

S. aureus bacteraemia surveillance

Quarterly report

October – December 2024

Key points

- Overall *S. aureus* (SA) rates for Northern Ireland (MRSA plus MSSA bacteraemias) decreased by approximately 4% during October-December 2024 compared to July-September 2024.
- MRSA rates increased by approximately 9% during October-December 2024 compared to July-September 2024.
- MSSA rates decreased by approximately 5% during October-December 2024 compared to July-September 2024.
- Bed day data were not available for BHSCT, NHSCT, SEHSCT and South Tyrone hospital (SHSCT) and provisional figures were used this quarter (figures taken from Oct-Dec 2023).
- Rates presented throughout this report have changed to per 100,000 occupied bed days to align with the Targets.

For further information or clarification on HCAI definitions, please refer to previous reports or contact hcaini@hscni.net

S. aureus bacteraemia surveillance

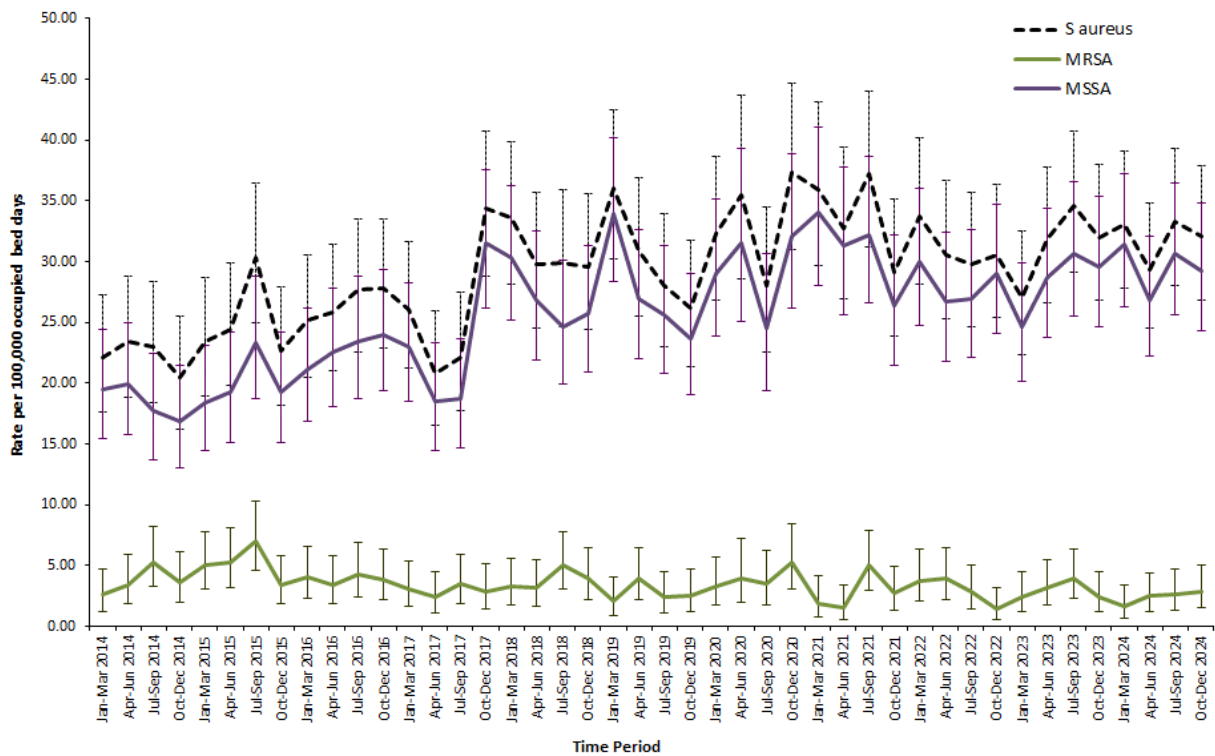


Figure 1: MSSA, MRSA and S. aureus rates in Northern Ireland by quarter, with 95% confidence intervals, Jan 2014 – Dec 2024 (see Appendix 3)

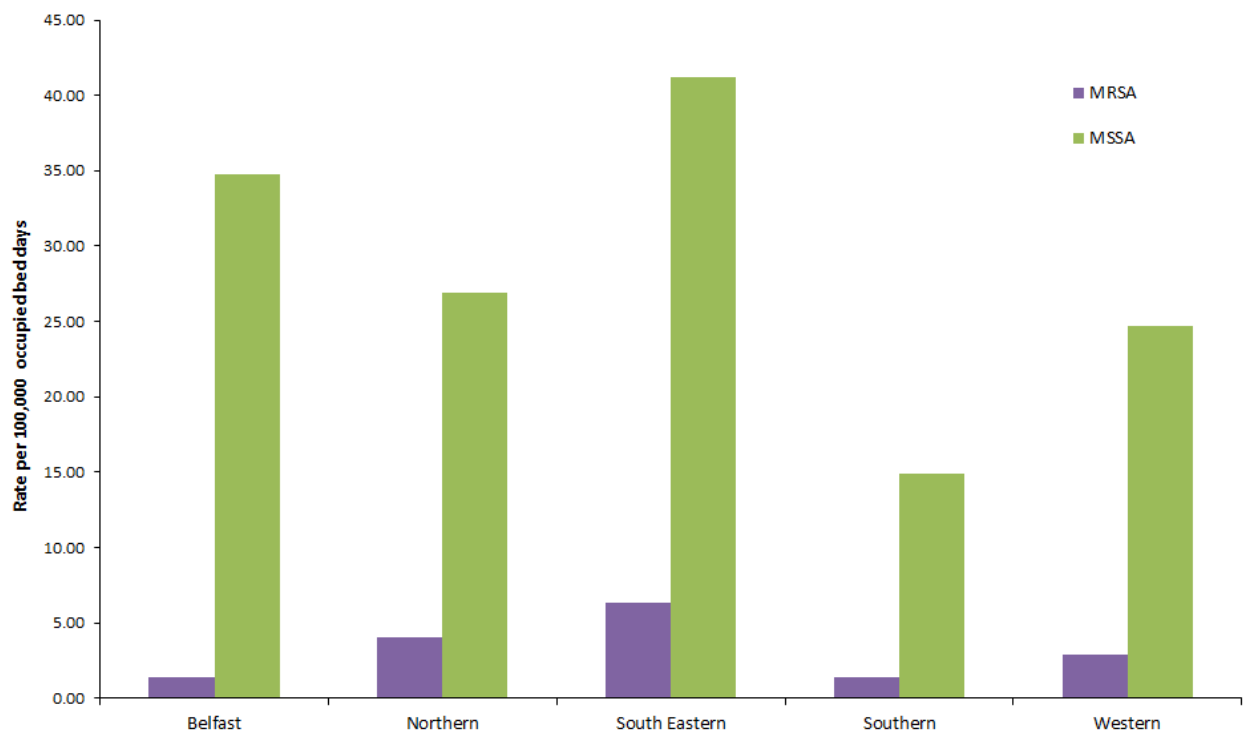


Figure 2: MRSA and MSSA rates per 100,000 occupied bed days, by HSCT, Oct-Dec 2024.

