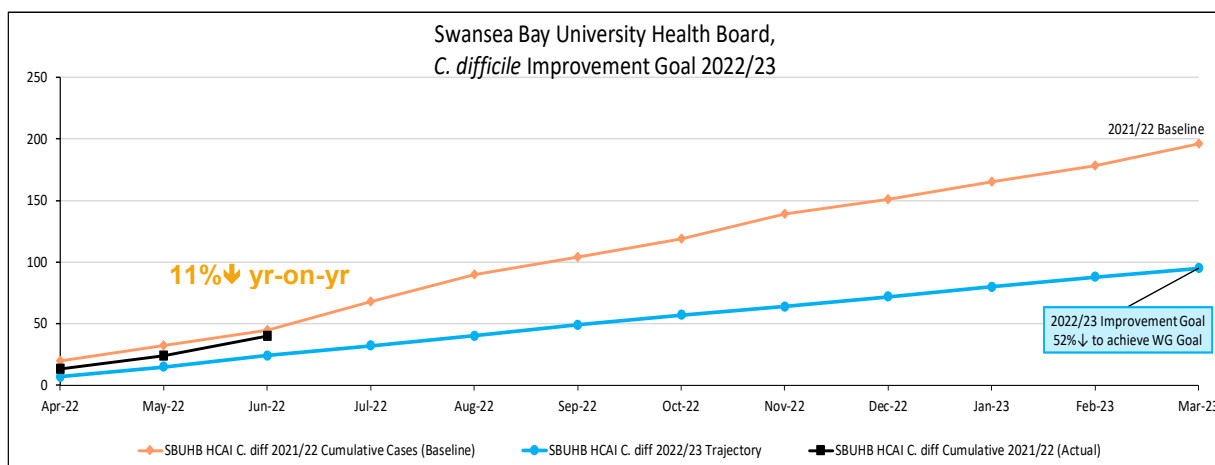
Financial Implications

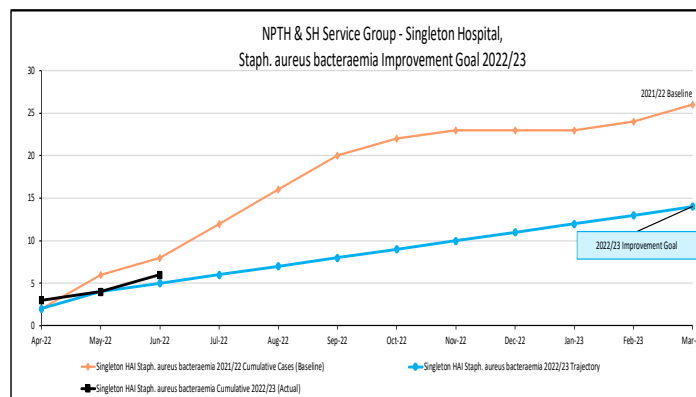
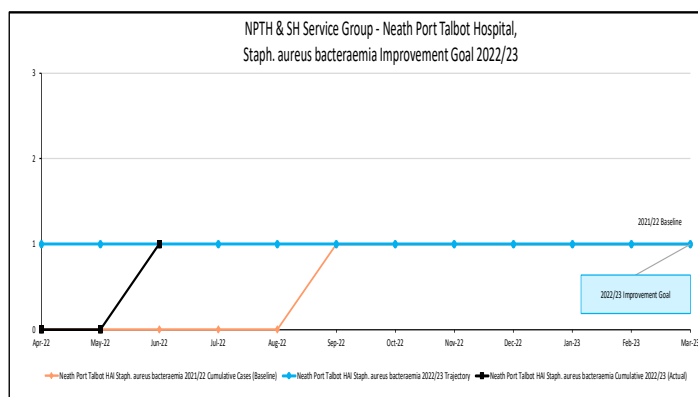
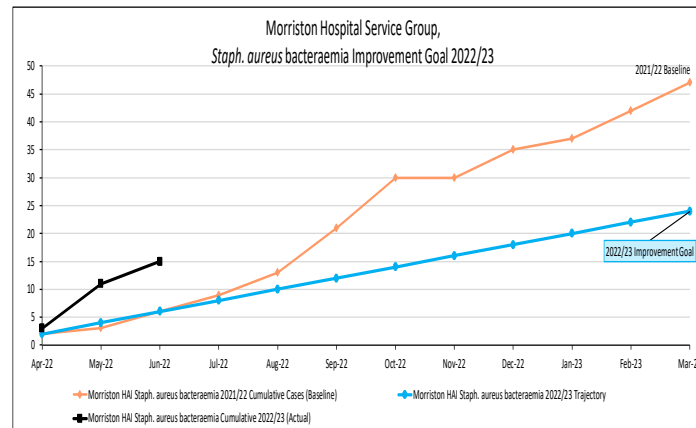
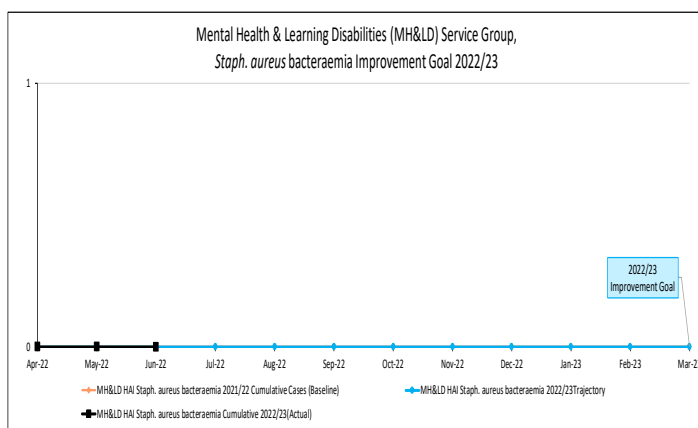
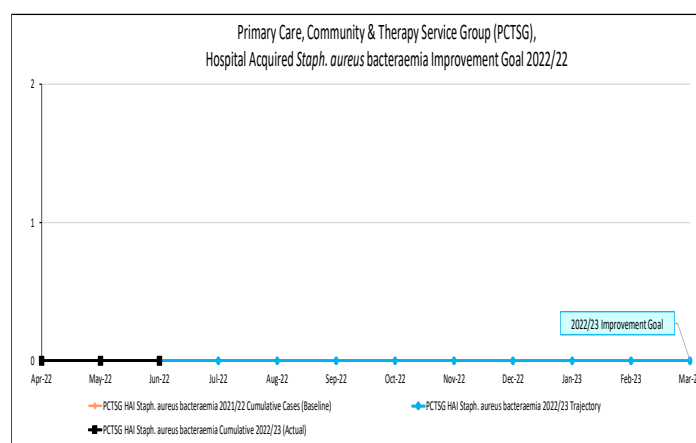
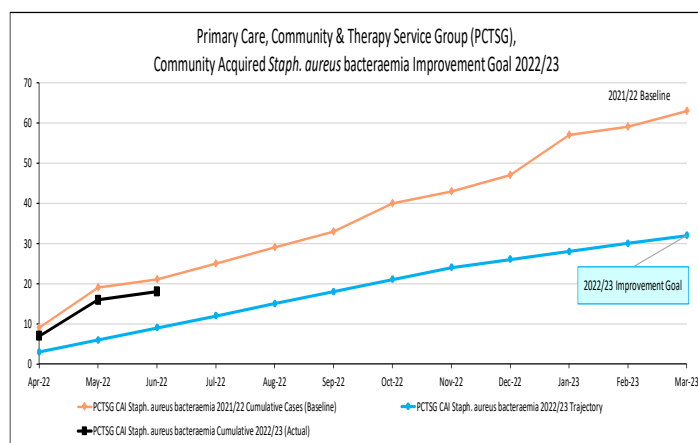
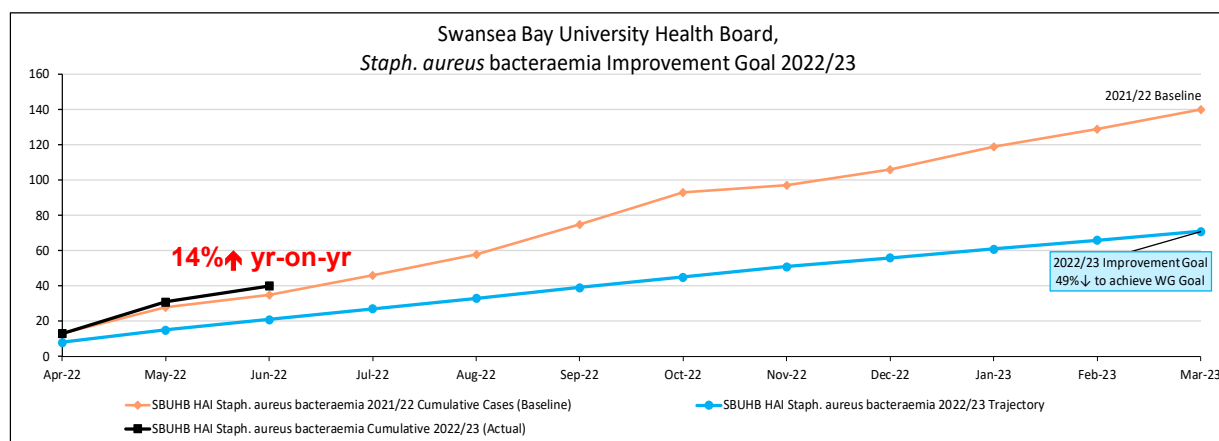
A Department of Health impact assessment report (IA No. 5014, 20/12/2010) stated that the best estimate of costs to the NHS associated with a case of *Clostridioides difficile* infection is approximately **£10,000**. The estimated cost to the NHS of treating an individual cost of MRSA bacteraemia is **£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 2022 to the end of June 2022 is as follows: *C. difficile* - £400,000; *Staph. aureus* bacteraemia - £280,000; *E. coli* bacteraemia - £76,900; therefore, a total cost of **£756,900**.

