NHS National Services Scotland

Quarterly epidemiological data on *Clostridioides difficile* infection, *Escherichia coli* bacteraemia, *Staphylococcus aureus* bacteraemia and Surgical Site Infection in Scotland

January to March 2020

7 July2020

This is an Official Statistics Publication

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Contents

Introduction

National Services Scotland (NSS) provides a commentary on quarterly epidemiological data in Scotland for January to March (Q1) 2020 on the following:

- *Clostridioides difficile* infection
- *Escherichia coli* bacteraemia
- *Staphylococcus aureus* bacteraemia
- Surgical Site Infection

Data are provided for the 14 NHS boards and one NHS Special Health Board.

Main points

Clostridioides difficile infection (CDI) during January to March 2020

- The total number of CDI cases in patients reported to NSS was 247.
- 199 CDI cases were reported to NSS as healthcare associated. This corresponds to an incidence rate of 13.5 cases per 100,000 total occupied bed days (TOBDs).
- 48 CDI cases were reported as community associated. This corresponds to an incidence rate of 3.5 cases per 100,000 population.
- No NHS boards were above the 95% confidence interval upper limit for healthcare associated CDI in the funnel plot analysis.
- No NHS boards were above the 95% confidence interval upper limit for community associated CDI in the funnel plot analysis.
- No NHS boards were above normal variation for healthcare or community associated CDI when analysing trends over the past three years.

Escherichia coli bacteraemia (ECB) during January to March 2020

- The total number of ECB cases in patients reported to NSS was 1,052.
- 538 ECB cases were reported to NSS as healthcare associated. This corresponds to an incidence rate of 36.4 cases per 100,000 TOBDs.
- 514 ECB cases were reported as community associated. This corresponds to an incidence rate of 37.8 cases per 100,000 population.
- No NHS boards were above the 95% confidence interval upper limit for healthcare associated ECB in the funnel plot analysis.
- NHS Ayrshire & Arran was above the 95% confidence interval upper limit for community associated ECB in the funnel plot analysis.
- No NHS boards were above normal variation for healthcare or community associated ECB when analysing trends over the past three years.

Staphylococcus aureus bacteraemia (SAB) during January to March 2020

- The total number of SAB cases in patients reported to NSS was 390.
- 241 SAB cases were reported to NSS as healthcare associated. This corresponds to an incidence rate of 16.3 cases per 100,000 TOBDs.
- 149 SAB cases were reported as community associated. This corresponds to an incidence rate of 11.0 cases per 100,000 population.
- No NHS boards were above the 95% confidence interval upper limit for healthcare associated SAB in the funnel plot analysis.
- No NHS boards were above the 95% confidence interval upper limit for community associated SAB in the funnel plot analysis.
- No NHS boards were above normal variation for healthcare or community associated SAB when analysing trends over the past three years.

Surgical Site Infection (SSI) January to March 2020

Epidemiological data for SSI are not included for this quarter due to the pausing of surveillance to support the COVID-19 response.

Results and Commentary

Clostridioides difficile Infection (CDI)

Total Cases for Quarter

- During Q1 2020, 247 *Clostridioides difficile* infection (CDI) cases in patients were reported to NSS. In the previous quarter there were 294 cases.
- In the clinical surveillance typing scheme (covering severe cases and/or outbreaks) ribotype 137 (14.3%) was the most common ribotype isolated, followed by 078 (11.4%), 002, 005, 015, 020 (all 8.6%), and 011, 014, 023 (all 5.7%), out of a total of 35 isolates. The remaining ribotypes comprise a mixture each with a prevalence of less than 3%.
- In the snapshot surveillance (which reflects the general distribution of ribotypes among all CDI cases), ribotype 078 was the most common (13.0%) followed by 023 (10.1%), 002, 005 (both 8.7%), 014 (7.2%), 015, 020,137 (all 5.8%) and 220 (4.3%) out of a total of 69 isolates. The remaining ribotypes comprise a mixture each with a prevalence of less than 3%. All isolates tested (snapshot and clinical) were susceptible to metronidazole and vancomycin.

Healthcare associated infection cases by health board of laboratory

- During Q1 2020, 199 CDI cases were reported to NSS as healthcare associated. This corresponds to an incidence rate of 13.5 cases per 100,000 total occupied bed days (TOBDs) (Table 1).
- Yearly trends (comparing year-ending March 2019 with year-ending March 2020) show that there was a decrease in NHS Grampian and NHS Greater Glasgow and Clyde (Table 2).
- No NHS boards were above the 95% confidence interval upper limit in the funnel plot analysis (Figure 1).
- No NHS boards were above normal variation when analysing trends over the past three years (see supplementary data).

Community associated infection cases by health board of residence

- During Q1 2020, 48 CDI cases were reported as community associated. This corresponds to an incidence rate 3.5 cases per 100,000 population (Table 3).
- Yearly trends (comparing year-ending March 2019 with year-ending March 2020) show that there was a decrease in NHS Fife, NHS Forth Valley, NHS Grampian and NHSScotland overall. (Table 4).
- No NHS boards were above the 95% confidence interval upper limit in the funnel plot analysis (Figure 2).
- No NHS boards were above normal variation when analysing trends over the past three years. (see supplementary data).

Table 1: CDI cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).[1,2]

NHS Board	Q4 Cases	Q4 Bed Days	Q4 Rate	Q1 Cases	Q1 Bed Days	Q1 Rate
AA	21	111,501	18.8	17	107,446	15.8
BR	3	29,415	10.2	3	28,855	10.4
DG	6	46,458	12.9	12	44,334	27.1
FF	12	91,708	13.1	7	87,695	8.0
FV	13	79,712	16.3	9	76,312	11.8
GR	17	133,259	12.8	17	131,518	12.9
GGC	70	429,650	16.3	63	413,057	15.3
HG	8	73,909	10.8	16	71,286	22.4
LN	25	147,326	17.0	20	140,747	14.2
LO	42	249,135	16.9	25	240,426	10.4
NWTC	1	11,659	8.6	1	10,915	9.2
OR	0	2,915	0.0	0	3,184	0.0
SH	2	2,673	74.8	0	2,514	0.0
TY	8	117,973	6.8	8	111,519	7.2
WI	3	6,884	43.6	1	6,346	15.8
Scotland	**231**	**1,534,177**	**15.1**	**199**	**1,476,154**	**13.5**

1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
2. Figures include any updates received following the last publication (see Appendix 2).

Table 2: CDI cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).[1,2,3]

NHS Board	YE Q1 19 Cases	YE Q1 19 Bed Days	YE Q1 19 Rate	YE Q1 20 Cases	YE Q1 20 Bed Days	YE Q1 20 Rate
AA	65	448,423	14.5	74	439,397	16.8
BR	13	124,757	10.4	14	116,978	12.0
DG	35	175,369	20.0	31	182,533	17.0
FF	28	360,178	7.8	33	357,536	9.2
FV	39	330,795	11.8	47	307,430	15.3
GR	99	534,355	18.5	55	528,097	10.4 ↓
GGC	315	1,674,662	18.8	266	1,679,319	15.8 ↓
HG	51	294,375	17.3	45	295,714	15.2
LN	95	564,178	16.8	86	579,725	14.8
LO	133	1,014,357	13.1	122	979,317	12.5
NWTC	1	48,158	2.1	3	46,538	6.4
OR	4	14,915	26.8	1	12,561	8.0
SH	0	9,875	0.0	5	10,423	48.0
TY	26	466,887	5.6	32	458,783	7.0
WI	1	28,274	3.5	7	26,945	26.0
Scotland	**905**	**6,089,558**	**14.9**	**821**	**6,021,296**	**13.6**

1. An arrow denotes statistically significant change.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
3. Figures include any updates received following the last publication (see Appendix 2).