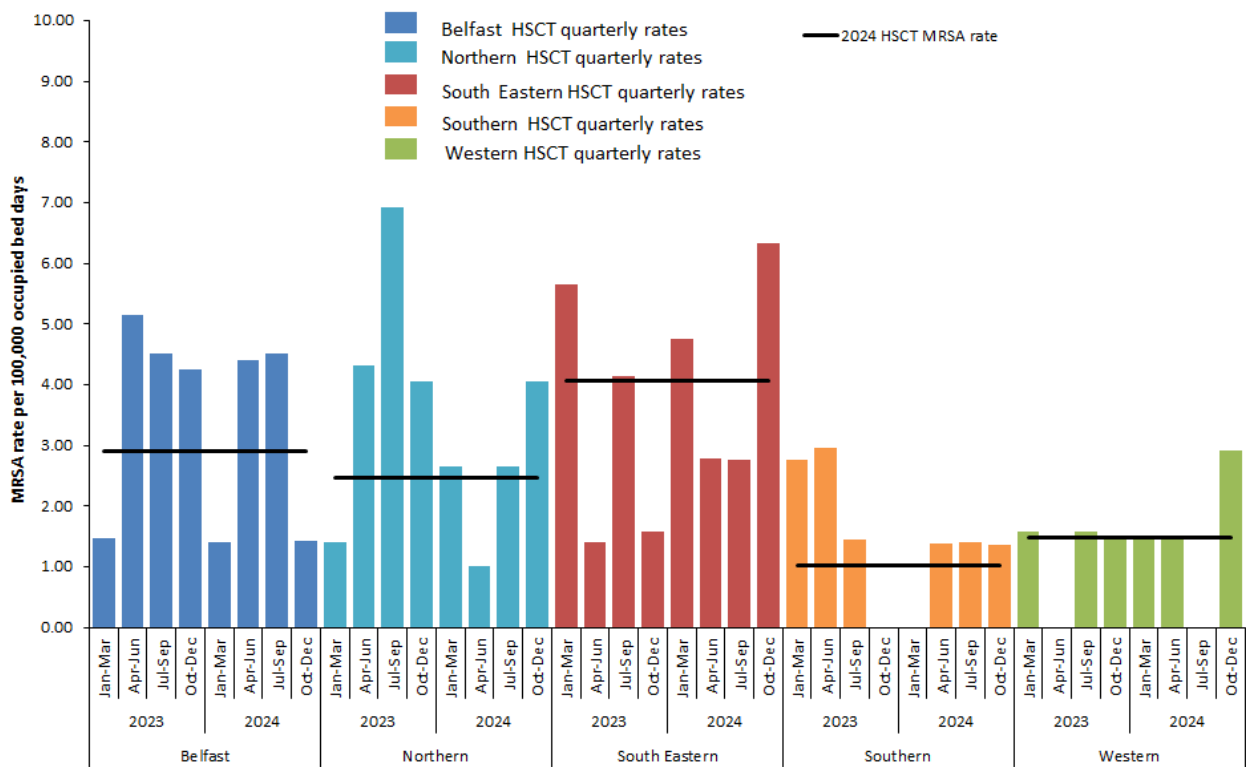


Figure 3: MRSA quarterly rate Jan 2023 – Dec 2024, by HSCT, with 2024 HSCT MRSA rate

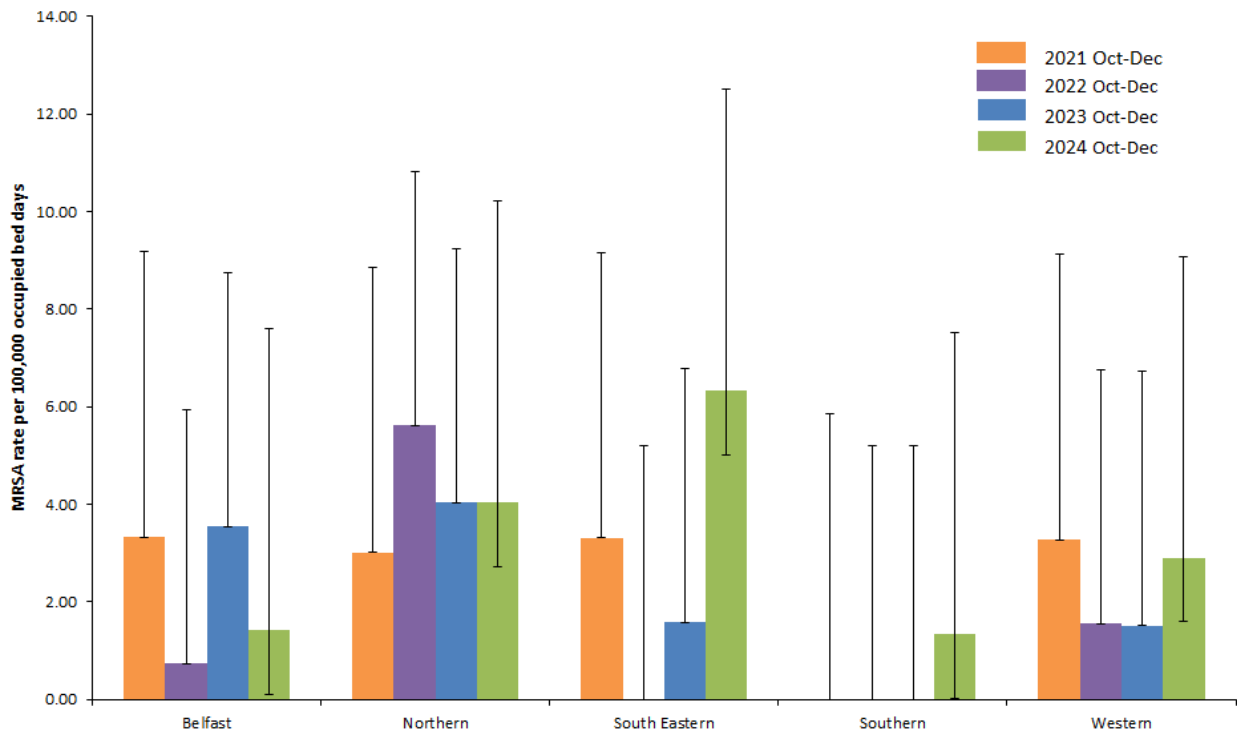


Figure 4: MRSA rate during Oct-Dec, by HSCT, from 2021–2024, with 95% confidence intervals

