Public Health England

Protecting and improving the nation's health

Quarterly epidemiological commentary

Mandatory MRSA, MSSA, Gram-negative bacteraemia and *C. difficile* infections data (up to January to March 2019)

June 2019

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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Contents

Data included in this quarterly epidemiological commentary

This document contains quarterly, national-level epidemiological commentaries for MRSA, MSSA, *E. coli*, *Klebsiella* spp. and *P. aeruginosa* bacteraemia and *C. difficile* infections. This includes analyses on counts and incidence rates of all cases and hospital-onset (previously referred to as trust-apportioned) cases of MRSA, MSSA, *E. coli*, *Klebsiella* spp. and *P. aeruginosa* bacteraemia and *C. difficile* infection.

The terminologies; ‘trust-apportioned’ and ‘not trust-apportioned’ have been updated to ‘hospital-onset’ and ‘community-onset’ respectively. Please note that this is only a change in the description and not a change in the methodology for apportionment.

All data tables associated with this report are included in an accompanying OpenDocument spreadsheet.

Revisions to data included are covered by a data-specific revisions and correction policy.

Citation

Citation to PHE division of HCAI & AMR is required. Citation: Public Health England. Quarterly epidemiology commentary: mandatory MRSA, MSSA and Gram-negative bacteraemia and *C. difficile* infection in England (up to January-March 2019) London: Public Health England, June 2019.

Further information

This publication forms part of the range of National Statistics outputs routinely published by Public Health England (PHE) which include monthly and annual reports on the mandatory surveillance of MRSA, MSSA and *E. coli, Klebsiella* spp. and *P. aeruginosa* bacteraemia and *C. difficile* infections (CDI).

Annual report output

Further epidemiological analyses by financial year can be found in PHE's annual epidemiological commentary.

Monthly report outputs

The following reports are produced by PHE on a monthly basis.

MRSA bacteraemia:

- counts of all reported, hospital and community-onset cases of MRSA bacteraemia by organisation

MSSA bacteraemia:

- counts of all reported, hospital and community-onset cases of MSSA bacteraemia by organisation
- monthly MSSA counts by acute trust; hospital-onset (trust-apportioned) cases only

E. coli bacteraemia:

- monthly counts of *E. coli* bacteraemia by trust; all reported cases only
- monthly counts of *E. coli* bacteraemia by CCG
- counts of all reported, hospital and community-onset cases of *E. coli* bacteraemia by organisation

Klebsiella spp. bacteraemia:

- counts of all reported, hospital and community-onset cases of *Klebsiella* spp. bacteraemia by organisation

P. aeruginosa bacteraemia:

- counts of all reported, hospital and community-onset cases of *P. aeruginosa* bacteraemia by organisation

CDI:

- monthly CDI counts by acute trust in patients aged 2 years and over; hospital- onset (trust-apportioned) cases only
- monthly CDI counts by acute trust by prior healthcare exposure
- monthly CDI counts by CCG in patients aged 2 years and over
- monthly CDI counts by CCG in patients aged 2 years and over, by prior healthcare exposure

Data for this report was extracted from PHE's healthcare associated infections data capture system (HCAI DCS) on 17 April 2019.

Epidemiological analyses of Gram-negative bacteraemia data

E. coli bacteraemia

The incidence rate of all reported Escherichia coli bacteraemia has continued to increase each year since the initiation of mandatory surveillance of *E. coli* bacteraemia in July 2011 (figure 1a). This is primarily driven by the increase in the rate of community-onset cases (table S1a). In contrast, the incidence rate of hospital-onset cases has been relatively stable within the same period (figure 1b).

Between July to September 2011 and January to March 2019, the count of cases and the incidence rate of all reported cases of *E. coli* bacteraemia increased by 23.7% from 8,275 cases to 10,239 and from 61.8 to 74.7 cases per 100,000 population. Similarly, over the same period, the count of community-onset cases increased by 33.6% from 6,279 to 8,387, while the incidence rate increased 30.4% from 46.9 cases per 100,000 population to 61.2.