Table 3: CDI cases and incidence rates (per 100,000 population) for community associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).[1,2,3,4]

NHS Board	Q4 Cases	Q4 Population	Q4 Rate	Q1 Cases	Q1 Population	Q1 Rate
AA	6	369,360	6.4	9	369,360	9.8
BR	2	115,510	6.9	3	115,510	10.4
DG	2	148,860	5.3	2	148,860	5.4
FF	4	373,550	4.2	1	373,550	1.1
FV	0	306,640	0.0	1	306,640	1.3
GR	8	585,700	5.4	10	585,700	6.9
GGC	10	1,183,120	3.4	9	1,183,120	3.1
HG	3	321,700	3.7	3	321,700	3.8
LN	12	661,900	7.2	3	661,900	1.8
LO	11	907,580	4.8	6	907,580	2.7
OR	0	22,270	0.0	0	22,270	0.0
SH	0	22,920	0.0	0	22,920	0.0
TY	4	417,470	3.8	0	417,470	0.0
WI	1	26,720	14.8	1	26,720	15.1
Scotland	**63**	**5,463,300**	**4.6**	**48**	**5,463,300**	**3.5**

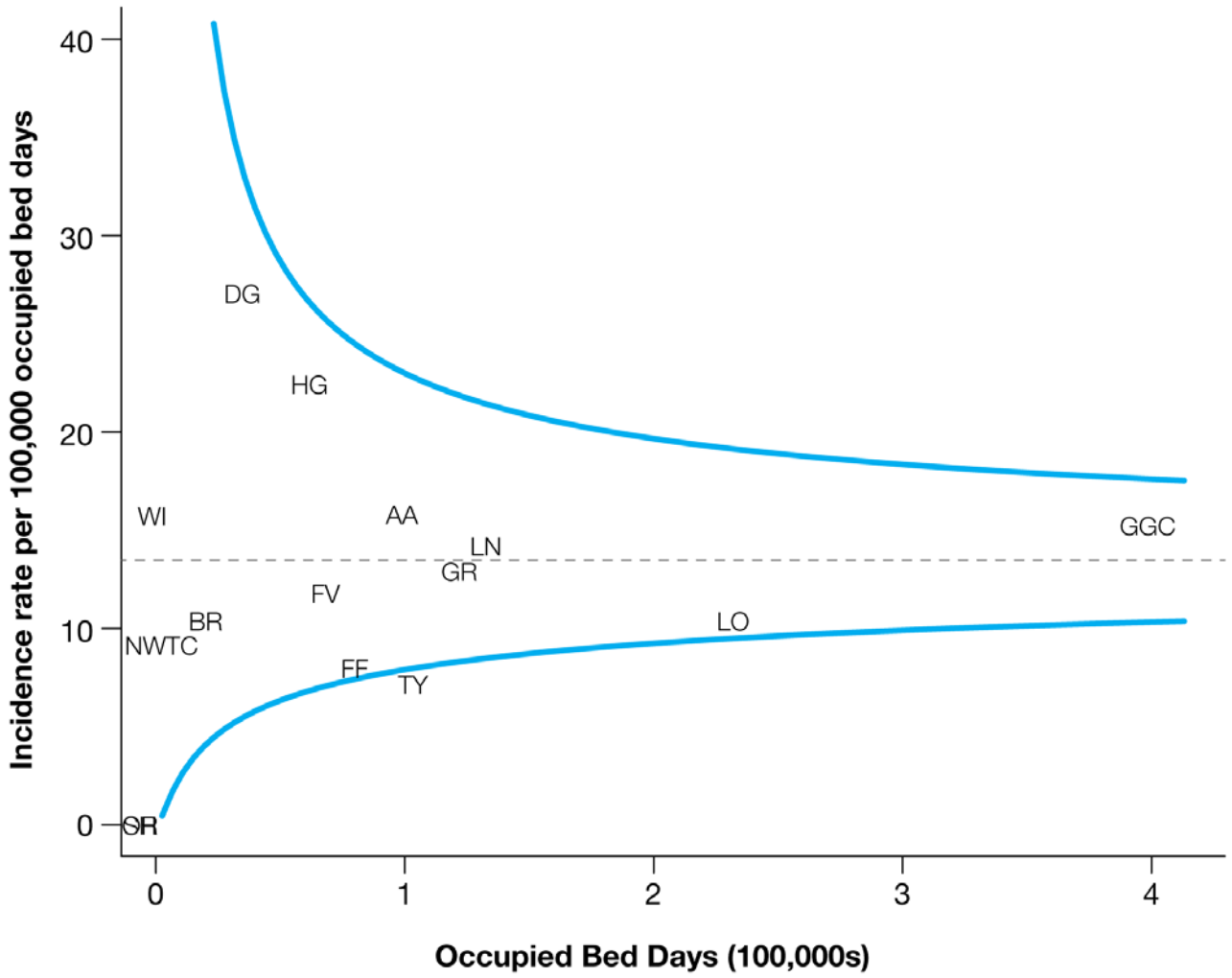
1. Quarterly population rates are based on an annualised population.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
3. Figures include any updates received following the last publication (see Appendix 2).

Table 4: CDI cases and incidence rates (per 100,000 population) for community associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).[1,2,3]

NHS Board	YE Q1 19 Cases	YE Q1 19 Population	YE Q1 19 Rate	YE Q1 20 Cases	YE Q1 20 Population	YE Q1 20 Rate
AA	25	369,360	6.8	30	369,360	8.1
BR	5	115,510	4.3	5	115,510	4.3
DG	9	148,860	6.0	13	148,860	8.7
FF	25	373,550	6.7	11	373,550	2.9 ↓
FV	12	306,640	3.9	3	306,640	1.0 ↓
GR	70	585,700	12.0	29	585,700	5.0 ↓
GGC	62	1,183,120	5.2	46	1,183,120	3.9
HG	24	321,700	7.5	16	321,700	5.0
LN	29	661,900	4.4	36	661,900	5.4
LO	51	907,580	5.6	46	907,580	5.1
OR	3	22,270	13.5	0	22,270	0.0
SH	2	22,920	8.7	0	22,920	0.0
TY	12	417,470	2.9	11	417,470	2.6
WI	1	26,720	3.7	3	26,720	11.2
Scotland	**330**	**5,463,300**	**6.0**	**249**	**5,463,300**	**4.6 ↓**

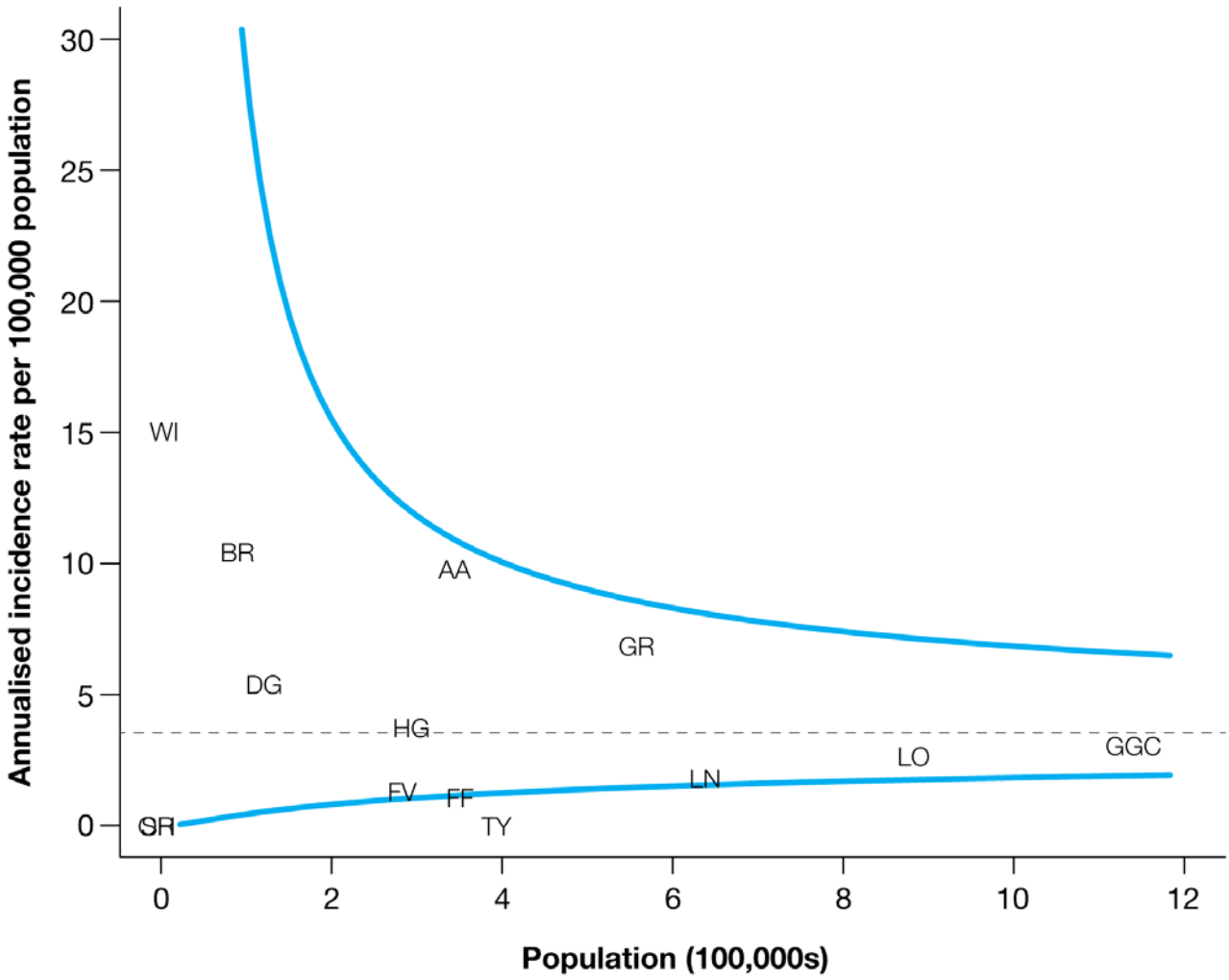
1. An arrow denotes statistically significant change.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
3. Figures include any updates received following the last publication (see Appendix 2).