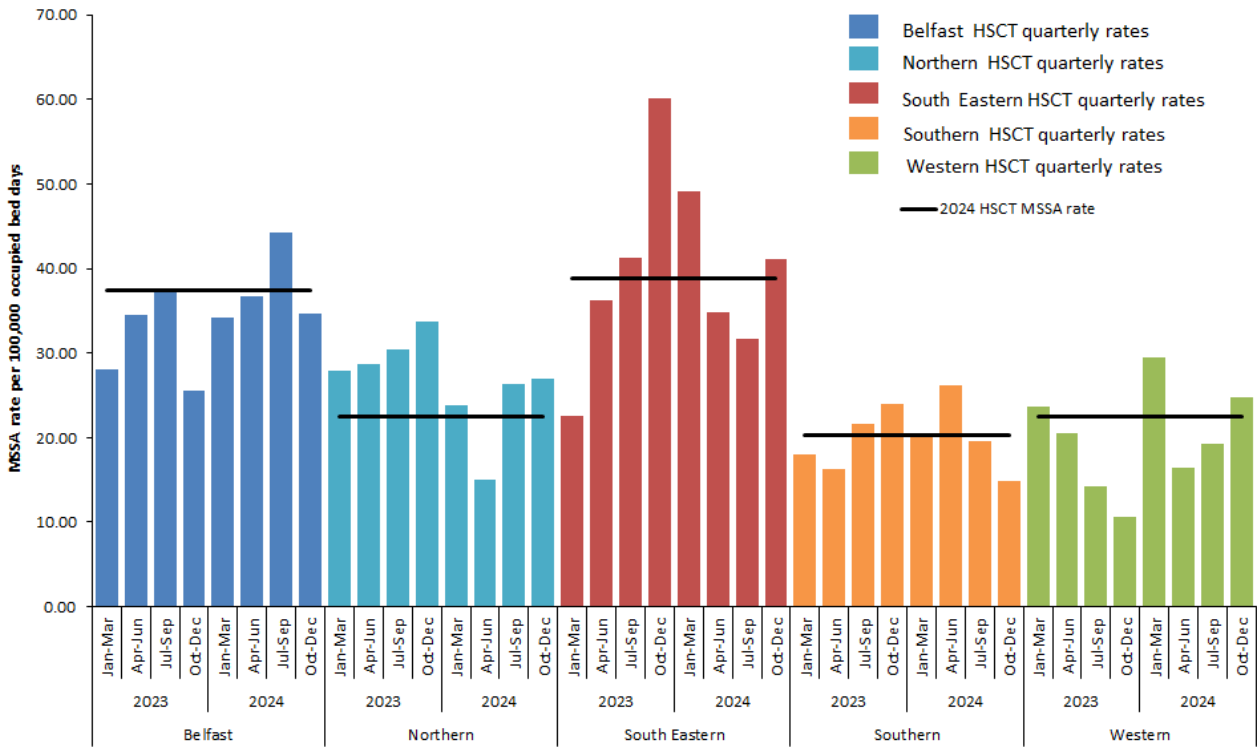


Figure 5: MSSA quarterly rate Jan 2023 – Dec 2024, by HSCT, with 2024 HSCT MSSA rate

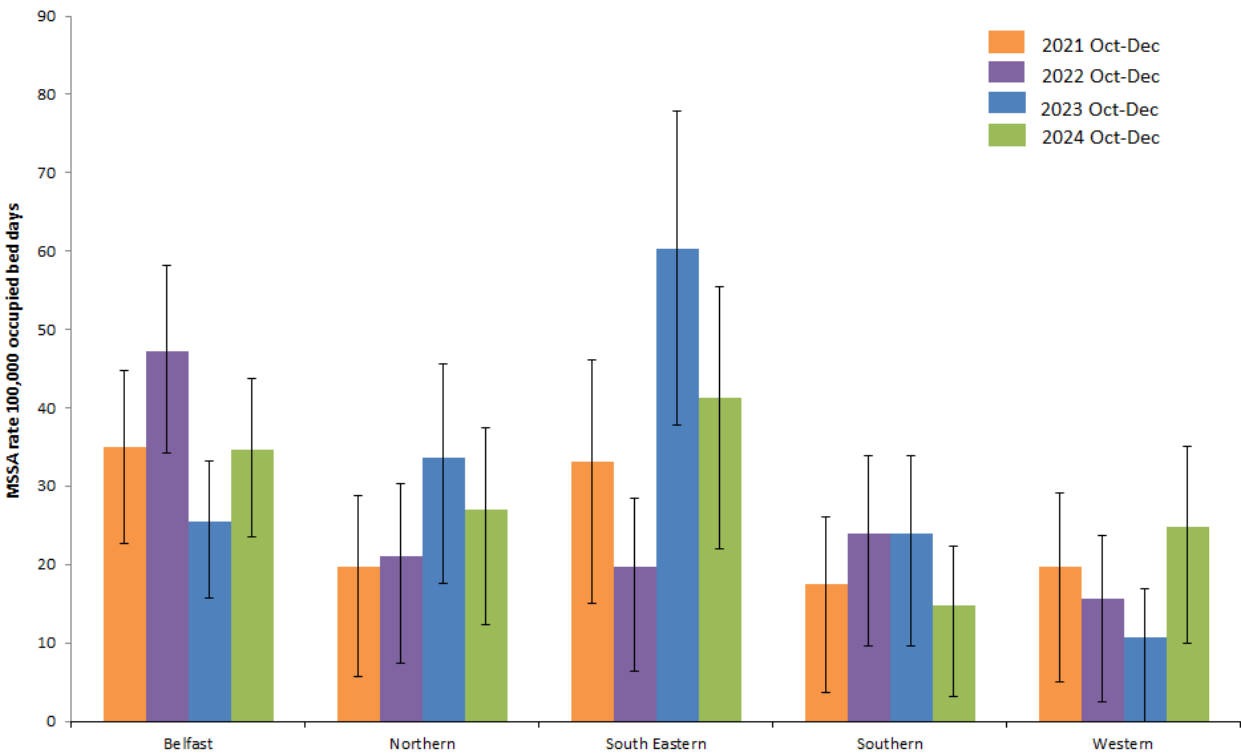


Figure 6: MSSA rate during Oct-Dec, by HSCT, from 2021–2024, with 95% confidence interval