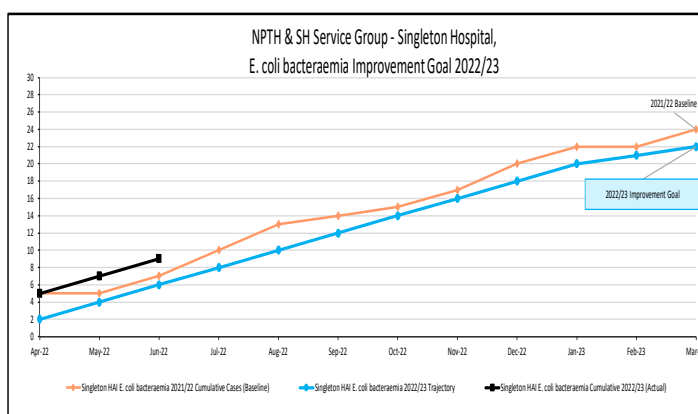
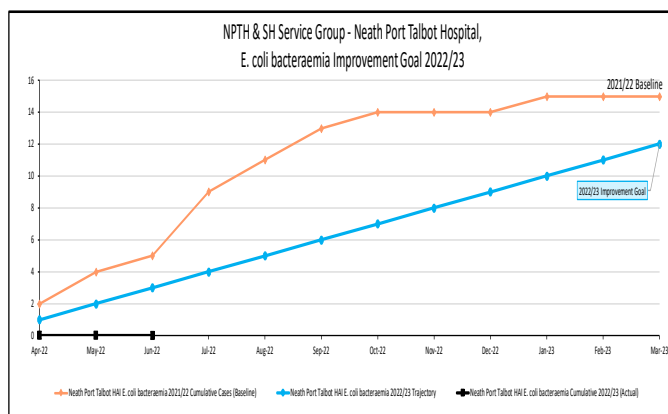
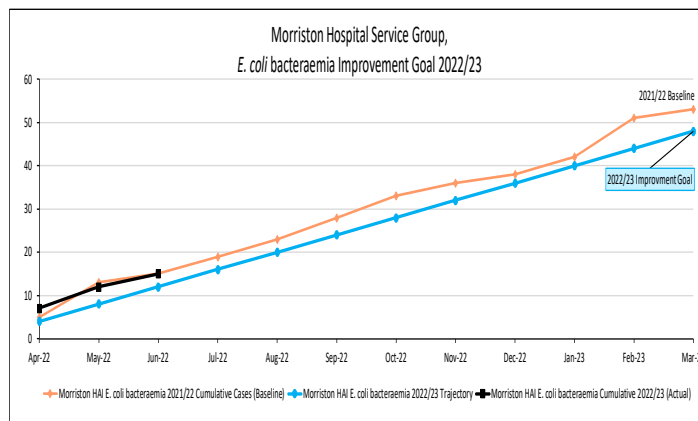
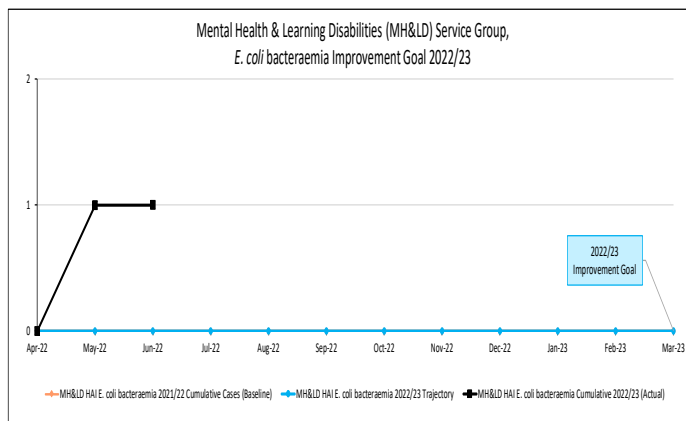
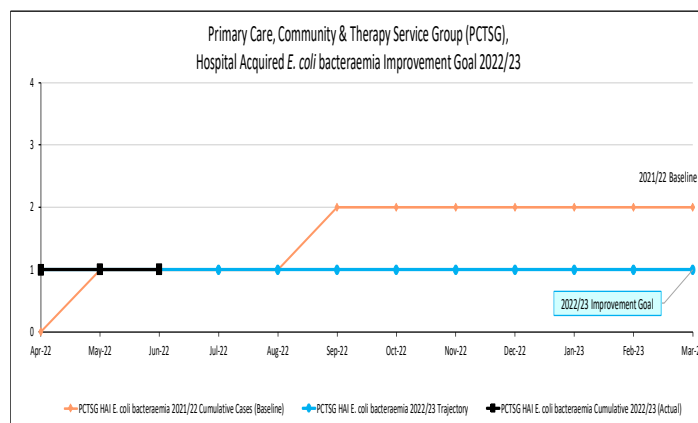
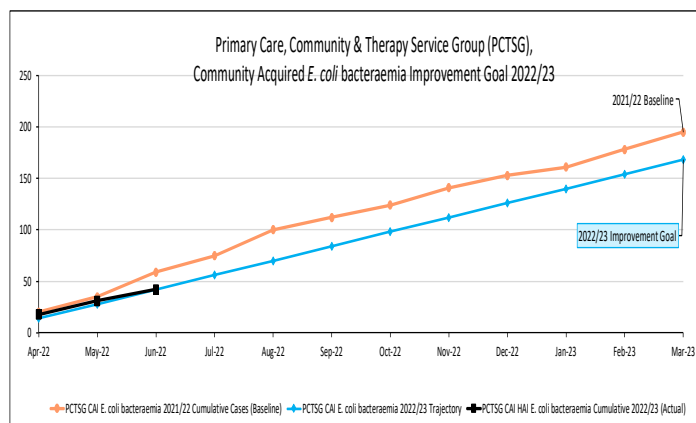
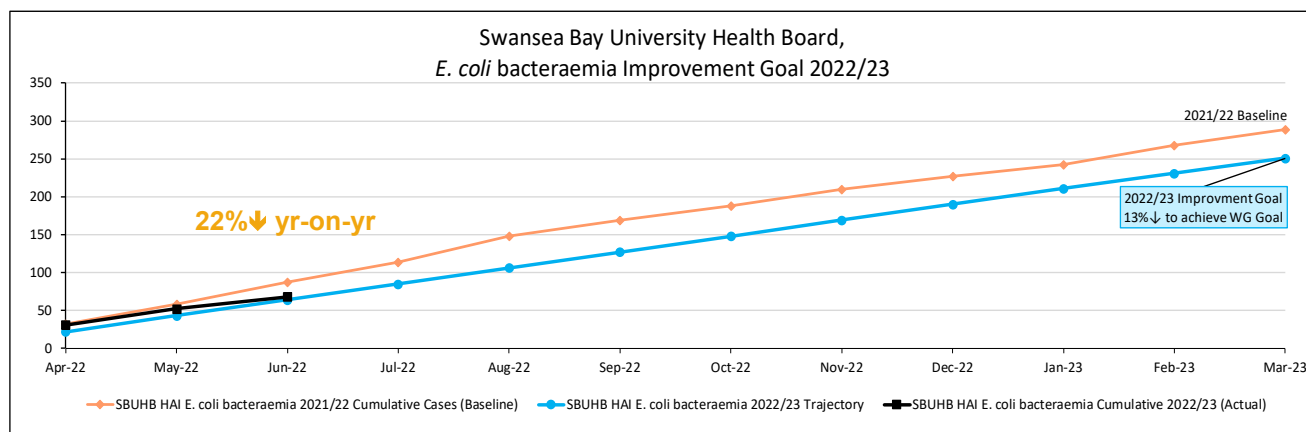
Recommendations