Figure 1: Funnel plot of CDI incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in Q1 2020.[1,2]



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
2. NHS Orkney and NHS Shetland overlap.

Figure 2: Funnel plot of CDI incidence rates (per 100,000 population) in community associated infection cases for all NHS boards in Scotland in Q1 2020.[1,2]



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
2. NHS Orkney and NHS Shetland overlap.

Escherichia coli bacteraemia (ECB)

Total Cases for Quarter

- During Q1 2020, 1,052 *Escherichia coli* bacteraemia (ECB) cases in patients were reported to NSS. In the previous quarter there were 1,194 cases.

Healthcare associated infection cases by health board of laboratory

- During Q1 2020, 538 ECB cases were reported to NSS as healthcare associated. This corresponds to an incidence rate of 36.4 cases per 100,000 TOBDs (Table 5).
- Yearly trends (comparing year-ending March 2019 with year-ending March 2020) show that there was an increase in NHS Grampian (Table 6).
- No NHS boards were above the 95% confidence interval upper limit in the funnel plot analysis (Figure 3).
- No NHS boards were above normal variation when analysing trends over the past three years (see supplementary data).

Community associated infection cases by health board of residence

- During Q1 2020, 514 ECB cases were reported as community associated. This corresponds to an incidence rate of 37.8 cases per 100,000 population (Table 7).
- Yearly trends (comparing year-ending March 2019 with year-ending March 2020) show that there was a decrease in NHS Greater Glasgow & Clyde and Scotland overall (Table 8).
- NHS Ayrshire & Arran was above the 95% confidence interval upper limit in the funnel plot analysis (Figure 4).
- No NHS boards were above normal variation when analysing trends over the past three years (see supplementary data).

Table 5: ECB cases and incidence rates (per 100,000 TOBD) for healthcare associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).[1,2,3]

NHS Board	Q4 Cases	Q4 Bed Days	Q4 Rate	Q1 Cases	Q1 Bed Days	Q1 Rate
AA	46	111,501	41.3	50	107,446	46.5
BR	14	29,415	47.6	10	28,855	34.7
DG	18	46,458	38.7	15	44,334	33.8
FF	55	91,708	60.0	42	87,695	47.9
FV	38	79,712	47.7	37	76,312	48.5
GR	53	133,259	39.8	49	131,518	37.3
GGC	151	429,650	35.1	123	413,057	29.8
HG	18	73,909	24.4	16	71,286	22.4
LN	77	147,326	52.3	64	140,747	45.5
LO	95	249,135	38.1	84	240,426	34.9
NWTC	1	11,659	8.6	0	10,915	0.0
OR	1	2,915	34.3	1	3,184	31.4
SH	3	2,673	112.2	1	2,514	39.8
TY	54	117,973	45.8	44	111,519	39.5
WI	2	6,884	29.1	2	6,346	31.5
Scotland	**626**	**1,534,177**	**40.8**	**538**	**1,476,154**	**36.4**

1. An arrow denotes statistically significant change.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
3. Figures include any updates received following the last publication (see Appendix 2).

Table 6: ECB cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).[1,2,3]

NHS Board	YE Q1 19 Cases	YE Q1 19 Bed days	YE Q1 19 Rate	YE Q1 20 Cases	YE Q1 20 Bed days	YE Q1 20 Rate
AA	205	448,423	45.7	192	439,397	43.7
BR	42	124,757	33.7	47	116,978	40.2
DG	60	175,369	34.2	60	182,533	32.9
FF	160	360,178	44.4	162	357,536	45.3
FV	135	330,795	40.8	152	307,430	49.4
GR	182	534,355	34.1	228	528,097	43.2 ↑
GGC	638	1,674,662	38.1	610	1,679,319	36.3
HG	67	294,375	22.8	70	295,714	23.7
LN	252	564,178	44.7	270	579,725	46.6
LO	356	1,014,357	35.1	346	979,317	35.3
NWTC	8	48,158	16.6	7	46,538	15.0
OR	5	14,915	33.5	8	12,561	63.7
SH	9	9,875	91.1	9	10,423	86.3
TY	208	466,887	44.6	186	458,783	40.5
WI	14	28,274	49.5	9	26,945	33.4
Scotland	**2,341**	**6,089,558**	**38.4**	**2,356**	**6,021,296**	**39.1**

1. An arrow denotes statistically significant change.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
3. Figures include any updates received following the last publication (see Appendix 2).

Table 7: ECB cases and incidence rates (per 100,000 population) for community associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).[1,2,3,4]

NHS Board	Q4 Cases	Q4 Population	Q4 Rate	Q1 Cases	Q1 Population	Q1 Rate
AA	41	369,360	44.0	52	369,360	56.6
BR	12	115,510	41.2	13	115,510	45.3
DG	21	148,860	56.0	20	148,860	54.0
FF	34	373,550	36.1	31	373,550	33.4
FV	53	306,640	68.6	39	306,640	51.2
GR	38	585,700	25.7	48	585,700	33.0
GGC	125	1,183,120	41.9	95	1,183,120	32.3
HG	43	321,700	53.0	20	321,700	25.0
LN	73	661,900	43.8	76	661,900	46.2
LO	63	907,580	27.5	70	907,580	31.0
OR	2	22,270	35.6	3	22,270	54.2
SH	4	22,920	69.2	1	22,920	17.5
TY	54	417,470	51.3	41	417,470	39.5
WI	5	26,720	74.2	5	26,720	75.3
Scotland	**568**	**5,463,300**	**41.2**	**514**	**5,463,300**	**37.8**

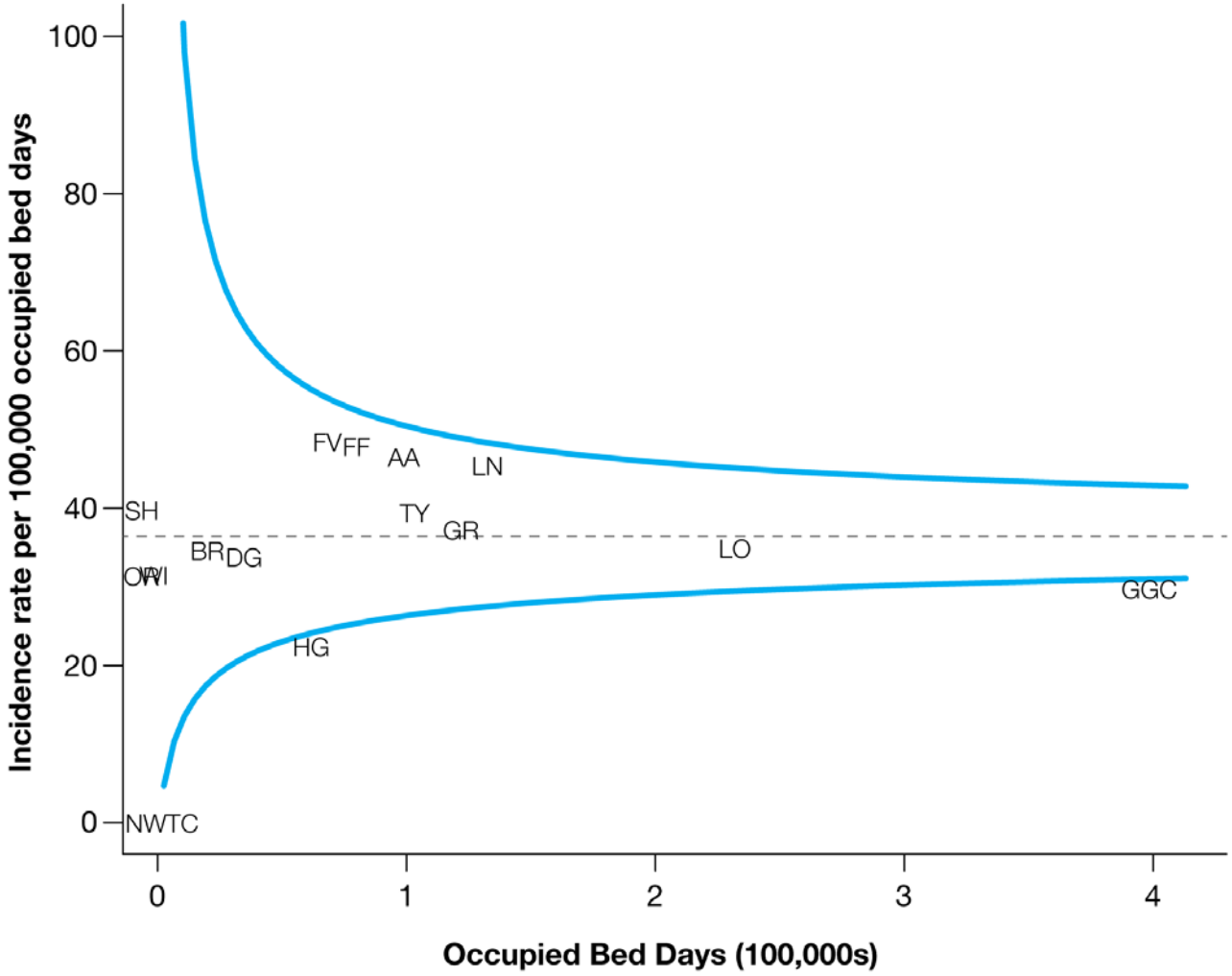
1. Quarterly population rates are based on an annualised population.
2. An arrow denotes statistically significant change.
3. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
4. Figures include any updates received following the last publication (see Appendix 2).