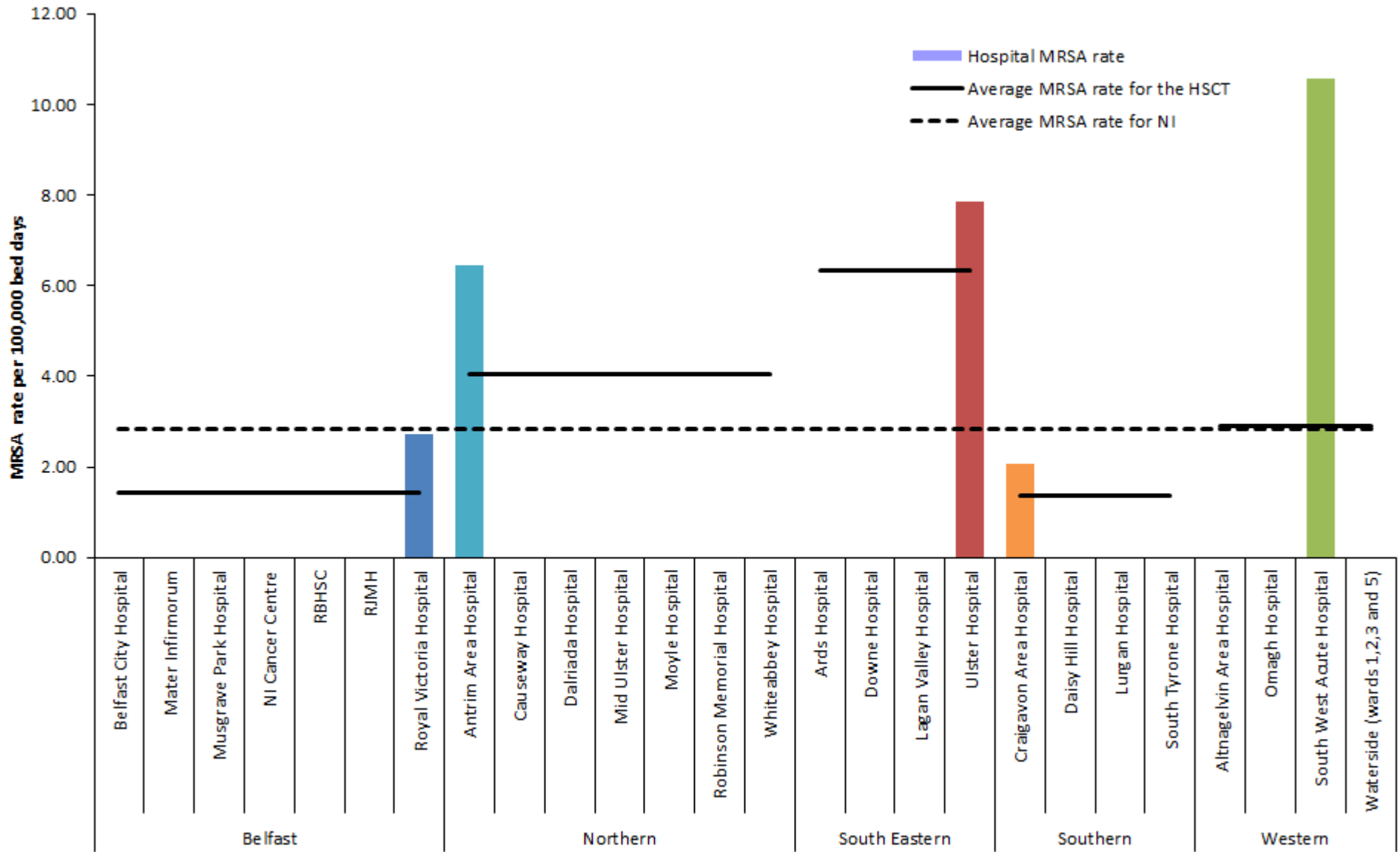


Figure 7: Rates of MRSA, October-December 2024 by individual hospitals, (gaps represent zero episodes), compared to October-December 2024 average rates for Northern Ireland and HSCTs