The incidence rate of hospital-onset cases decreased 7.2% between July to September 2011 and January to March 2019 from 23.7 per 100,000 bed-days (n=1,996) to 20.9 per 100,000 bed-days (n=1,852).

Comparing the most recent quarter (January to March 2019) to the same period in the previous year (January to March 2018) shows a 7.4% increase in the count of all reported cases from 9,530 to 10,239, while the incidence rate increased 7.4% from 69.5 per 100,000 population to 74.7. Community-onset *E. coli* bacteraemia cases increased 8.9% from 7,703 to 8,387 per 100,000 bed-days, while the community-onset incidence rate increased 8.9% from 56.2 per 100,000 population to 61.2 (figure 1a and 1b, table S1). Hospital-onset *E. coli* bacteremia cases and incidence rate were broadly similar between the two periods.

There is a strong seasonality to the incidence of all-reported *E. coli* bacteraemia cases, with the highest rates observed in July to September of each year. There is less evidence of the same seasonality amongst hospital-onset cases, though a summer peak is observed in financial years 2015/16, 2016/17 and 2018/19.

Figure 1a: Quarterly rates of all reported *E. coli* bacteraemia: July to September 2011 to January to March 2019

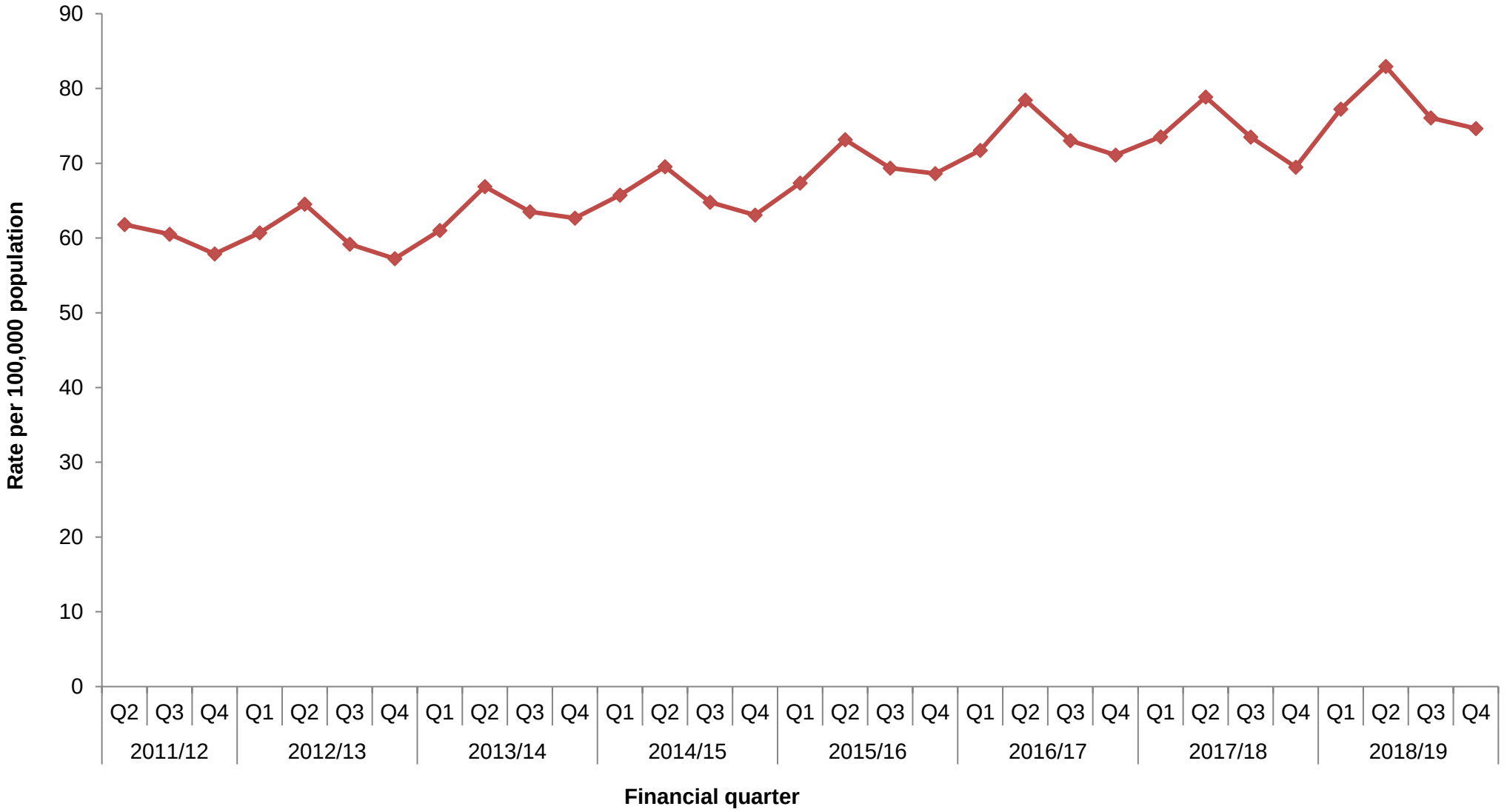
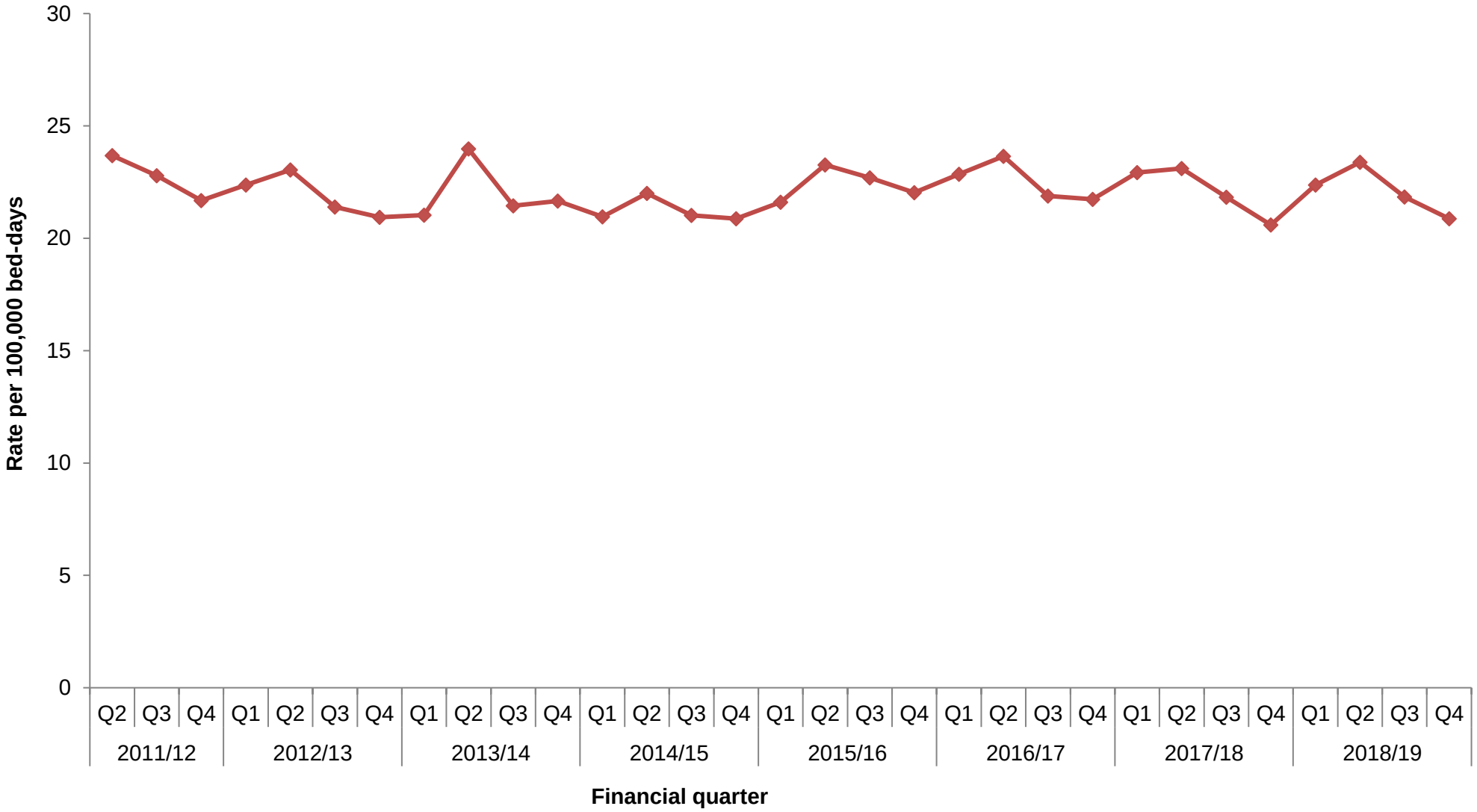