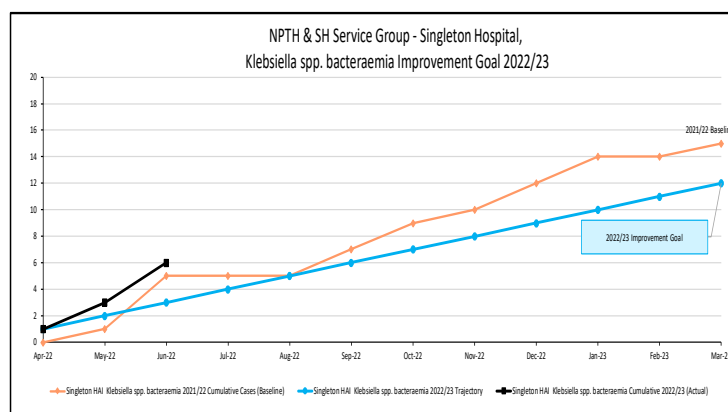
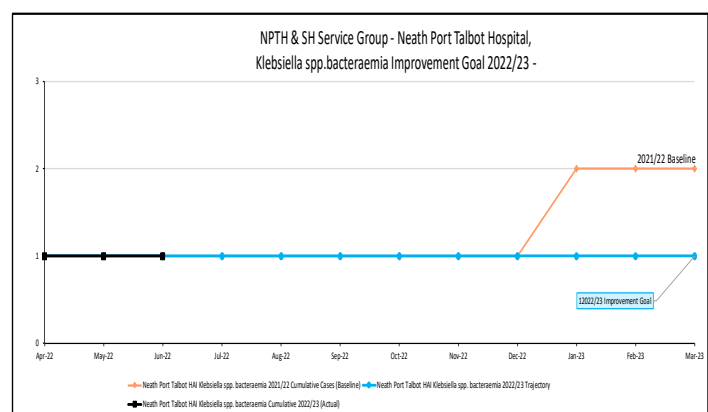
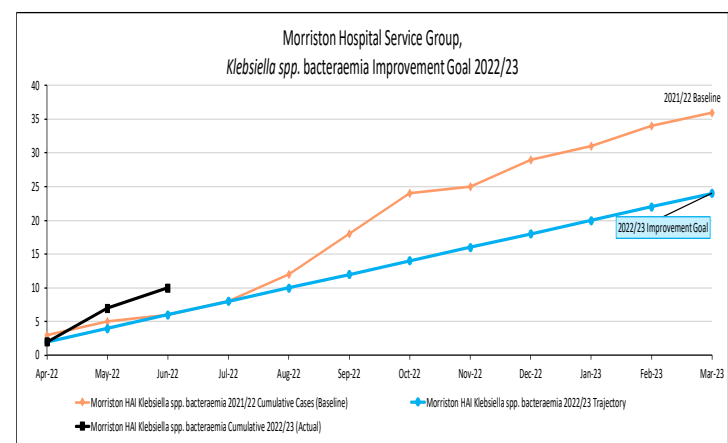
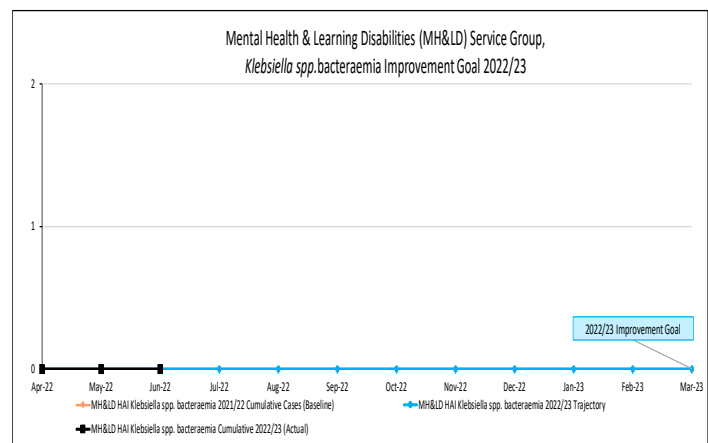
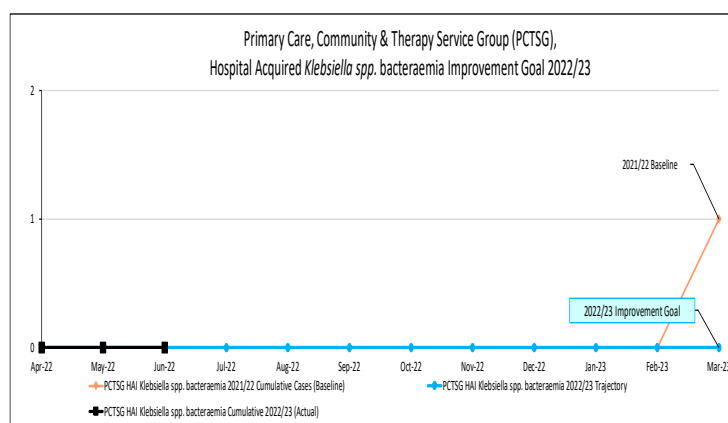
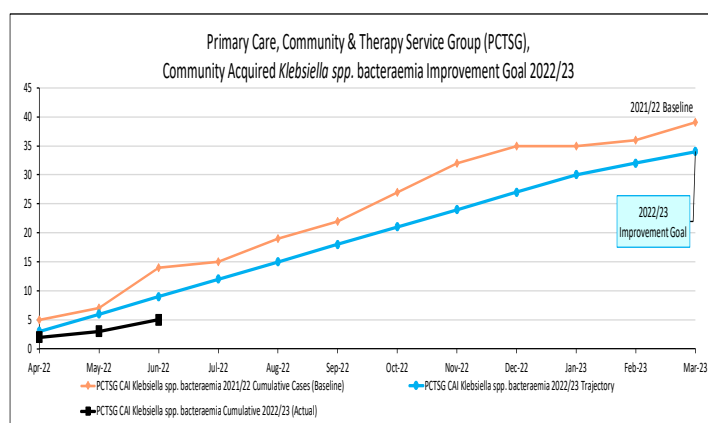
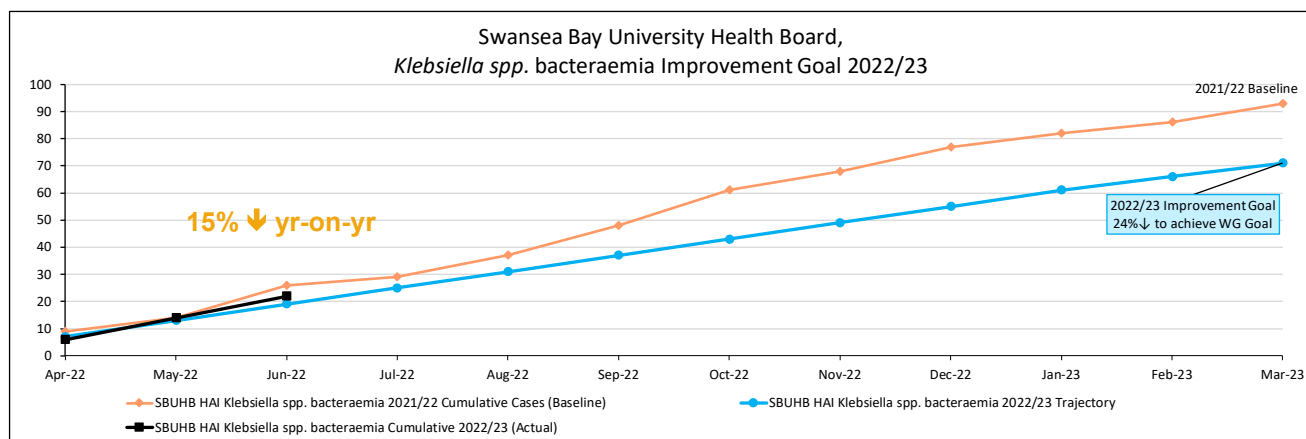
Members are asked to:

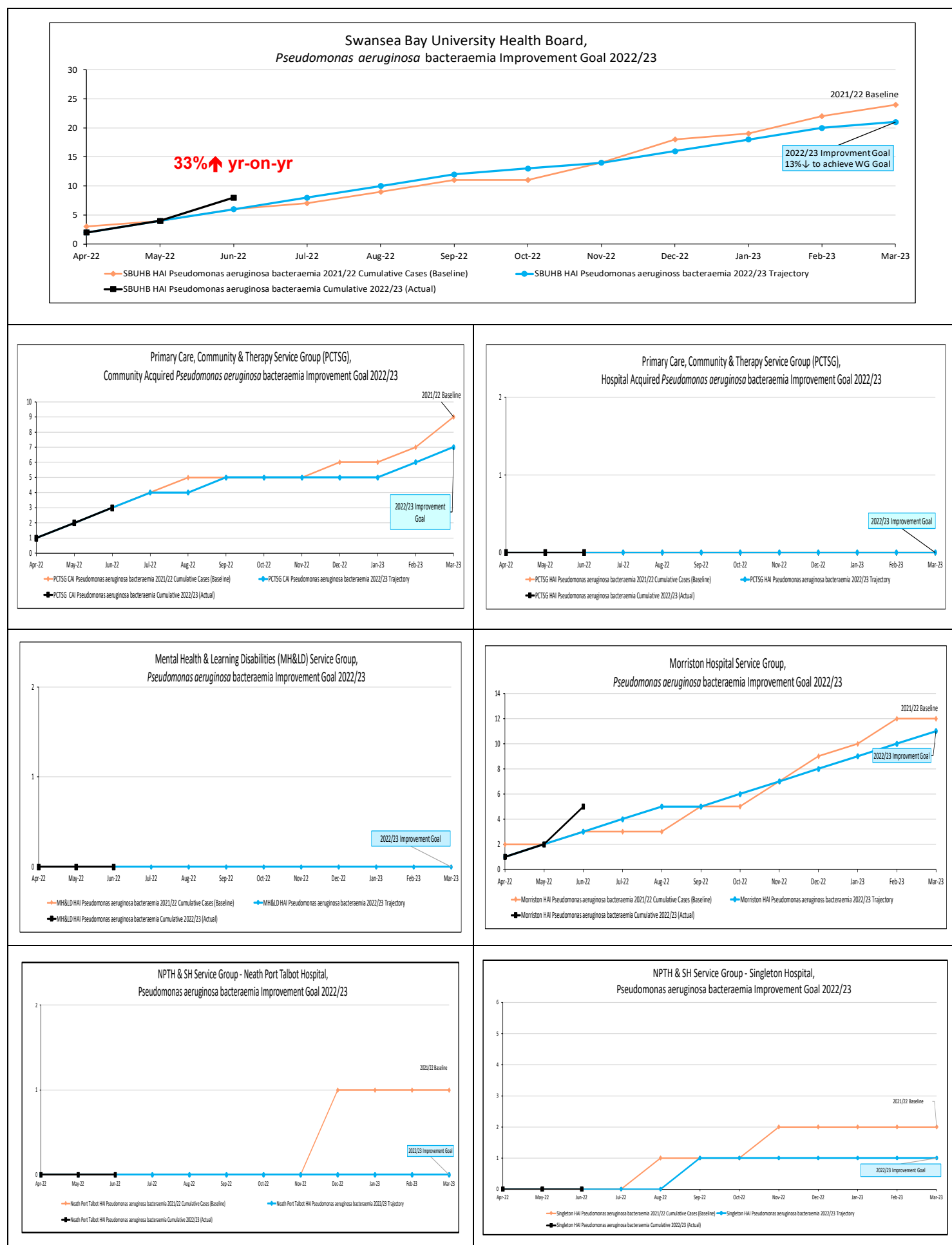
- Consider initial progress to the end of June 2022 against the Health Board's Infection Prevention Improvement Plan, and agree Quarter 2 priorities and actions for July 2022.