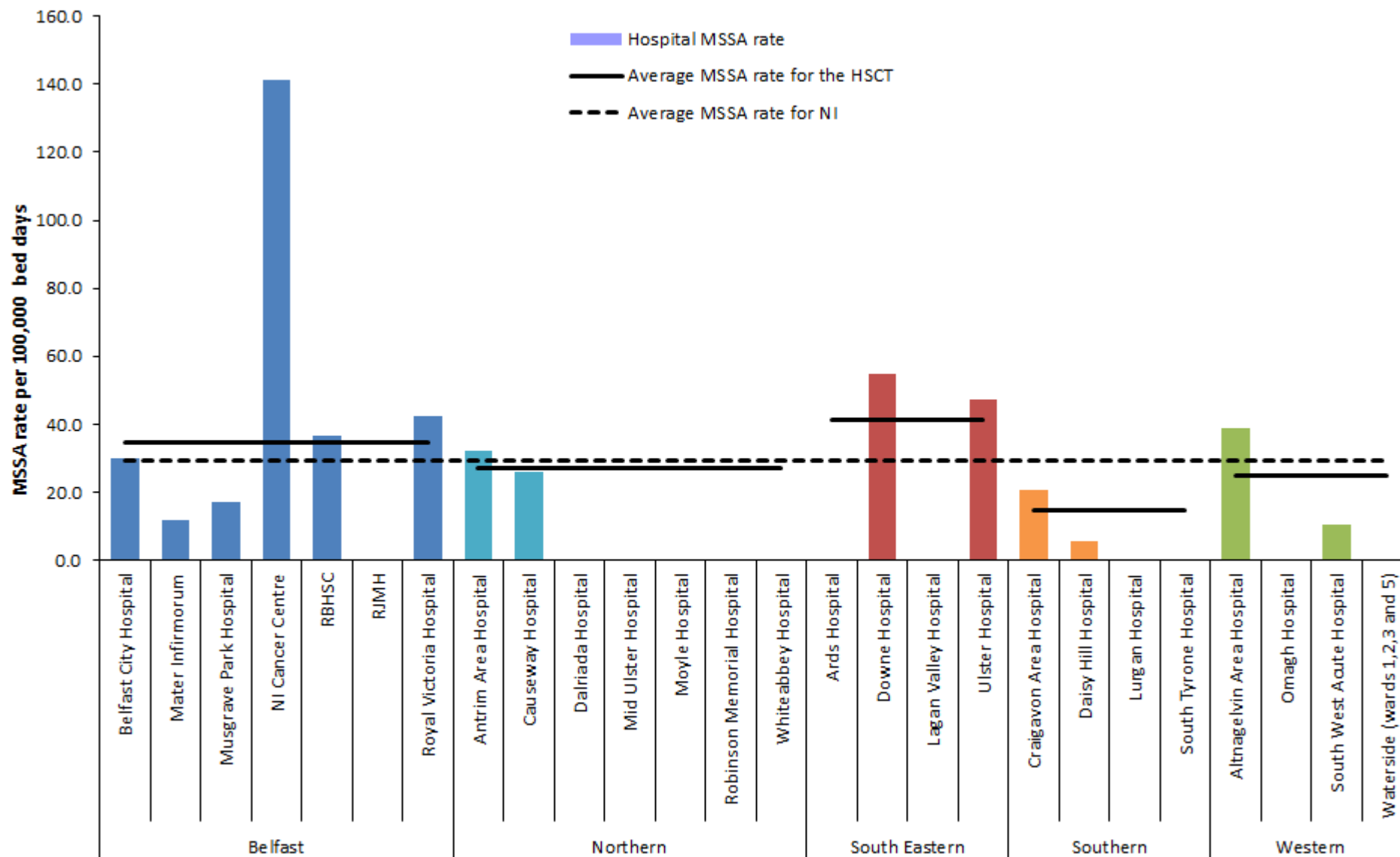


Figure 8: Rates of MSSA, October-December 2024 by individual hospitals, (gaps represent zero episodes), compared to October-December 2024 average rates for Northern Ireland and HSCT

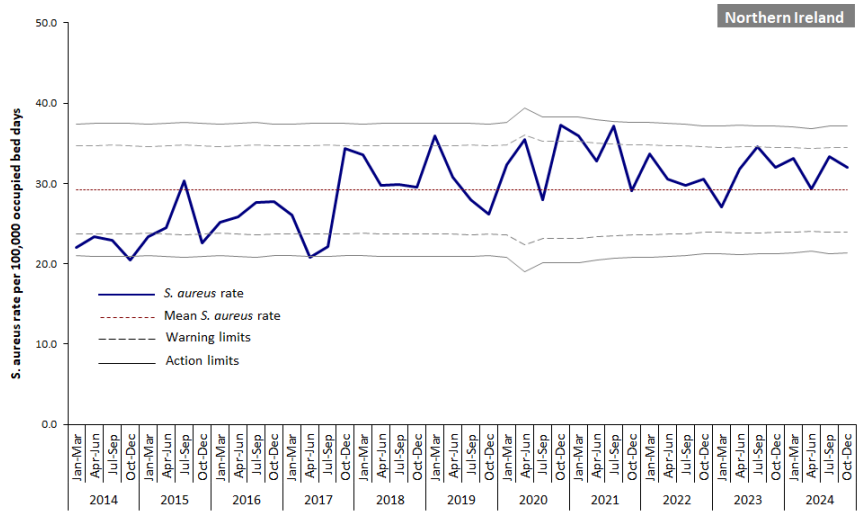


Figure 9a: Statistical process control chart for quarterly *S. aureus* rates in Northern Ireland

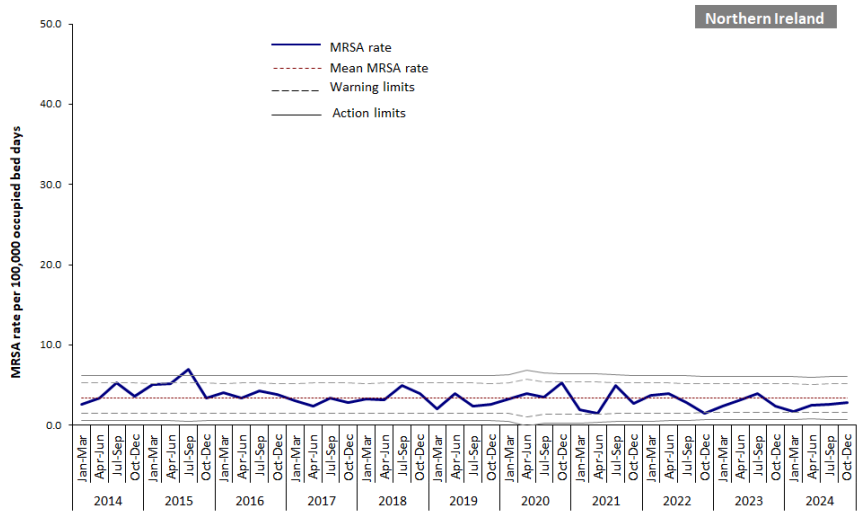


Figure 9b: Statistical process control chart for quarterly MRSA rates in Northern Ireland