Table 8: ECB cases and incidence rates (per 100,000 population) for community associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).[1,2,3]

NHS Board	YE Q1 19 Cases	YE Q1 19 Population	YE Q1 19 Rate	YE Q1 20 Cases	YE Q1 20 Population	YE Q1 20 Rate
AA	210	369,360	56.9	205	369,360	55.5
BR	68	115,510	58.9	68	115,510	58.9
DG	79	148,860	53.1	90	148,860	60.5
FF	141	373,550	37.7	138	373,550	36.9
FV	163	306,640	53.2	173	306,640	56.4
GR	214	585,700	36.5	185	585,700	31.6
GGC	590	1,183,120	49.9	486	1,183,120	41.1 ↓
HG	154	321,700	47.9	130	321,700	40.4
LN	344	661,900	52.0	317	661,900	47.9
LO	299	907,580	32.9	264	907,580	29.1
OR	12	22,270	53.9	12	22,270	53.9
SH	5	22,920	21.8	10	22,920	43.6
TY	168	417,470	40.2	193	417,470	46.2
WI	19	26,720	71.1	21	26,720	78.6
Scotland	**2,466**	**5,463,300**	**45.1**	**2,292**	**5,463,300**	**42.0** ↓

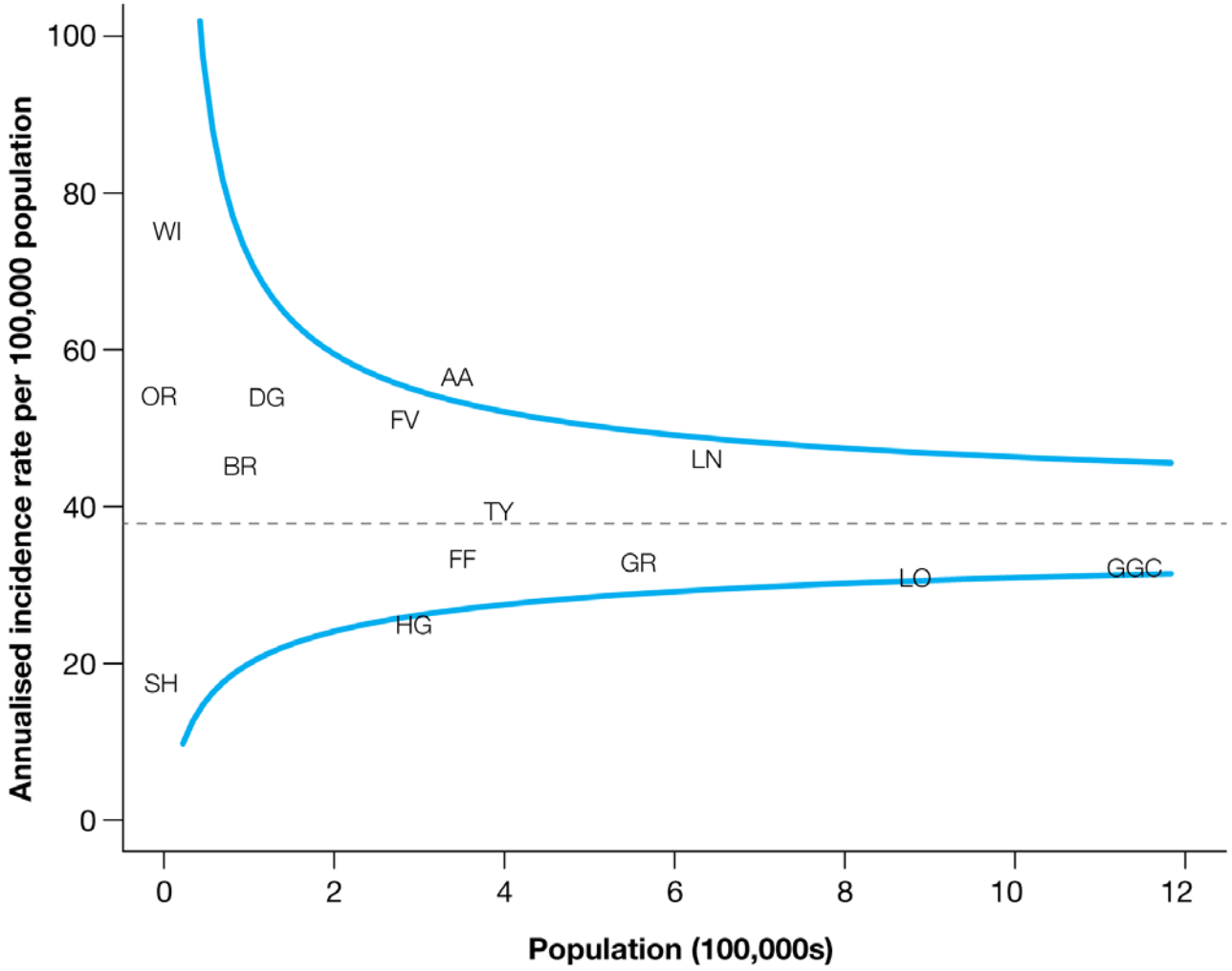
1. An arrow denotes statistically significant change.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
3. Figures include any updates received following the last publication (see Appendix 2).

Figure 3: Funnel plot of ECB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in Q1 2020.[1,2]



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
2. NHS Orkney and NHS Western Isles overlap.

Figure 4: Funnel plot of ECB incidence rates (per 100,000 population) in community associated infection cases for all NHS boards in Scotland in Q1 2020.[1]



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.

Staphylococcus aureus bacteraemia (SAB)

Total cases for quarter

- During Q1 2020, 390 *Staphylococcus aureus* bacteraemia (SAB) cases were reported to NSS. In the previous quarter there were 365 SAB cases.

Healthcare associated infection cases by health board of laboratory

- During Q1 2020, 241 SAB cases were reported to NSS as healthcare associated. This corresponds to an incidence rate of 16.3 cases per 100,000 TOBDs (Table 9).
- Yearly trends (comparing year-ending March 2019 with year-ending March 2020) show that there was an increase in NHS Tayside and NHS Western Isles and decreases in NHS Borders and NHS Fife (Table 10).
- No NHS boards were above the 95% confidence interval upper limit in the funnel plot analysis (Figure 5).
- No NHS boards were above normal variation when analysing trends over the past three years (see supplementary data).

Community associated infection cases by health board of residence

- During Q1 2020, 149 SAB cases were reported as community associated. This corresponds to an incidence rate of 11.0 cases per 100,000 population (Table 11).
- Yearly trends (comparing year-ending March 2019 with year-ending March 2020) show that there was no increase or decrease in NHS boards or Scotland overall (Table 12).
- No NHS boards were above the 95% confidence interval upper limit in the funnel plot analysis (Figure 6).
- No NHS boards were above normal variation when analysing trends over the past three years (see supplementary data).