C. difficile

Staph. aureus bacteraemia

E. coli bacteraemia

Klebsiella spp. bacteraemia

Pseudomonas aeruginosa bacteraemia

12 Month Plan

Goal	Method	Baseline position	3 month (Q1)	6 month (Q2)	9 month (Q3)	12 month (Q4)	Outcome	Responsibility	Digital & Finance Implications	IP&C Methodology Support Lead	Progress @ end Q1				
Service Groups to review IPC governance arrangements & structures and submit to Health Board Infection Control Committee.	Service Delivery Groups to establish a Service Group Infection Control Committee (with appropriate MDT clinical representation), with HCAI Quality Priority a focus, that reports into the Health Board's Infection Control Committee.	Previously established within most Service Groups, but frequency of meetings has slipped during Pandemic.	Established, with meetings planned up to March 2023 in all Service Groups.	Development and agreement of clear roles and responsibilities from Board to ward and reflected within Service Group improvement plans.			Strengthened local ownership, governance arrangements for IPC at Service Group level.	Service Group Directors		Support for each Service Group ICC.					
	Service Groups to establish a process for high level scrutiny and learning for Staph. aureus bacteraemia and C. difficile infection, with local clinical teams presenting to the Group Medical and Nursing Directors.	High level scrutiny of nosocomial (NI) cases of key infections not well established	Each Service Group will have established a process of scrutiny of nosocomial C. diff and Staph. aureus bacteraemia.	Each Service Group will identify top 5 areas with highest incidence of infection and implement QI programmes to reduce infections.	Clear evidence of improvement strategies.	Clear evidence of improvement strategies.	Improved scrutiny and shared learning from these key harm events.	Service Group Directors		Support provided as required for scrutiny of cases. Matron for IPC chairs Quality Priority C. diff Group.					
	Service Group Medical & Nursing Directors to present findings from this scrutiny process, and lessons learned, monthly to Executive Medical and Nursing Directors.	Meetings being held with each Service Group Triumvirate to confirm process expectations.	Regular senior leadership scrutiny meeting dates established.	Clear evidence of improvement strategies.	Clear evidence of improvement strategies.	Clear evidence of improvement strategies.	Clear expectation that Service Groups have improved compliance, assurance of earlier identification of infection, improved assessment of severity of disease and management of cases. Identification from lessons learned which inform improvement actions.	Executive & Service Group Medical & Nursing Directors.		Support for process and attendance at Exec review meetings.					
Reduce incidence of the following key infections: Staph. aureus and Gram negative bacteraemias, and C. difficile infection. What does good practice look like by being clear on our clinical pathways and evidence based practice.	Using strategies outlined below: Need to rotate nurse / medical management responsibilities to understand key areas of work. Need to ensure staff at all levels are clear that IPC is everyone's responsibilities. What does good practice look like by being clear on our clinical pathways and evidence based practice.	C.difficile infection WG Improvement Goal: <8 cases/month (NI & CAI) HB average 11 NI cases/month; 5 Community acquired (CAI)/month Average 7 NI cases/month Morriston Average 3 NI cases/month Singleton 5 NI cases in 11 month PCTG	WG Improvement Goal: <8 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 2 CAI cases/month Average <4 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/quarter NPTH 0 NI cases/month PCTG	WG Improvement Goal: <8 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 2 CAI cases/month Average <4 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/quarter NPTH 0 NI cases/month PCTG	WG Improvement Goal: <8 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 2 CAI cases/month Average 3 NI cases/month Morriston Average 1 NI cases/month Singleton 1 NI case/quarter NPTH 0 NI cases/month PCTG	WG Improvement Goal: <8 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 2 CAI cases/month Average 3 NI cases/month Morriston Average 1 NI cases/month Singleton 1 NI case/quarter NPTH 0 NI cases/month PCTG	Annual percentage reduction to achieve adopted HB reduction goal - 50%	Service Group Directors	Band 6 WTE Digital Intelligence resource for dashboard.	Head of Nursing IPC leading with Digital Intelligence on development of digital solution and dashboard.	Average 13 cases/month Av. 8 HAI case/mth (+2mth); Av. 5 CAI/mth (+3mth); Morr - 6mth (+2mth); Sing- 2mth (on-track); NPTH 1/qtr (on-track)				
		Staph. aureus bacteraemia WG Improvement Goal: <6 cases/month (NI & CAI) HB average 6 NI cases/month; 5 Community acquired (CAI)/month Average 4 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case in 11 months NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 2 NI cases/month Morriston Average 1 NI cases/month Singleton 0 NI cases/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 2 NI cases/month Morriston Average 1 NI cases/month Singleton 0 NI cases/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 2 NI cases/month Morriston Average 1 NI cases/month Singleton 0 NI cases/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 2 NI cases/month Morriston Average 1 NI cases/month Singleton 0 NI cases/month NPTH 0 NI cases/month PCTG	Annual percentage reduction to achieve adopted HB reduction goal - 45%				Average 13 cases/month Av. 7 HAI case/mth (+4mth); Av. 5 CAI/mth (+2mth); Morr - 5mth (+3mth); Sing - 2mth (+1mth); NPTH +1 in qtr				
		E.coli bacteraemia WG Improvement Goal: <21 cases/month (NI & CAI) HB average 8 NI cases/month; 16 Community acquired (CAI)/month Average 4 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case in 11 months NPTH 0 NI cases/month PCTT	WG Improvement Goal: <21 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 15 CAI cases/month Average 3 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <21 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 15 CAI cases/month Average 3 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <21 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 15 CAI cases/month Average 3 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <21 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 15 CAI cases/month Average 3 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <21 cases/month Minimum improvement goals: HB average 6 NI cases/month; average 15 CAI cases/month Average 3 NI cases/month Morriston Average 2 NI cases/month Singleton 1 NI case/month NPTH 0 NI cases/month PCTG				Annual percentage reduction to achieve adopted HB reduction goal - 15%	Average 23 cases/month Av. 9 HAI case/mth (+3mth); Av. 14 CAI/mth (on-track) Morr - 5mth (+2mth); Sing -3mth (+1mth); NPTH 0 cases in qtr (on-track)			
		Klebsiella spp. bacteraemia WG Improvement Goal: <6 cases/month (NI & CAI) HB average 5 NI cases/month; 3 Community acquired (CAI)/month Average 3 NI cases/month Morriston Average 1 NI cases/month Singleton 2 NI cases in 11 months NPTH 0 NI cases/month PCTT	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 1 NI case/month Morriston Average 1 NI case/month Singleton Average 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 1 NI case/month Morriston Average 1 NI case/month Singleton Average 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 1 NI case/month Morriston Average 1 NI case/month Singleton Average 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 1 NI case/month Morriston Average 1 NI case/month Singleton Average 1 NI case/month NPTH 0 NI cases/month PCTG	WG Improvement Goal: <6 cases/month Minimum improvement goals: HB average 3 NI cases/month; average 3 CAI cases/month Average 1 NI case/month Morriston Average 1 NI case/month Singleton Average 1 NI case/month NPTH 0 NI cases/month PCTG				Annual percentage reduction to achieve adopted HB reduction goal - 25%	Average 7 cases/month Av. 6 HAI case/mth (+3mth); Av. 2 CAI/mth (on-track); Morr - 3mth (+2mth); Sing -2mth (+1mth); NPTH 1 cases in qtr (on-track)			
		Service Groups will ensure a process of Multi-disciplinary team (MDT) rapid review of cases , to ensure appropriate management, and identification of improvement actions.	The current process of Root Cause Analysis is protracted and not timely.	Service Group Medical and Nurse Directors will agree and establish a rapid review process to ensure that these clinical reviews are undertaken in a timely manner.	All inpatient cases will have rapid MDT review undertaken. Lessons identified will be shared and improvement actions implemented using Quality Improvement methodologies.	All inpatient cases will have rapid MDT review undertaken. Lessons identified will be shared and improvement actions implemented using Quality Improvement methodologies.	All inpatient cases will have rapid MDT review undertaken. Lessons identified will be shared and improvement actions implemented using Quality Improvement methodologies.				MDT Rapid Review process results in optimal treatment of cases and in quality improvement leading to the reductions identified above.	Service Group Nursing & Medical Directors		IP&C will participate in the MDT Rapid Review process.	Improving, but off-track for all cases. Challenge remains medical team availability for rapid review.
		Reduce unnecessary use of peripheral vascular cannulae (PVC) , and urinary catheters , utilising STOP protocol or from the point of assessment and admission	Currently incidence of use of PVC and urinary catheters unknown. Currently, scoping with Digital Intelligence feasibility of identifying incidence from existing DI systems (e.g. SIGNAL or WNCN).	Scoping completed, with proposals for methodology for obtaining baseline and agree how data will be presented. If a digital solution is not available, a manual point prevalence survey will need to be undertaken in Service Groups.	Data on incidence of presence of PVC and urinary catheters by ward, specialty and site available on Ward to Board dashboard. Utilise baseline data on PVC and urinary catheter incidence to agree improvement goal.	Incidence of PVC and urinary catheter use is routinely monitored and scrutinised at ward and divisional/specialty group. Service Group Infection Control Committees (ICC) to monitor progress against improvement goals.	Incidence of PVC use is routinely monitored and scrutinised at ward and divisional/specialty group. Service Group Infection Control Committees (ICC) to monitor progress against PVC incidence improvement goal.				Minimum 10% reduction in incidence of PVC and urinary catheters.	Service Group Nursing & Medical Directors	Band 6 WTE Digital Intelligence resource for dashboard.	IP&C Head of Nursing and IPC Quality Improvement Matron will develop methodology for reporting, using national processes where these exist.	Off-track. SIGNAL - unreliable data input. Not currently an option in current iteration of WNCN, but requested for development in future iterations. Manual point prevalence not undertaken to date.