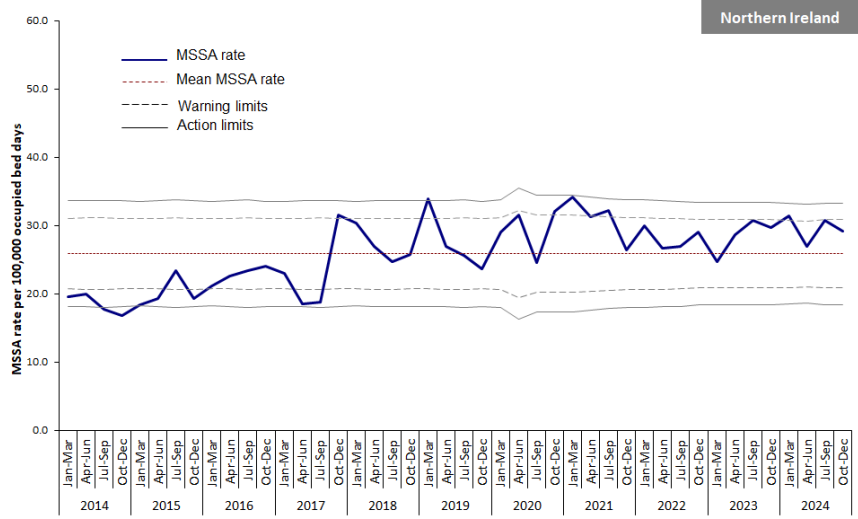


Figure 9c: Statistical process control chart for quarterly MSSA rates in Northern Ireland

Appendix 1

Table 1: Quarterly rates* of MRSA patient episodes, by hospital, Jan - Dec 2024

Hospital	Jan - Mar 2024	Apr - Jun 2024	Jul - Sep 2024	Oct - Dec 2024
Belfast City Hospital	7.30	0.00	7.34	0.00
Mater Infirmorum	0.00	0.00	0.00	0.00
Musgrave Park Hospital	0.00	0.00	0.00	0.00
NICCO	0.00	23.57	23.17	0.00
RBHSC	0.00	13.72	0.00	0.00
RJMh	0.00	0.00	0.00	0.00
Royal Group of Hospitals	1.36	5.70	5.58	2.74
Belfast Health & Social Care Trust	1.40	4.41	4.50	1.42
Antrim Area Hospital	2.11	1.56	2.08	6.44
Causeway Hospital	5.17	0.00	5.20	0.00
Dalriada Hospital	0.00	0.00	0.00	0.00
Mid Ulster Hospital	0.00	0.00	0.00	0.00
Moyle Hospital	0.00	0.00	0.00	0.00
Robinson Memorial Hospital	0.00	0.00	0.00	0.00
Whiteabbey Hospital	0.00	0.00	0.00	0.00
Northern Health & Social Care Trust	2.65	1.00	2.64	4.04
Ards Hospital	0.00	0.00	0.00	0.00
Downe Hospital	0.00	0.00	0.00	0.00
Lagan Valley Hospital	0.00	0.00	0.00	0.00
Ulster Hospital	5.87	3.43	3.40	7.86
South Eastern Health & Social Care Trust	4.75	2.79	2.76	6.34
Craigavon Area Hospital	0.00	2.10	0.00	2.06
Daisy Hill Hospital	0.00	0.00	6.40	0.00
Lurgan Hospital	0.00	0.00	0.00	0.00
South Tyrone Hospital	0.00	0.00	0.00	0.00
Southern Health & Social Care Trust	0.00	1.40	1.40	1.35
Altnagelvin Area Hospital	0.00	2.59	0.00	0.00
Omagh Hospital	0.00	0.00	0.00	0.00
South West Acute Hospital	5.41	0.00	0.00	10.57
Waterside Hospital	0.00	0.00	0.00	0.00
Western Health & Social Care Trust	1.48	1.50	0.00	2.91
NI TOTAL	1.89	2.46	2.62	2.85

Table 2: Quarterly MRSA patient episodes, by HSCT, Jan - Dec 2024

Trust	Jan - Mar 2024 Episodes	Apr - Jun 2024 Episodes	Jul - Sep 2024 Episodes	Oct - Dec 2024 Episodes
Belfast Health & Social Care Trust	2	6	6	2
Northern Health & Social Care Trust	2	1	2	3
South Eastern Health & Social Care Trust	3	2	2	4
Southern Health & Social Care Trust	0	1	1	1
Western Health & Social Care Trust	1	1	0	2
NI TOTAL	8	11	11	12

*Note: Rates displayed are per 100,000 occupied bed days. Previous reports presented rates per 1,000 occupied bed days.

Bed day data were not available for BHSCT, NHSCT, SEHSCT hospitals and South Tyrone hospital (SHSCT) – provisional figures were used this quarter (figures taken from Oct-Dec 2023).

Appendix 1

Table 3: Quarterly rates* of MSSA patient episodes, by hospital, Jan – Dec 2024

Hospital	Jan - Mar 2024	Apr - Jun 2024	Jul - Sep 2024	Oct - Dec 2024
Belfast City Hospital	21.85	22.08	58.70	30.03
Mater Infirmorum	33.94	30.77	73.39	11.86
Musgrave Park Hospital	5.58	11.29	0.00	17.23
NICCO	47.77	47.15	46.34	141.21
RBHSC	37.17	27.45	99.79	36.54
RJMH	0.00	14.89	44.66	0.00
Royal Group of Hospitals	46.08	49.86	40.45	42.40
Belfast Health & Social Care Trust	34.26	36.77	44.28	34.72
Antrim Area Hospital	25.34	17.18	37.42	32.20
Causeway Hospital	31.04	16.13	10.41	25.77
Dalriada Hospital	0.00	0.00	0.00	0.00
Mid Ulster Hospital	0.00	0.00	0.00	0.00
Moyle Hospital	0.00	0.00	0.00	0.00
Robinson Memorial Hospital	0.00	0.00	0.00	0.00
Whiteabbey Hospital	0.00	0.00	0.00	0.00
Northern Health & Social Care Trust	23.83	15.01	26.40	26.94
Ards Hospital	0.00	0.00	0.00	0.00
Downe Hospital	0.00	0.00	0.00	54.90
Lagan Valley Hospital	14.60	13.36	39.28	0.00
Ulster Hospital	58.72	41.21	33.96	47.15
South Eastern Health & Social Care Trust	49.10	34.83	31.69	41.19
Craigavon Area Hospital	22.79	23.10	14.75	20.61
Daisy Hill Hospital	23.60	48.89	38.41	5.82
Lurgan Hospital	0.00	0.00	20.69	0.00
South Tyrone Hospital	0.00	0.00	0.00	0.00
Southern Health & Social Care Trust	20.33	26.26	19.60	14.86
Altnagelvin Area Hospital	20.08	23.32	26.63	39.05
Omagh Hospital	58.33	0.00	0.00	0.00
South West Acute Hospital	54.13	10.95	16.15	10.57
Waterside Hospital	0.00	0.00	0.00	0.00
Western Health & Social Care Trust	29.56	16.45	19.34	24.71
NI TOTAL	31.43	26.85	30.70	29.19