Table 9: SAB cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).[1,2,3]

NHS Board	Q4 Cases	Q4 Bed Days	Q4 Rate	Q1 Cases	Q1 Bed Days	Q1 Rate
AA	16	111,501	14.3	19	107,446	17.7
BR	2	29,415	6.8	3	28,855	10.4
DG	2	46,458	4.3	8	44,334	18.0
FF	10	91,708	10.9	11	87,695	12.5
FV	8	79,712	10.0	8	76,312	10.5
GR	20	133,259	15.0	16	131,518	12.2
GGC	69	429,650	16.1	75	413,057	18.2
HG	10	73,909	13.5	6	71,286	8.4
LN	30	147,326	20.4	29	140,747	20.6
LO	32	249,135	12.8	43	240,426	17.9
NWTC	1	11,659	8.6	1	10,915	9.2
OR	1	2,915	34.3	2	3,184	62.8
SH	1	2,673	37.4	0	2,514	0.0
TY	30	117,973	25.4	19	111,519	17.0
WI	1	6,884	14.5	1	6,346	15.8
Scotland	**233**	**1,534,177**	**15.2**	**241**	**1,476,154**	**16.3**

1. An arrow denotes statistically significant change.
2. Note: Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
3. Figures include any updates received following the last publication (see Appendix 2).

Table 10: SAB cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).[1,2,3]

NHS Board	YE Q1 19 Cases	YE Q1 19 Bed days	YE Q1 19 Rate	YE Q1 20 Cases	YE Q1 20 Bed days	YE Q1 20 Rate
AA	62	448,423	13.8	75	439,397	17.1
BR	22	124,757	17.6	7	116,978	6.0 ↓
DG	16	175,369	9.1	17	182,533	9.3
FF	76	360,178	21.1	47	357,536	13.1 ↓
FV	55	330,795	16.6	45	307,430	14.6
GR	97	534,355	18.2	83	528,097	15.7
GGC	324	1,674,662	19.3	321	1,679,319	19.1
HG	50	294,375	17.0	36	295,714	12.2
LN	101	564,178	17.9	117	579,725	20.2
LO	138	1,014,357	13.6	125	979,317	12.8
NWTC	9	48,158	18.7	6	46,538	12.9
OR	2	14,915	13.4	6	12,561	47.8
SH	5	9,875	50.6	2	10,423	19.2
TY	68	466,887	14.6	93	458,783	20.3 ↑
WI	1	28,274	3.5	9	26,945	33.4 ↑
Scotland	**1,026**	**6,089,558**	**16.8**	**989**	**6,021,296**	**16.4**

1. An arrow denotes statistically significant change.
2. Note: Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
3. Figures include any updates received following the last publication (see Appendix 2).

Table 11: SAB cases and incidence rates (per 100,000 population) for community associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).[1,2,3,4]

NHS Board	Q4 Cases	Q4 Population	Q4 Rate	Q1 Cases	Q1 Population	Q1 Rate
AA	9	369,360	9.7	15	369,360	16.3
BR	2	115,510	6.9	3	115,510	10.4
DG	2	148,860	5.3	8	148,860	21.6
FF	8	373,550	8.5	6	373,550	6.5
FV	14	306,640	18.1	6	306,640	7.9
GR	13	585,700	8.8	16	585,700	11.0
GGC	22	1,183,120	7.4	23	1,183,120	7.8
HG	10	321,700	12.3	8	321,700	10.0
LN	16	661,900	9.6	19	661,900	11.5
LO	21	907,580	9.2	27	907,580	12.0
OR	0	22,270	0.0	3	22,270	54.2
SH	1	22,920	17.3	2	22,920	35.1
TY	14	417,470	13.3	13	417,470	12.5
WI	0	26,720	0.0	0	26,720	0.0
Scotland	**132**	**5,463,300**	**9.6**	**149**	**5,463,300**	**11.0**

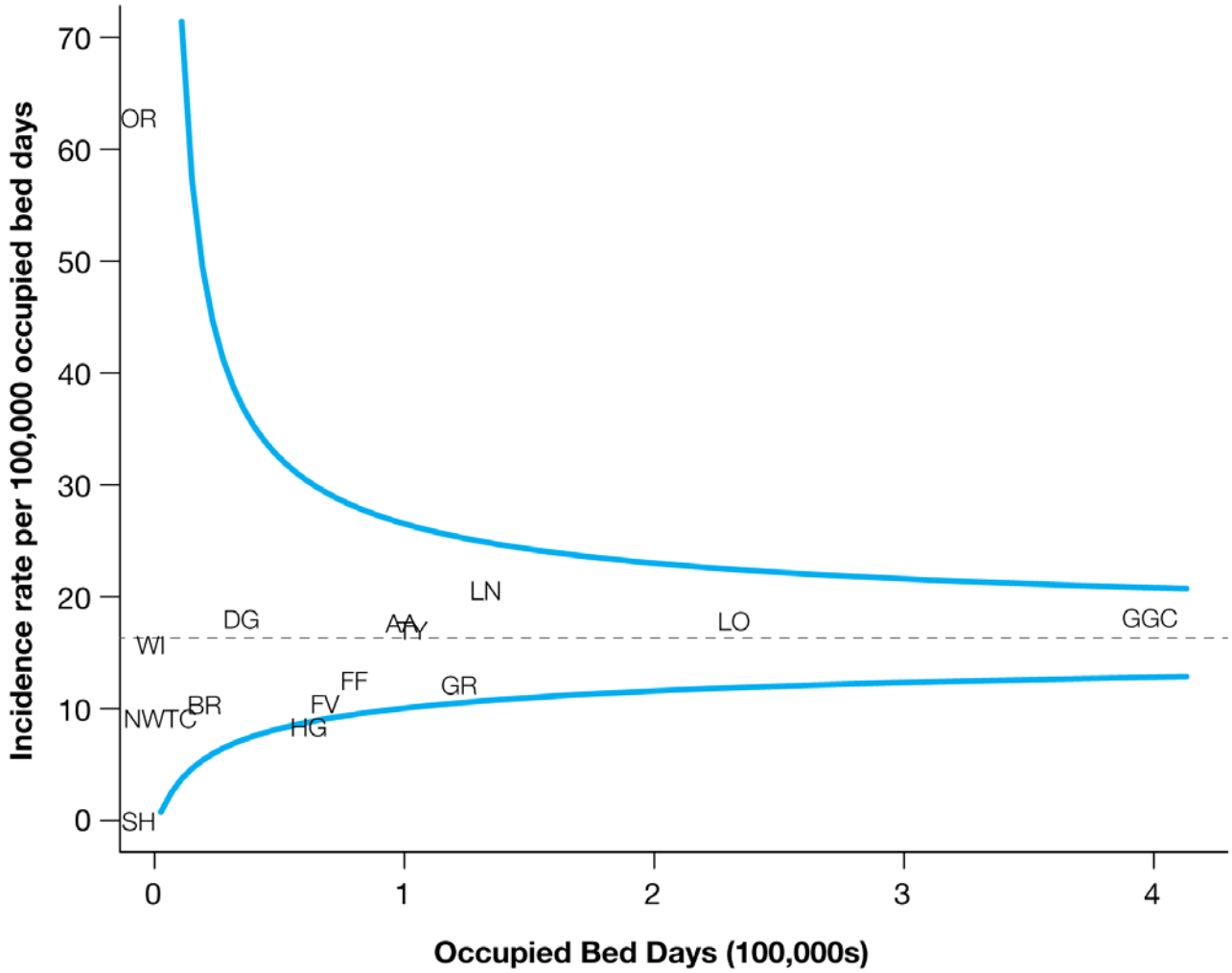
1. Quarterly population rates are based on an annualised population.
2. An arrow denotes statistically significant change.
3. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
4. Figures include any updates received following the last publication (see Appendix 2).

Table 12: SAB cases and incidence rates (per 100,000 population) for community associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).[1,2,3]

NHS Board	YE Q1 19 Cases	YE Q1 19 Population	YE Q1 19 Rate	YE Q1 20 Cases	YE Q1 20 Population	YE Q1 20 Rate
AA	44	369,360	11.9	47	369,360	12.7
BR	12	115,510	10.4	10	115,510	8.7
DG	18	148,860	12.1	19	148,860	12.8
FF	37	373,550	9.9	34	373,550	9.1
FV	29	306,640	9.5	39	306,640	12.7
GR	47	585,700	8.0	47	585,700	8.0
GGC	86	1,183,120	7.3	80	1,183,120	6.8
HG	32	321,700	9.9	34	321,700	10.6
LN	56	661,900	8.5	58	661,900	8.8
LO	86	907,580	9.5	94	907,580	10.4
OR	1	22,270	4.5	4	22,270	18.0
SH	2	22,920	8.7	5	22,920	21.8
TY	57	417,470	13.7	45	417,470	10.8
WI	5	26,720	18.7	0	26,720	0.0
Scotland	**512**	**5,463,300**	**9.4**	**516**	**5,546,300**	**9.4**