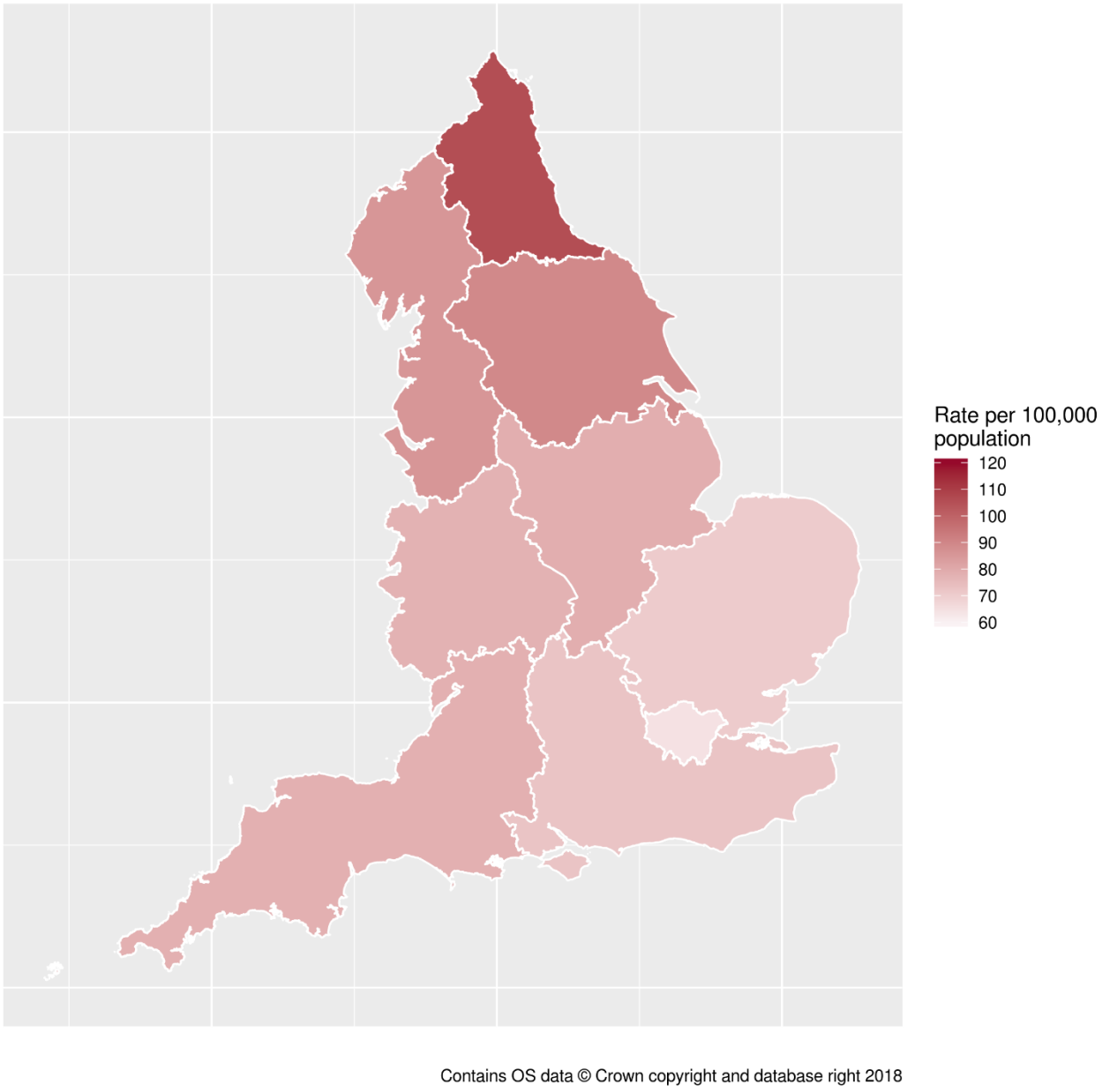
Figure 1b: Quarterly rates of hospital-onset *E. coli* bacteraemia: July to September 2011 to January to March 2019