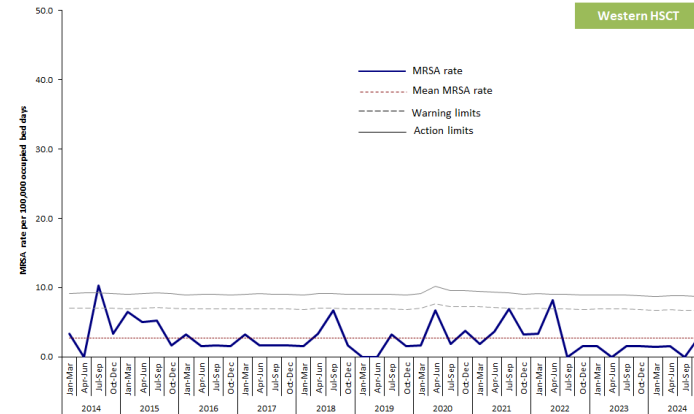
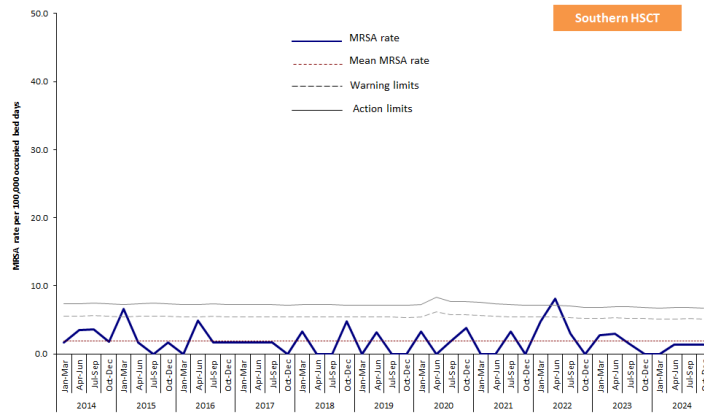
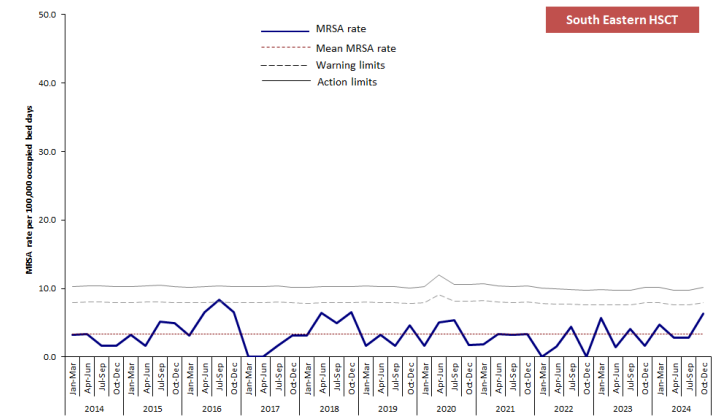
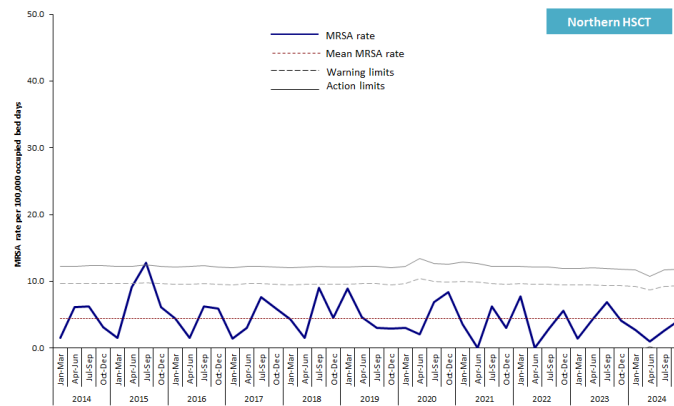
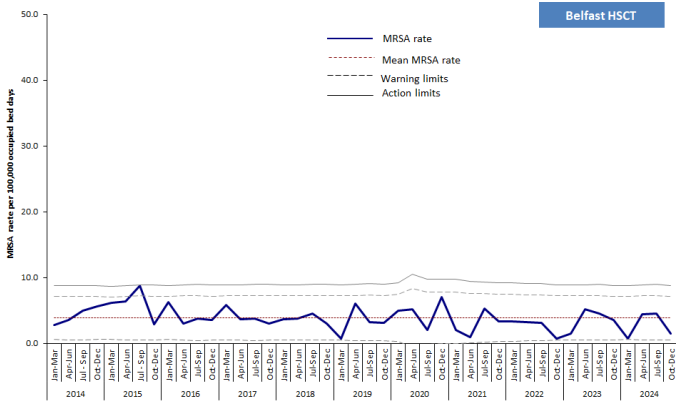
Table 4: Quarterly MSSA patient episodes, by HSCT, Jan – Dec 2024

Trust	Jan - Mar 2024 Episodes	Apr - Jun 2024 Episodes	Jul - Sep 2024 Episodes	Oct - Dec 2024 Episodes
Belfast Health & Social Care Trust	49	50	59	49
Northern Health & Social Care Trust	18	15	20	20
South Eastern Health & Social Care Trust	31	25	23	26
Southern Health & Social Care Trust	15	19	14	11
Western Health & Social Care Trust	20	11	13	17
NI TOTAL	133	120	129	123