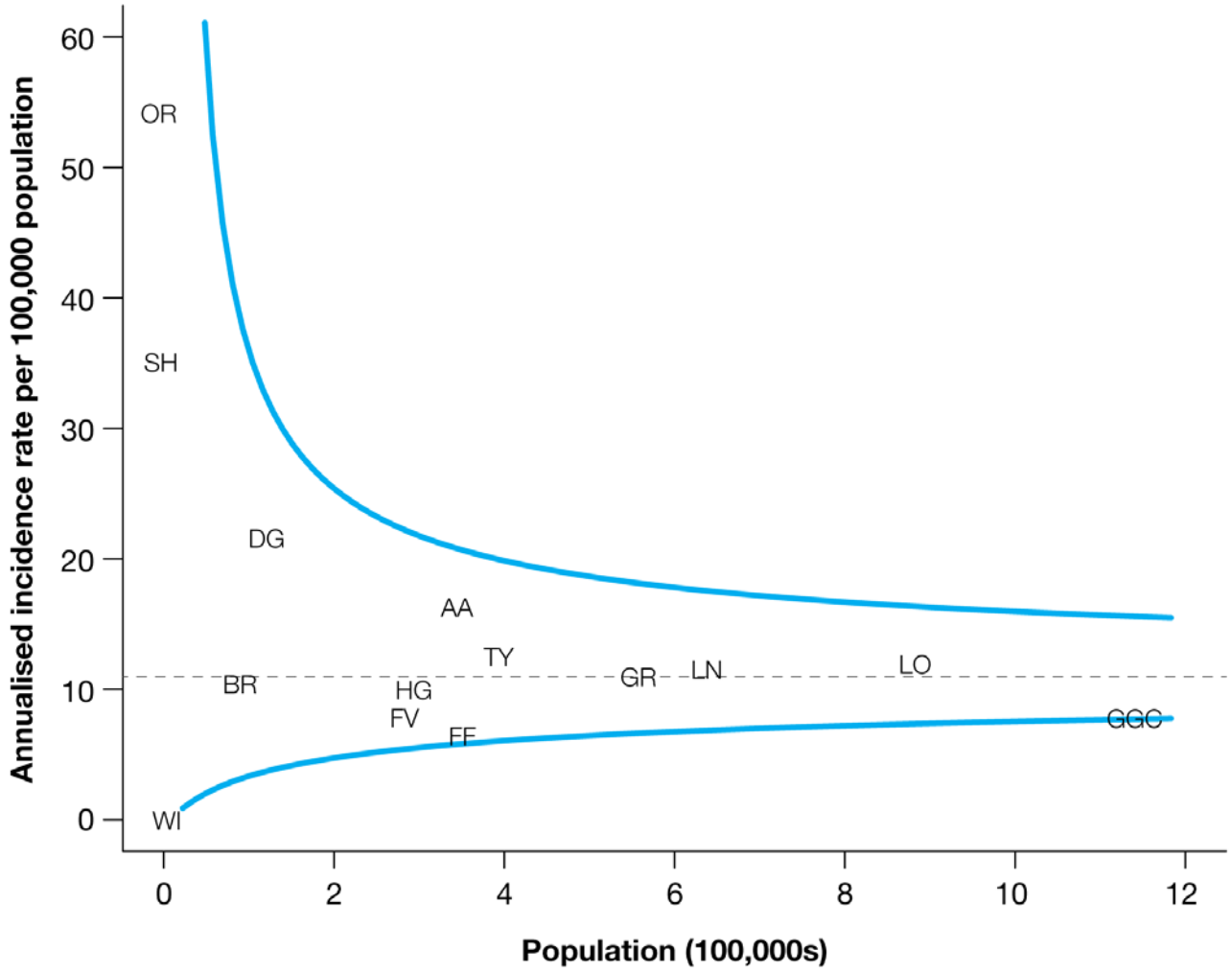
1. An arrow denotes statistically significant change.
2. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
3. Figures include any updates received following the last publication (see Appendix 2).

Figure 5: Funnel plot of SAB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in Q1 2020.[1,2]



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
2. NHS Ayrshire & Arran and NHS Tayside overlap.

Figure 6: Funnel plot of SAB incidence rates (per 100,000 population) in community associated infection cases for all NHS boards in Scotland in Q1 2020.[1]



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.

Surgical Site Infection (SSI)

Epidemiological data for SSI are not included for this quarter due to the pausing of surveillance to support the COVID-19 response.

List of Tables

File name	File and size
Table 1: CDI cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).	supplementary data (415 Kb)
Table 2: CDI cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).	supplementary data (415 Kb)
Table 3: CDI cases and incidence rates (per 100,000 population) for community associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).	supplementary data (415 Kb)
Table 4: CDI cases and incidence rates (per 100,000 population) for community associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).	supplementary data (415 Kb)
Table 5: ECB cases and incidence rates (per 100,000 TOBD) for healthcare associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).	supplementary data (415 Kb)
Table 6: ECB cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).	supplementary data (415 Kb)
Table 7: ECB cases and incidence rates (per 100,000 population) for community associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).	supplementary data (415 Kb)
Table 8: ECB cases and incidence rates (per 100,000 population) for community associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).	supplementary data (415 Kb)
Table 9: SAB cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).	supplementary data (415 Kb)
Table 10: SAB cases and incidence rates (per 100,000 TOBDs) for healthcare associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).	supplementary data (415 Kb)
Table 11: SAB cases and incidence rates (per 100,000 population) for community associated infection cases: Q4 2019 (October to December 2019) compared to Q1 2020 (January to March 2020).	supplementary data (415 Kb)
Table 12: SAB cases and incidence rates (per 100,000 population) for community associated infection cases: year-ending March 2019 (YE Q1 19) compared to year-ending March 2020 (YE Q1 20).	supplementary data (415 Kb)

Contact

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Further Information

Further Information can be found on the website.

For more information on types of infections included in this report, please see the CDI, ECB, SAB and SSI pages.

The next release of this publication will be October 2020.

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Appendices

Appendix 1 – Background information

Revisions to the surveillance

Description of Revision	First report revision applied	Report section(s) revision applies to	Rational for revision
Name change for *Clostridium difficile* to *Clostridioides difficile*.	October 2018	CDI	A novel genus *Clostridioides* has been proposed for *Clostridium difficile* which will now be known as ***Clostridioides difficile***. There are no implications with regards the natural history of infection, infection prevention and control, or clinical treatment.
Addition of healthcare/community case assignment	October 2017	CDI/SAB	An increasing awareness of those infections occurring in community settings has warranted measurement of incidence rates by healthcare setting (healthcare settings vs. community settings) to enable interventions to be targeted to the relevant settings.
Use of standardised denominator data for CDI/ECB/SAB	October 2017	CDI/SAB	The 'total occupied bed days' data will be extracted from the ISD(S)1 data collection which contains

Description of Revision	First report revision applied	Report section(s) revision applies to	Rational for revision
			aggregated information on acute and non-acute bed days including geriatric medicine and long-term stays in real-time. The standardisation of denominator data across the three surveillance programmes could result in slightly less accurate denominators due to inclusion of persons in the denominator who are at slightly less risk of infection. However, in surveillance programmes developed for the purpose of preventing infection and driving quality improvement in care, consistency of the denominators over time tend to be more important than getting a very precise estimate of the population at risk, as the primary aim is to reduce infection to a lower incidence relative to what it was at the

Description of Revision	First report revision applied	Report section(s) revision applies to	Rational for revision
			initial time of benchmarking.
Reporting of CDI cases aged 15 years and above only	October 2017	CDI	Current Scottish Government Local Delivery Plan Standards are based on the incidence rate in cases aged 15 years and above, therefore the report has been aligned to reflect this. NSS will continue to monitor CDI incidence rates in the separate age groups (15-64 years and 65 years and above) internally.
Reporting of total SAB cases only (i.e. Removal of MRSA sub-analysis)	October 2017	SAB	MRSA numbers are becoming too small to carry out statistical analysis. NSS will continue to monitor internally.
Addition of year end trends to ECB	October 2018	ECB	This analysis (already included for other reported organisms) is now possible for ECB due the amount of data that has now been collected.
Change in production of Quarterly SPC Charts	April 2020	All sections	Updated method used for calculating exceptions within the SPC charts. The mean,

Description of Revision	First report revision applied	Report section(s) revision applies to	Rational for revision
			Trigger/warning lines (+2 standard deviations) and upper control limits (+3 standard deviations) presented, are now calculated using the 12 quarters prior to the most recent quarter, as to compare the new rate against an existing baseline.
Changes to data collection in response to COVID-19	July 2020	All sections	A CNO letter sent 25th March 2020 asked NHS Boards to continue to report case numbers and origin of infection data but they would not be required to report risk factor data as would normally be expected under enhanced/extended surveillance for *Staphylococcus aureus* bacteraemia (SAB), *Escherichia coli* bacteraemia (ECB) and *Clostridioides difficile* infection (CDI). All mandatory and voluntary Surgical Site Infection (SSI) surveillance was paused until further notice.