Goal	Method	Baseline position	3 month (Q1)	6 month (Q2)	9 month (Q3)	12 month (Q4)	Outcome	Responsibility	Digital & Finance Implications	IP&C Methodology Support Lead	Progress @ end Q1
	For every patient with a PVC or urinary catheter there will be a completed insertion bundle and completed maintenance bundle for every day that the device is in situ.	Recorded on Ward Metrics in January 2022: compliance with completion of PVC insertion bundle - 69%; compliance with completion of PVC maintenance bundle - 75%; compliance with completion of urinary catheter insertion bundle - 87%; compliance with completion of urinary catheter maintenance bundle - 87%. WNCR Quarter 3 planned development & implementation of PVC Care Bundles. Ward Manager / Matron to review and maintain	Service Groups provide assurance Compliance with all relevant bundles will be reported and monitored at Service Group ICC to ensure good compliance or any hot stop areas for improvement. Where appropriate, Service Groups will implement improvement strategies, with agreed step-improvements	Clear progress on Improved compliance reported quarterly with clear plan to deliver on 100% compliance. Service Group ICC to review progress against improvement goals.	Clear progress on Improved compliance reported quarterly with clear plan to deliver on 100% compliance. Service Group ICC to review progress against improvement goals.	Clear progress on Improved compliance reported quarterly with clear plan to deliver on 100% compliance. Service Group ICC to review progress against improvement goals.	Continuous improvement on compliance with PVC & urinary catheter insertion and maintenance bundles, with goal of 100% compliance.	Service Group Nursing & Medical Directors	Band 6 WTE Digital Intelligence resource for all service groups / IPC.	IPC Quality Improvement Matron continues to work with WNCR Project Leads to inform current and future developments which can provide digital solutions to surveillance and monitoring	Compliance recorded in Nursing Metrics dashboard-Jun-22: PVC insertion bundle - 74% ↑; PVC maintenance bundle - 84% ↑; Urinary catheter insertion bundle - 91% ↑; Urinary catheter maintenance bundle - 97% ↑.
	Clinical staff will be compliant with mandatory ANTT training and will be ANTT competence assessed (3-yearly) (applicable for PVC and urinary catheters)	ANNT training compliance @ 31/01/22: Nursing Morriston Service Group: 23% NPTH & SH Service Group: 21% PCCT Service Group: 16% Medical & Dental: 3.37% Nursing & Midwifery Registered: 36.85%	Undertake and complete scoping by Service Groups to identify which clinical staff are required to comply with mandatory ANTT training and agree programme for improvement.	Clear progress on Improved compliance reported quarterly with clear plan to deliver on 100% compliance. Service Group ICC to review progress against improvement goals.	Clear progress on Improved compliance reported quarterly with clear plan to deliver on 100% compliance. Service Group ICC to review progress against improvement goals.	Clear progress on Improved compliance reported quarterly with clear plan to deliver on 100% compliance. Service Group ICC to review progress against improvement goals.	All Service Group staff who undertake aseptic procedures will be compliant with ANTT training (3-yearly) and will have been competence assessed in the 3-year period.	Service Group Nursing & Medical Directors	Obtained through ESR.	IPC Quality Improvement Matron on national working groups to promote better recording of compliance with ANTT training and competence. Support will be provided to Service Groups to develop internal processes for monitoring compliance. IPC team will provide support in delivering training as an adjunct to eLearning.	ANNT training compliance @ 05/07/22: Morriston Service Group: 23% ± NPTH & SH Service Group: 23% ↑ PCCT Service Group: 16% ± Medical & Dental: 3.06% ↓ Nursing & Midwifery Registered: 36.38% ↑ ESR remains unreliable for accurate recording - requires ESR work on standardising position numbers
	Review the pathway and interactions to aid reduction of incidence of catheter associated urinary tract infection (CAUTI) .	Baseline data unreliable (total number of cases reported via DATIX since December 2019 = 6) Surveillance programme not available currently.	Scope with Digital Intelligence ability to identify CAUTI utilising existing DI systems, e.g. WNCR, HEPMA, or LIMS (using positive urine cultures from catheter samples of urine).	Scoping completed, with agreement on a way forward and methodology agreed.	Cases of CAUTI are reported on Ward to Board dashboard.	Cases of CAUTI are reported on Ward to Board dashboard.	20% reduction in CAUTI.	Service Group Nursing & Medical Directors	Band 6 WTE Digital Intelligence resource	IP&C Head of Nursing and IPC Quality Improvement Matron will support Service Groups in developing surveillance criteria and processes and work with Digital Intelligence on providing a digital solution to surveillance.	Off-track. Digital Intelligence Partner commenced post June 2022. CAUTI reported on Nursing Metrics: 12 cases recorded in Q1
	Reduce hepatobiliary-related E.coli and Klebsiella spp. bacteraemia cases.	Hepatobiliary disease an associated underlying cause for 21% of E. coli bacteraemia and 20% Klebsiella spp. bacteraemia.	Undertake risk based review of patients awaiting surgery or procedures related to hepatobiliary disease. Service Groups to link review to IMTP and Surgical Services plans.	Monitored through IMTP process.	Monitored through IMTP process.	Monitored through IMTP process.	Reduction in waiting lists for hepatobiliary related surgery or interventions, and a reduction in associated E. coli and Klebsiella bacteraemia.	Service Group Directors		IPC will continue to undertake analysis of bacteraemia data and provide data on proportion of bacteraemia with hepatobiliary source.	
	Improve compliance with 'Start Smart Then Focus' (SSTF) antimicrobial stewardship programme, with timely feedback of results to Service Groups	Quarterly audits undertaken by Pharmacy, with feedback to Service Groups and Infection Control Committee. Currently scoping with Digital Intelligence the development of a ward dashboard, utilising HEPMA as the source of data.	Continue with quarterly audits. Complete scoping and draft version of dashboard available.	Continue with quarterly audits. Testing and refinement of dashboard, with Go Live date agreed.	Data available via dashboard for Singleton and NPTH (currently using HEPMA). Continue with quarterly audits in Morriston until HEPMA roll-out completed.	Data available via dashboard for Singleton and NPTH (currently using HEPMA). Continue with quarterly audits in Morriston until HEPMA roll-out completed.	Continuous improvement in SSTF compliance. Improved antimicrobial stewardship.	Service Group Medical Directors	Band 6 WTE Digital Intelligence resource	Lead for this is Consultant Antimicrobial Pharmacist.	Quarterly audit & feedback continues. Digital dashboard draft off-track. Digital Intelligence Partner commenced post June 2022.
	Reduce incidence of hospital acquired pneumonia (HAP)	Currently incidence of HAP unknown. Currently, scoping with Digital Intelligence feasibility of identifying baseline through Clinical Coding	Agree methodology for obtaining baseline, or for undertaking point prevalence survey to obtain baseline prevalence.	Validation of data and review of cases to identify contributory factors & causes. Agree quality improvement initiatives and methodology. Initial out of data to review and validate	Implement agreed methodology. Service Groups monitor infection data, and review progress against improvement actions at Service Group Infection Control Committee.	Service Groups monitor infection data, and review progress against improvement actions at Service Group Infection Control Committee.	Reduction in cases of HAP.	Service Group Medical Directors	Band 6 WTE Digital Intelligence resource	IP&C Head of Nursing and IPC Quality Improvement Matron will support clinicians to develop surveillance criteria and processes and work with Digital Intelligence on providing a digital solution to surveillance.	Off-track. Scoping with Clinical coding for baseline data. Initial discussions taken place.
	Reduce the incidence of surgical site infection (SSI) .	Currently incidence of SSI unknown. Currently, scoping with Digital Intelligence feasibility of identifying incidence from existing DI systems (e.g. TOMS and LIMS, & WNCPC).	Develop a risk based approach process for surveillance of surgical site infection (SSI) - with a focus on high consequence SSI (those involving a readmission or a return to theatre as a consequence of infection). Agree methodology for obtaining baseline, or for undertaking point prevalence survey to obtain baseline prevalence.	Validation of data and review of cases to identify contributory factors & causes. Agree quality improvement initiatives and methodology. Initial out of data to review and validate	Service Groups monitor infection data, and review progress against improvement actions at Service Group Infection Control Committee.	Service Groups continue to monitor infection data, and look for outcomes including reduce LOS and antibiotic use.	Reduction in cases of high consequence SSI. Reduction in investigation, treatment and theatre costs, and reduction in increased length of stay. Reduction in readmissions. Improved patient outcomes.	Service Group Medical Directors	Band 6 WTE Digital Intelligence resource	IP&C Head of Nursing and IPC Quality Improvement Matron will support Surgical Services to develop surveillance criteria and processes and work with Digital Intelligence on providing a digital solution to surveillance.	Cardiothoracic services piloting surveillance tool. Off-track.
	Prioritise in Capital Funding Programme Decant Facilities to allow for refurbishment, repair, improvements to compliance with required mechanical ventilation standards, increasing single room capacity, maintenance.	Currently, there are no dedicated decant facilities available on acute hospital sites. Singleton is currently using empty sections in wards to facilitate the decant of patients for cladding replacement work to take place.	If approval obtained to support a capital programme for provision of dedicated Ward decant facilities, initially at Morriston, commence to capital planning and costing stage.	If funding approved, work up capital development programme			Provision of dedicated decant facility at Morriston (long-term plan).	Assistant Director Capital Planning and Morriston Service Directors.	Capital funding requirements in long-term	IPC Team will be involved at planning and delivery stages to ensure specifications meet requirements of Infection Control in the Built Environment.	Capital Planning progressing option appraisal for decant solution
Improve safety of patient care environment	Robust programme of Planned Preventive (PPM) and monitoring to maintain the integrity and functioning of engineering aspects of infection prevention, e.g. water safety, mechanical ventilation, etc.	Funding challenges and limited access to clinical areas for PPM	Scoping of requirements across inpatient locations.	Service Groups build into operational plans access for PPM to be undertaken. Challenges to progress will be risk assessed and escalated.	Service Groups build into operational plans access for PPM to be undertaken. Challenges to progress will be risk assessed and escalated.	Service Groups build into operational plans access for PPM to be undertaken. Challenges to progress will be risk assessed and escalated.	Safe patient care environment	Assistant Director of Estates	Additional revenue funding requirement to be provided by Assistant Director of Estates	IPC Team support Water Safety, and Ventilation Safety Groups, and provide input to ensure IPC standards are met.	