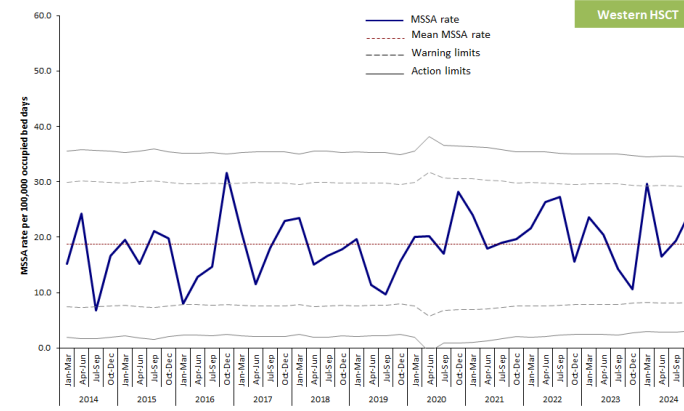
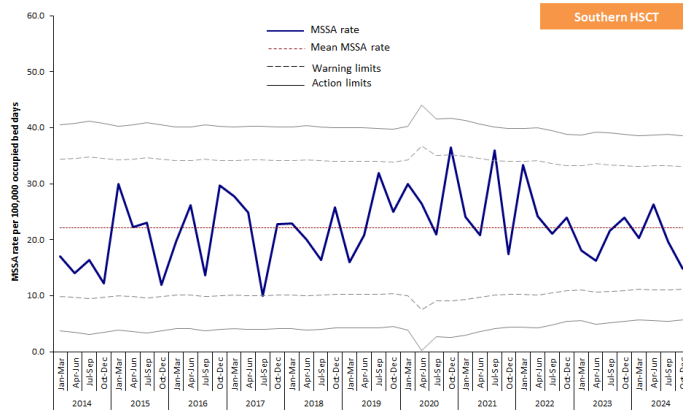
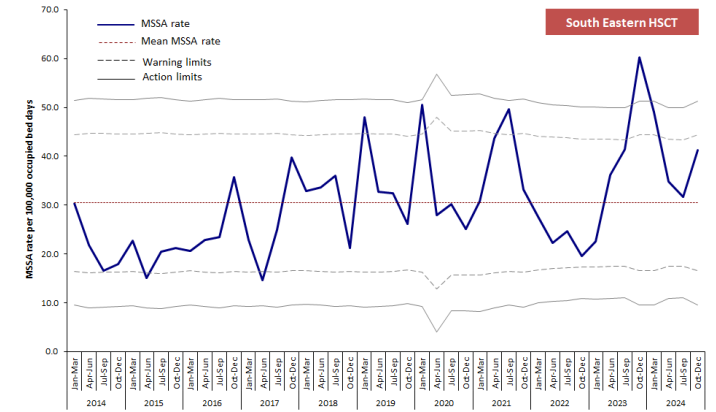
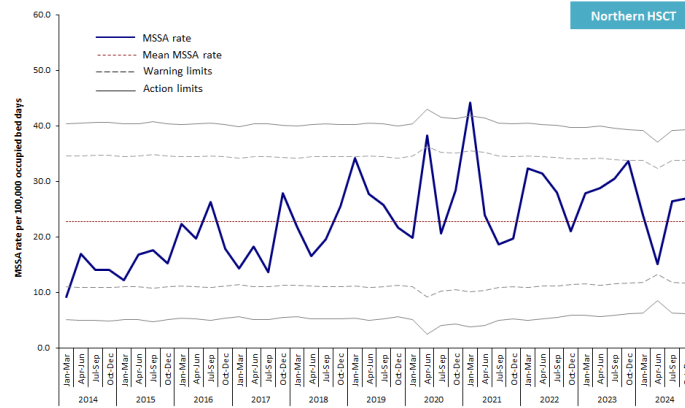
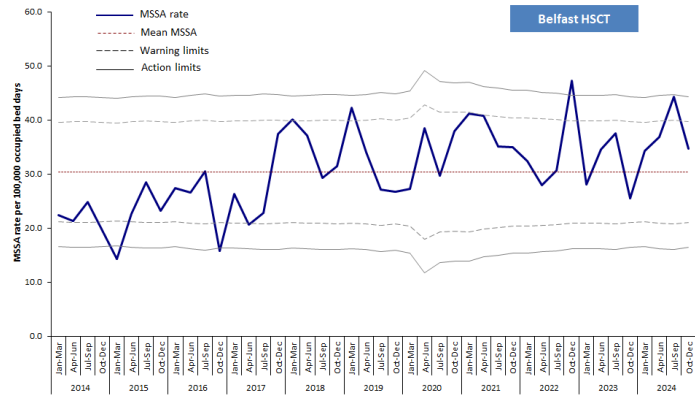
*Note: Rates displayed are per 100,000 occupied bed days. Previous reports presented rates per 1,000 occupied bed days.

Bed day data were not available for BHSCT, NHSCT, SEHSCT hospitals and South Tyrone hospital (SHSCT) – provisional figures were used this quarter (figures taken from Oct-Dec 2023).

Appendix 2: Trends in MRSA rates, by HSCT and quarter, Jan 2014 – Dec 2024



Appendix 2: Trends in MSSA rates, by HSCT and quarter, Jan 2014 – Dec 2024



Appendix 3

Table 5: MSSA, MRSA and total *S. aureus* patient episode rates, and the percentage of *S. aureus* reported as MRSA, in Northern Ireland, Jan 2021 – Dec 2024.

Quarter	MSSA rate	MRSA rate	All <i>S. aureus</i> rate	% MRSA
Jan-Mar 2021	34.09	1.88	35.96	5.2
Apr-Jun 2021	31.29	1.46	32.75	4.5
Jul-Sep 2021	32.21	5.00	37.21	13.4
Oct-Dec 2021	26.42	2.70	29.12	9.3
Jan-Mar 2022	29.98	3.75	33.73	11.1
Apr-Jun 2022	26.66	3.92	30.58	12.8
Jul-Sep 2022	26.96	2.80	29.75	9.4
Oct-Dec 2022	29.06	1.45	30.51	4.8
Jan-Mar 2023	24.64	2.42	27.06	8.9
Apr-June 2023	28.66	3.18	31.84	10.0
Jul-Sep 2023	30.68	3.90	34.57	11.3
Oct-Dec 2023	29.61	2.65	32.02	8.3
Jan-Mar 2024	31.43	1.89	33.09	5.7
Apr-Jun 2024	26.85	2.46	29.31	8.4
Jul-Sep 2024	30.70	2.62	33.32	7.9
Oct-Dec 2024	29.19	2.85	32.04	8.9

Appendix 4

Table 6: MRSA patient episodes for each financial year, by HSCT

HSCT	Financial Year					
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Belfast	16	22	15	15	11	21
Northern	16	9	12	11	7	13
South Eastern	12	7	7	6	8	8
Southern	3	4	3	5	9	3
Western	7	4	7	10	7	3
Northern Ireland	54	46	44	47	42	48

Table 7: MSSA patient episodes for each financial year, by HSCT

HSCT	Financial Year					
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Belfast	189	147	138	166	176	182
Northern	64	63	73	60	75	85
South Eastern	85	88	59	95	62	125
Southern	48	67	54	66	59	58
Western	42	35	46	46	58	49
Northern Ireland	428	400	370	433	430	499