Description of Revision	First report revision applied	Report section(s) revision applies to	Rational for revision
Change from Health Protection Scotland to National ARHAI Scotland	October 2020	All sections	In April 2020, as part of launch of Public Health Scotland, the ARHAI Group within Health Protection Scotland (NSS) became National ARHAI Scotland. National ARHAI Scotland will continue to support NHS boards in the prevention and control of healthcare associated infections. Future versions of this report will be updated to reflect this branding change. This change will therefore be instated for the next publication in October 2020.

Report methods and caveats

Full details of the report **methods and caveats**

UK comparisons

Improved collaboration with the other UK nations has made comparisons and standardisation across the UK a high priority for all four nations' governments/health departments. The changes introduced in the Scottish HAI surveillance, described here facilitate benchmarking of the Scottish data against those of the rest of the UK.

Appendix 2 – Publication Metadata

Metadata Indicator	Description
Publication title	Commentary on quarterly epidemiological data on *Clostridioides difficile* infection, *Escherichia coli* bacteraemia, *Staphylococcus aureus* bacteraemia and Surgical Site Infection in Scotland
Description	This release provides information on *Clostridioides difficile* infection, *Escherichia coli* bacteraemia, *Staphylococcus aureus* bacteraemia and Surgical Site Infection in Scotland for the period January to March 2020.
Theme	Infections in Scotland
Topic	*Clostridioides difficile* infection, *Escherichia coli* bacteraemia, *Staphylococcus aureus* bacteraemia and Surgical Site Infection
Format	Excel workbooks
Data source(s)	***Clostridioides difficile* infection:** **Case data source:** Electronic Communication of Surveillance in Scotland (ECOSS) **Data linkage source**: General / Acute Inpatient and Day Case Scottish Morbidity Records (SMR01) **Healthcare associated denominator:** Total occupied bed days: Information Services Division ISD(S)1 **Community associated denominator:** National Records of Scotland (NRS) mid-year population estimates ***Escherichia coli* bacteraemia:** **Case data source:** Electronic Communication of Surveillance in Scotland (ECOSS) Enhanced Surveillance Web Tool **Healthcare associated denominator:** Total occupied bed days: Information Services Division ISD(S)1 **Community associated denominator:** NRS mid-year population estimates ***Staphylococcus aureus* bacteraemia:** **Case data source:** Electronic Communication of Surveillance in Scotland (ECOSS) Enhanced Surveillance Web Tool **Healthcare associated denominator:** Total occupied bed days: Information Services Division ISD(S)1

Metadata Indicator	Description
	Community associated denominator: NRS mid-year population estimates **Surgical Site Infection:** **Case data source:** Surgical Site Infection Reporting System (SSIRS) **Number of procedures denominator:** SSIRS
Date that data are acquired	The date the data were extracted for analysis. *Clostridioides difficile:* 22/04/2020 *Escherichia coli* Bacteraemia: 27/05/2020 *Staphylococcus aureus* Bacteraemia: 27/05/2020 Surgical Site Infection: Epidemiological data for SSI are not included for this quarter due to the pausing of surveillance to support the COVID-19 response.
Release date	7 July 2020
Frequency	Quarterly
Timeframe of data and timeliness	The latest iteration of data is 31 March 2020, therefore three months in arrears
Continuity of data	Quarterly as at March, June, September, December
Revisions statement	These data are not subject to planned major revisions. However, NSS aims to continually improve the interpretation of the data and therefore analysis methods are regularly reviewed and may be updated in the future.
Revisions relevant to this publication	**Updates to previously published figures** **Total Occupied Bed Days (TOBDs)** Amendments to total occupied bed days dataset provided by Information Services Division (ISD) have been included in historic dataset for analysis and reporting. Updated figures are available to view in the most recent supplementary data. There were no retrospective amendments to bed days. ***Clostridioides difficile* Infection (CDI)** Data linkage between CDI surveillance data and the Scottish Morbidity Records (SMR01) is used to identify community and healthcare associated CDI cases. Delays in SMR01 data availability at the time of report production means that some cases may be reassigned as either healthcare associated or community associated CDI at a later date (see Methods and Caveats).

<table>
<tr><th>Metadata Indicator</th><th>Description</th></tr>
<tr><td></td><td>
The following updates have been made to the CDI case numbers as a result of more SMR01 hospital discharge records being made available for linkage since the last publication:

Updates to healthcare and community associated CDI data:

<table>
<tr><th>NHS Board</th><th>Quarter</th><th>Updates</th></tr>
<tr><td>GGC</td><td>Q4 2019</td><td>Healthcare associated CDI cases updated to 70 from 69 as one case was reassigned as healthcare instead of community.

Community associated CDI cases updated to 10 from 11 as one case was reassigned as healthcare instead of community.</td></tr>
<tr><td>WI</td><td>Q4 2019</td><td>Healthcare associated CDI cases updated to 3 from 2 as one case was reassigned as healthcare instead of community.

Community associated CDI cases updated to 1 from 2 as one case was reassigned as healthcare instead of community.</td></tr>
</table>
*When a case is reassigned from community associated to healthcare associated infection, the NHS Board reported will change from NHS Board of residence to NHS Board of laboratory.
**SMR01 records for 2020 Q1were below the required level of completeness at time of data linkage. Amendments have been manually applied following validation with the NHS boards.

Surgical Site Infection (SSI)
Epidemiological data for SSI are not included for this quarter due to the pausing of surveillance to support the COVID-19 response.
</td></tr>
<tr><td>Concepts and definitions</td><td>
Clostridioides difficile Infection (CDI)

Clostridioides difficile infection (CDI) is the most common cause of intestinal infections (and diarrhoea) associated with antimicrobial therapy. Clinical disease comprises a range of toxin mediated symptoms from mild diarrhoea, which can resolve without treatment, to severe cases such as pseudomembranous colitis (PMC), toxic megacolon and peritonitis that can lead to death.

For mild disease, diarrhoea is usually the only symptom. Other clinical features consistent with more severe forms of CDI include fever, leukocytosis, pseudomembranous colitis and ileus.

Symptoms of CDI, and associated immune reactions in children differ from those in adults, but the pathology is not well described. Routine testing in children aged less than 3 years old is not recommended.
</td></tr>
</table>

Metadata Indicator	Description
	Approximately 3% of healthy adults and 20% of hospital patients carry *C. difficile* in their gut. The elderly living in care homes or staying in long-term care facilities are more likely to carry *C. difficile* than other adults. In studies from the US, 20% of care home residents and 50% of patients in long-term care facilities, respectively, were colonised with *C. difficile*. The Scottish CDI guidance 'Guidance on Prevention and Control of CDI in Healthcare Settings in Scotland' and *C. difficile* testing protocol 'protocol for diagnosis of CDI' are key documents for the control and reduction of CDI in Scotland. There remains scope for a reduction of incidence rates through continued local monitoring, appropriate prescribing, and compliance with infection prevention and control measures. ***Escherichia coli* Bacteraemia (ECB)** *Escherichia coli* (*E. coli*) is a bacterium commonly found in the gut of animals and people where it forms part of the normal gut flora that helps human digestion. Although most types of *E. coli* live harmlessly in your gut, some types can make you unwell. Some types *E. coli* can cause urinary tract infections (UTI) and illnesses such as pneumonia. *E. coli* continues to be the most frequent cause of Gram-negative bacteraemia in Scotland and is a frequent cause of infection worldwide. The number of patients with *E. coli* bacteraemia (ECB) reported to NSS has increased continuously since 2009. New cases of ECB are identified by laboratory testing (via positive blood cultures) and submitted to the national system ECOSS. Only cases of ECB that have been reviewed and confirmed by the NHS boards in the enhanced surveillance system are included in the quarterly commentaries. ***Staphylococcus aureus* Bacteraemia (SAB)** *Staphylococcus aureus* (*S. aureus*) is a Gram positive bacterium which colonises the nasal cavity of about a quarter of the healthy population. This colonisation is usually harmless. However, infection can occur if *S. aureus* breaches the body's defence systems and can cause a range of illnesses from minor skin infections to serious systemic infections such as bacteraemia. Some strains of *S. aureus* produce toxins or show resistance to first line treatments therefore can be more complicated to treat. Scotland has had a mandatory meticillin resistant *S. aureus* (MRSA) bacteraemia surveillance programme since 2001. The programme was extended to include meticillin sensitive *S. aureus* (MSSA) bacteraemias in 2006 and in 2014 to include enhanced *S. aureus* bacteraemia (SAB) surveillance. Full details of the surveillance methods may be found in the protocol.