Goal	Method	Baseline position	3 month (Q1)	6 month (Q2)	9 month (Q3)	12 month (Q4)	Outcome	Responsibility	Digital & Finance Implications	IP&C Methodology Support Lead	Progress @ end Q1
	Improve quality of ventilation in existing inpatient areas.	Majority of inpatient bed areas have inadequate air supply to meet existing WHTM and WHO standards for mitigating against airborne infections.	Scoping of requirements across inpatient locations.	Business case development. If funding approved, procurement of short-term air purification systems until long-term mechanical ventilation solutions are possible.	Solutions are available in preparation for peak seasonal respiratory illnesses	Solutions are available in preparation for peak seasonal respiratory illnesses	Safe patient care environment	Assistant Director of Estates	Capital funding rates, requirements in long-term and short-term (free-standing air purification equipment)	IPC Team support Ventilation Safety Groups, and provide input to ensure IPC standards are met.	Scoping assessment undertaken by Assistant Director of Estates and Head of Health & Safety.
	Quarterly cleaning of ceiling-mounted ventilation grilles	Recommendation previously made and supported by Infection Control Committee but not progressed.	Develop a business case for provision of quarterly cleaning of ventilation grilles.	If approved, progress to implementation of quarterly programme.	Programme in place and progress reported to Service Group and Health Board Infection Control Committees	Programme in place and progress reported to Service Group and Health Board Infection Control Committees	Safe patient care environment	Assistant Director of Estates	Additional revenue funding requirement Assistant Director of Estates	IPC Team support Ventilation Safety Groups, and provide input to ensure IPC standards are met.	Paper prepared by Assistant Director of Estates
	Attain and sustain minimum standards of cleanliness	Cleaning monitoring audits are insufficient to provide assurance.	Support Services to ensure correct workforce requirements to undertake the appropriate numbers of audits.	Compliance with undertaking the correct number of audits of standards of cleanliness.	Compliance with undertaking the correct number of audits of standards of cleanliness.	Compliance with undertaking the correct number of audits of standards of cleanliness.	Safe patient care environment, and compliance with agreed standards.	Head of Support Services	No additional funding requirements	IPC support provided to Support Services to support risk assessments.	Resource in place.
	Establish funding a Discharge/Transfer Response Team in Morriston Hospital, to undertake all patient care equipment and environment cleaning & disinfection.	Currently, cleaning of patient beds, lockers, and all patient care equipment is undertaken by nursing staff prior to Domestic Services staff being able to undertake environmental cleaning. Particularly when there has been transfer or discharge of a patient with an infection, there can be a significant delay in the environmental cleaning process due to nursing staff correctly prioritising patient care activities. This can result in delays for available beds for emergency admissions.	Scoping to identify required resource. Second/recruit support service staff to response team.	Undertake training of identified staff on how to undertake effective cleaning of patient care equipment	Recruitment into posts.		Safe patient care environment and equipment, and compliance with agreed standards. Reduction in waiting times for beds.	Head of Support Services	Additional revenue funding requirement	IPC team will participate in training and monitoring service	Initial scoping undertaken for Morriston, but has been extended for provision across other sites. Wider resource paper being progressed.
	Develop an electronic system of requesting '4D' Cleaning , with the ability to audit compliance with meeting recommended level of cleaning.	Currently, requesting '4D' Cleaning is a manual process. It is not possible to demonstrated whether the level of cleaning requested has been delivered.	Scoping with Digital Intelligence the development of an electronic requesting system and feasibility of utilising existing systems, such as SIGNAL.	Develop a proposal and business case for submission.	If business case supported, agree time-frames for development and implementation.	Digital solution live.	Improved compliance with undertaking the correct level of cleaning for the relevant infectious agent.	Head of Support Services	Band 6 WTE Digital intelligence resource	IPC Quality Improvement Matron will support Digital Intelligence and Support Services in developing specifications for digital solution	Off-track. Maintain current manual system. Hotel Service Project lead retired. To pick up with Head of Support Services reassignment.
	Patient equipment decontamination is undertaken in a dedicated patient equipment decontamination unit .	Currently, there are no dedicated decontamination facilities available on acute hospital sites for effective and efficient decontamination of patient care equipment and devices, e.g. bed frames, hoists, infusion & feeding pumps and drivers, etc. This is currently undertaken on the ward by nursing staff, with a variable standard of decontamination undertaken.	Concept approval.	If support of this unit is attained, develop a capital programme business case for consideration by the Health Board.	If business case supported, agree time-frames for development and implementation.	Progress to Capital Planning stage	Patient care equipment and devices will be effectively and efficiently cleaned, ensuring that these devices are not a vector of infection transmission.	Assistant Director Capital Planning and Service Directors.	Additional Capital funding requirement to be scoped and costed by Assistant Director Capital Planning and Service Directors.	IPC Operational Decontamination Lead will support at planning and development stages to ensure appropriate standards are included within plans.	Not agreed within capital programme.
	Each patient will have a single patient use patient medical devices , e.g. BP cuffs, oxygen saturation probes, glide sheets, hoist slings, cardiac monitoring leads, pressure bags, for the duration of the inpatient episode.	Shared patient equipment, such as BP cuffs, oxygen saturation probes, etc. are difficult to decontaminate effectively. Oxygen saturation probes have been identified as being contaminated with HGISA (highly resistant Staph. aureus) and with GRE in recent outbreaks of these infections.	Scoping of availability of disposable alternatives, which would be allocated to a patient for the duration of their inpatient episode. Estimation of numbers of items required and associated revenue costs. Review learning from previous outbreaks regarding disposable alternatives.	Develop a business case for funding for consideration by the Health Board. If business case supported, implementation of single patient use devices.			Patient observation equipment will not be a potential source of infection transmission.	Procurement Head EBME Nominated Service Group Clinical Lead	Additional revenue funding requirement to be worked through by Procurement.	Support as required provided by IPC team.	Scoping underway by Service Groups. Outcome unclear to date.
Review strategic and operational Corporate IP&C workforce, ensuring sustainability	Establish a Health Board role for a Medical Director of Infection Control (DiPIC) with a background in microbiology/IPC to provide senior strategic and clinical leadership for IPC.	No position for DiPIC currently.	Scope and submit business case for funding. If funding approved, commence recruitment process.	Appointment to DiPIC post.			Provide senior clinical leadership, with clinical credibility, to drive through infection reduction strategies.	Executive Medical and Nursing Directors.	Additional revenue funding requirement	Support with development of business cases and Job Descriptions.	Agreement in principle to support post. Proposed JD developed and for Medical Director review.
	Establish a Health Board role for a Consultant Practitioner in Infection Prevention leading on the establishment of the Health Board as a centre for excellence and research in the field of IPC.	No position for Consultant Practitioner currently.	Scope and submit business case for funding. If funding approved, commence recruitment process.	IPC Service review to be undertaken			Lead on infection improvement and prevention research, and work collaboratively with partner universities and Public Health Wales Microbiology and Infectious Disease clinicians. Publication of research/study findings, sharing learning on the national and international stage, establishing the Health Board as a centre of excellence and a leader in the field of infection prevention.	Executive Director of Nursing, Assistant Director of Nursing (IPC lead), Head of Nursing IP&C.	Additional revenue funding requirement	Support with development of business cases and Job Descriptions.	Additional specific funding not approved in Management Board March 2022. IPC service review to be undertaken in Q2.
	Increase IPC work-based training and audit Healthcare Support staff to extend scope and frequency of this resource and to provide backfill and cross-cover.	The current 2.6 WTE Healthcare IPC Support staff provide service within the three acute sites. No available resource to provide cover for MH&LD or PCTG or to provide backfill or cross-cover. Currently, IPC Healthcare IPC Support deliver hand hygiene, PPE Donning & Doffing, and bed & commode decontamination training in workplace. Also undertake C. diff and IPC assurance checks, audit of clinical practice, with feedback of findings to departmental staff.	Develop and submit a business case to increase by 3.8 WTE the IPC Healthcare Support team to extend scope and frequency of activities of this resource. If funding approved, commence recruitment process.	Appointment of additional Healthcare workplace training and audit support staff. Development of an extended IPC work-based training, assurance and surveillance programme, with training and competence assessment of IPC Support staff. Commencement of extended programme once additional staff and training complete.	Delivery of extended programme within Service Groups	Delivery of extended programme within Service Groups	Extend activities undertaken by IPC Support staff to all Service Groups. Extended workplace training and audit programme to include: • Delivery of Standard Infection Prevention & Control, and ANTT training work-based training to support Service Groups in achieving improved compliance with mandatory training; • Delivery of work-based training to support Service Groups with HCAI Quality Priority focussed initiatives, e.g. training on correct microbiological sampling techniques to improve quality of sample and reliability of result, and avoid having to resample due to poor initial sample (getting it right first time). • Undertake point prevalence surveys of presence of invasive devices, and validation prevalence of key infections as quality assurance process of existing digital processes.	Executive Director of Nursing, Assistant Director of Nursing (IPC lead), Head of Nursing IP&C.	Funding for 3.8 WTE IPC Healthcare Support team.	Development and delivery of a work-based training programme to support Service Groups in delivery of improvement actions. Priority to be given to development and delivery of training programme for correct specimen taking and ANTT training and competence assessments.	Additional specific funding not approved in Management Board March 2022. IPC service review to be undertaken in Q2.

Goal	Method	Baseline position	3 month (Q1)	6 month (Q2)	9 month (Q3)	12 month (Q4)	Outcome	Responsibility	Digital & Finance Implications	IP&C Methodology Support Lead	Progress @ end Q1
	Review and strengthen IP&C Business Hub arrangements	Currently 0.79 WTE substantive Business/administration Manager for IPC: Duties include administering Health Board's Infection Control Committee, Decontamination Quality Priority Group, C. difficile Quality Priority Group, administers IPC team meetings, plans all IPC training sessions, undertakes preparatory work for initial drafts of HCAI update reports for Quality & Safety Committee, Quality & Safety Governance Group, and Infection Control Committee; development and administration of IP&C SharePoint; ERoster administration; Trac administration and line management of current seconded admin support staff. Additionally, 1 WTE temporary contract Admin Support (until October 2022) for COVID surveillance and preparation of internal and WG reporting. Also, provides administrative support for the Health Board COVID Nosocomial Death & Harm Scrutiny Panel, updates C. difficile database with results of Whole Genome Sequencing; input onto Datix nosocomial C. difficile, Staph. aureus, E. coli, Klebsiella and Pseudomonas bacteraemia cases, and periods of increased incidents. Administers generic IPC training booking emails and books staff onto IPC delivered training. Service risk when the funding for this post ceases. Additional 1 WTE administration support staff on long-term deployment from the Director of Public Health's PHW team for the duration of the pandemic (until 31st March 2022). Duties have included administrative support for the Health Board-based PHW Healthcare Epidemiologist with review of incidents and outbreaks; inputting training records for IPC training onto ESR for the whole Health Board. Service risk when this resource is no longer delegated to support IPC business activities.	Develop and submit business case for IPC Business Hub, to include 1.8 WTE Band 3 Administrative Support staff. If funding approved, commence recruitment process.	Appointment to posts			Sustainable IPC Business Hub, with ongoing service support as outlined in baseline. Maintain input of training records for Service Groups to demonstrate improved compliance with IPC-related training. Maintain input of nosocomial Tier 1 infections onto Datix to support Service Group assurance processes.	Executive Director of Nursing, Assistant Director of Nursing (IPC lead), Head of Nursing IP&C.	Funding for 1.8 WTE IPC Administration Support team.	Development of work plan, with emphasis on input of training data to support Service Groups in reporting training compliance.	Additional specific funding not approved in Management Board March 2022. IPC service review to be undertaken in Q2.
Digital Intelligence resource to support the delivery of key improvement actions	Appointment of 1 WTE Band 6 Digital Intelligence officer to work on HCAI priorities.	Currently, support available but not dedicated to delivery of HCAI improvement goals.	If approved, Digital Intelligence will scope the work required to deliver on improvement plans.	Test iteration of a digital solution available	First iteration live and available for Service Groups demonstrating trends and compliance against agreed HB Targets.	Development and delivery of second/third stage iterations.	Timely and reliable data available for surveillance, performance and improvement measures.	Head of Digital Intelligence	Funding for 1 WTE Band 6 Digital Intelligence officer.	IP&C Head of Nursing and IPC Quality Improvement Matron will working with Digital Intelligence to scope the projects, agree on criteria and the vision for the final products. Validation of data at each stage of development..	Digital Intelligence Partner for Corporate commenced post June 2022. Not wholly dedicated to HCAI & Antimicrobials stewardship. Currently commencing scoping re HCAI intelligence.
Strengthen IPC resources within Service Groups.	Review potential invest to save opportunity within Service Groups to support infection prevention resources and agree respective governance and management structures.	Service Groups currently do not have a dedicated infection prevention resource to drive infection reduction-related quality improvements. The central IP&C Service has identified IPC staff specific to each Service Group. Due to vacancies and maternity leave, there is cross-cover in place currently to ensure each Service Group has an identified IPC lead.	Service Groups to undertake a scoping exercise to identify the resource required to lead on infection prevention and drive improvements.					Service Group Directors		Support as required provided by IPC team.	Morrison SG EOI for Programme Manager. Funding unavailable for Care Home dedicated lead.
Effective communication strategy making IPC everyone's business	Multiple approaches including formal letters to senior leaders and clinicians, regular review at management board and key COMMS strategy to in reach all staff within the HB Key information on infection reduction performance will be published and available at the entrances to wards and units. Excellence will be recognised within Service Groups and through executive team walkabouts. Support processes will be established to address areas of poor performance to provide support in the journey to excellence.	No current COMMS strategy in place to support the HB IPC overarching IPC Plan Currently, the publication of performance in relation to infection at ward entrances is variable. No current strategy for recognising excellence in relation to infections, nor a standardised process for supporting areas of poor performance on the journey to excellence.	Outline strategy to facilitate go live in April 22. All key stakeholders including WG, CHC, Local Authorities to be advised. Agreement on a standardised approach to publishing infection information at ward/unit entrances. Service Group Director and Executive Team Walkabouts established to recognise areas of excellence and poor performance.	Review through Service Groups and up via new governance structures to Board. Revise plan if required and monitor success of comms strategy and engagement. Infection performance, which is timely and current, is displayed at the entrances to wards & units. Service Groups will establish a recognition programme to celebrate successes and will provide enhanced support to areas that require help to improve.	Continue process to monitor and establish success and awards to maintain positive approach. Infection performance, which is timely and current, is displayed at the entrances to wards & units. Recognition of excellence and processes established to provide support in the quality improvement journey to excellence.	Build in likely approach for 23-24 Infection performance, which is timely and current, is displayed at the entrances to wards & units. Recognition of excellence and processes established to provide support in the quality improvement journey to excellence.	Informed and engaged staff of all disciplines and grades Timely and reliable information on infection performance is available, ensuring confidence in the transparency of the Health Board and its commitment to quality improvement. Provision of safe, quality care to our patients, with recognised reductions in infection.	Director of COMMS / DIPC Service Group Directors/Director of COMMS/DIPC/Head of Digital Intelligence Service Group Directors & Executive Nurse & Medical Director and DIPC	Funding for 1 WTE Band 6 Digital Intelligence officer.	IP&C Head of Nursing and IPC Quality Improvement Matron will support Digital Intelligence in the provision of reliable and timely information on infections. Central IP&C Service will support the processes for recognition and for quality improvements.	Leadership Touch Point IPC event on 28.06.22. IPC improvement to be included within first HB Newspaper. Off-track. Digital Intelligence Partner commenced post June 2022. Proposal for standardised ward 'How we're doing' boards circulated to Service Groups Management Board Walkabouts to be undertaken by 31/07/22

Key:

Completed
Evidence of progress but not completed
Off-track