Metadata Indicator	Description
	Surgical Site Infection (SSI) A surgical site infection (SSI) is an infection that occurs after surgery in the part of the body where the surgery took place. SSI may be superficial infections involving the skin only, while other SSI is more serious and can involve tissues under the skin, organs, or implanted material. SSI is one of the most common types of healthcare associated infection in Scotland, estimated to account for 16.5% of inpatient healthcare associated infection within NHSScotland, according to Scottish Point Prevalence Survey 2016. Surgical Site Infection Surveillance (SSIS) is mandatory across NHSScotland and all NHS boards participate in SSI surveillance for all inpatient and post discharge surveillance (PDS) for 10 post-operative days for caesarean section procedures and prospective readmission surveillance for hip arthroplasty for 30 post-operative days. Additional new mandatory large bowel and vascular procedures commenced since April 2017. Reporting these procedures will not take place until it is assessed that robust data have been provided by boards. Further information on the **methods and caveats** is available:
Relevance and key uses of the statistics	***Clostridioides difficile* Infection (CDI)** Surveillance data is essential for monitoring trends and assisting in outbreak investigations. Certain strains of *C. difficile* have been associated with more severe disease (e.g. PCR types 027 and 078) and antibiotic resistance has been suggested to be a factor in the emergence and spread of *C. difficile* epidemic types. In addition, the identification of ribotypes can assist in the investigation of outbreaks. The surveillance data should inform and support NHS boards in implementing antimicrobial prescribing policies, infection control and prevention interventions. ***Escherichia coli* Bacteraemia (ECB)** The outputs of the surveillance programme are intended to support the NHS boards in controlling and reducing the burden of ECB. Benchmarking against other NHS boards (and other countries) is an important function of the surveillance. In conjunction with other sources of intelligence (including enhanced surveillance data) the outputs of the quarterly surveillance can also help the NHS boards with planning and targeting activities to reduce risk to patient of becoming infected and improve the care of patients (i.e. strategic planning, targeted intervention, care quality improvement). As urinary tract infections are commonly associated with *E. coli* bacteraemia cases, we are collaborating with the Scottish Urinary Tract Infection Network (SUTIN). This will promote collaborative working with our partners within Health and Social Care around change ideas which may reduce the risk of *E. coli* bacteraemia. Work is also being done on improving antimicrobial treatment of

Metadata Indicator	Description
	people with infections –co-ordinated by the Scottish Antimicrobial Prescribing Group (SAPG) through a network of antimicrobial management teams. ***Staphylococcus aureus* Bacteraemia (SAB)** NSS continues to offer support to NHS boards across Scotland to aid their local SAB reduction strategies. A programme of enhanced SAB surveillance commenced in all NHS boards in Scotland on 1 October 2014. This is providing further intelligence to focus future reduction interventions. **Surgical Site Infection (SSI)** SSIs are estimated to double the length of post-operative stay in hospital and significantly increase the cost of care. The national SSIS programme is intended to enhance the quality of patient care with use of data obtained from surveillance to compare incidence of SSI over time and against a benchmark rate and to use this information locally to review and guide clinical practice. **Key to NHS boards** AA = Ayrshire & Arran BR = Borders DG = Dumfries & Galloway FV = Forth Valley FF = Fife GR = Grampian GGC = Greater Glasgow & Clyde HG = Highland LN = Lanarkshire LO = Lothian NWTC = National Waiting Times Centre OR = Orkney SH = Shetland TY = Tayside WI = Western Isles
Accuracy	CDI, ECB and SAB data are the product of the Electronic Communication of Surveillance in Scotland (ECOSS). Participating laboratories routinely report all identifications of organisms, infection or microbiological intoxication, unless they are known to be of no clinical or public health importance. The collected data is used for; the identification of single cases of severe disease, outbreaks, and longer term trends in the incidence of laboratory reported infections, enhanced surveillance, health protection, analytical and statistical use. Delays in SMR01 data availability at the time of report production means that some CDI cases may be reassigned at a later date. Therefore, healthcare-

Metadata Indicator	Description
	associated and community-associated CDI cases in this report are provisional and may change. The enhanced ECB and SAB ECOSS web tool has built-in validation rules that have to be met before the data is submitted. Further checks of the data are made by NSS before the data are analysed. CDI validation of collected data entails sending a list of CDI cases extracted from ECOSS and asking for confirmation that the cases represent true CDI cases, i.e., meet the case definition which is defined in the surveillance protocol sent to all the NHS boards and available on the website. The final list of CDI cases is then agreed before publishing. SSI data comes from the Surgical Site Infection Reporting System (SSIRS). Complying with a national minimum dataset and definitions for Surgical Site Infections, enables the data submitted to NSS to be mapped into the national dataset following a rigorous quality assurance process. SSIRS has built-in validation rules and data cannot be submitted until rules are met. SSIRS primary validation checks for incomplete or ambiguous core data fields, for example, if presentation to the surgery is 'emergency' the OPCS code should correspond. Secondary validation includes data checks that can be accepted without completion and/or values that are outside the stated requirements.
Completeness	**ECB/SAB:** Surveillance data are collected using an ECOSS Surveillance Web Tool that allows data collectors in NHS boards to validate ECOSS records as well as additional cases that may not be included in the ECOSS system. This therefore means that completeness is near to 100%. Only cases reviewed in the enhanced surveillance are included in the 'analysis' in the commentary publication. **CDI:** Diagnosis of CDI is confirmed in a patient who is both symptomatic with diarrhoea and whose stool has tested positive using a two-step diagnostic algorithm. Laboratory reports of positive samples are then sent to ECOSS for data extraction. In the community, patients with CDI may have a mild illness that does not require a GP visit, or the symptoms may not be recognised by a GP for a *C. difficile* test request. In hospitals, the chance of a diarrhoea sample not being tested for *C. difficile* is much lower, and patients who have ileus (i.e., CDI but with no diarrhoea) might be missed, however as a result of NSS published guidance on managing CDI patients, this is not likely. NSS carries out validation with the NHS boards to check that no CDI cases have been missed from ECOSS each quarter. As with most surveillance programmes, completeness will not be 100% but mandatory surveillance, supported by NSS through issued guidance on diagnosis of CDI and validation of cases, ensures this is as near to 100% as practically possible. When categorising by healthcare or community,

Metadata Indicator	Description
	not all cases may be successfully data linked in any one quarter. Therefore, the sum total of the healthcare and community CDI cases may not equal the total number of CDI cases reported to NSS. **SSI:** Surveillance coordinators are responsible for completeness and accuracy of data. At hospital level, processes are in placed to ensure all patients included in the standard surveillance have had forms completed (e.g. cross checking with admission or theatre list). NSS also compare SSIRS data with data from ISD to a make sure all procedures under surveillance have been included; however, this comparison is only done annually.
Comparability	**CDI/ECB/SAB:** Public Health England report rates per quarter for CDI, ECB and SAB (methods and definitions may differ) **SSI:** SSI rates by health board are not published by the rest of UK. Annual numbers are reported by Public Health England -
Accessibility	It is the policy of NSS to make its web sites and products accessible according to **published guidelines**.
Coherence and clarity	Tables and charts are accessible via the website at:
Value type and unit of measurement	Healthcare associated cases and incidence rates (per 100,000 Total occupied bed days (TOBDs)) for *Clostridioides difficile* infection, *Escherichia coli* bacteraemia & *Staphylococcus aureus* bacteraemia. Community associated cases and incidence rates (per 100,000 population) for *Clostridioides difficile* infection, *Escherichia coli* bacteraemia & *Staphylococcus aureus* bacteraemia. Number of procedures and Surgical Site Infections and incidence per categories (per 100 procedures) for inpatients and post discharge surveillance.
Disclosure	The NSS protocol on **Statistical Disclosure Protocol** is followed.
Official Statistics designation	Official Statistics
UK Statistics Authority Assessment	Not Assessed
Last published	7 April 2020
Next published	6 October 2020
Date of first publication	7 April 2015 Prior to this *Clostridioides difficile* infection (first publication - 2 Apr 2008) and *Staphylococcus aureus* bacteraemia (first publication - 3 Apr 2002) were separate reports.

Metadata Indicator	Description
Help email	**mailto:NSS.HPSHAIIC@nhs.net**
Date form completed	30 June 2020

Appendix 3 – Early access details

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", NSS is obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department

NHS Board Chief Executives

NHS Board Communication leads

Appendix 4 – NSS and Official Statistics

Official Statistics

Our statistics comply with the **Code of Practice for Statistics** in terms of trustworthiness, high quality and public value. This also means that we keep data secure at all stages, through collection, processing, analysis and output production, and adhere to the '**five safes**'.