Geographic distribution of *E.coli* bacteraemia; financial year 2018/19

During the financial year 2018/19, the highest incidence rates (per 100,000 population) of *E.coli* was in PHE North East at 106.0. The lowest rate reported was in PHE London at 64.6 (figure 1c).

Figure 1c: Incidence rate of *E.coli* bacteraemia by PHE centre, financial year 2018/19



Klebsiella spp. bacteraemia

Between April to June 2017 and January to March 2019, there was a 9.3% increase in the count of all cases from 2,340 to 2,558 and a 10.5% increase in the incidence rate of all reported *Klebsiella* spp. bacteraemia cases from 16.9 to 18.7 cases per 100,000 population respectively (figure 2a). The count and the incidence rate of community-onset cases also increased by 8.6% from 1,674 to 1,818 cases and by 9.8% from 12.1 cases per 100,000 population to 13.3 respectively. Over the same period, the count and the incidence rate of hospital-onset cases increased by 11.1% from 666 to 740 cases and by 7.8% from 7.7 cases per 100,000 bed-days to 8.3 respectively (figure 2b).

Comparing the most recent quarter (January to March 2019) to the same period in the previous year (January to March 2018) shows a 14.3% increase in the count of all reported cases from 2,237 to 2,558, while the incidence rate increased 14.3% from 16.3 per 100,000 population to 18.7. Hospital-onset *Klebsiella* spp. cases increased 6.5% from 695 to 740 which corresponds to an incidence rate increase of 6.5% from 7.8 to 8.3 per 100,000 bed-days. Community-onset *Klebsiella* spp. cases increased 17.9% from 1,542 to 1,818, while the community-onset incidence rate increased 17.9% from 11.2 to 13.3 per 100,000 population (table S2a).

During January to March 2019, 73.6% (1,883/2,558) of all reported *Klebsiella* spp. bacteraemia were caused by *Klebsiella pneumoniae*, no change from the same quarter in the previous year (January to March 2018). During January to March 2019, 16.5% (422/2,558) of *Klebsiella* spp were caused by *Klebsiella oxytoca*, no change to the same quarter in the previous year (January to March 2018).

Figure 2a: Quarterly rates of all reported *Klebsiella* spp. bacteraemia by species: April to June 2017 to January to March 2019

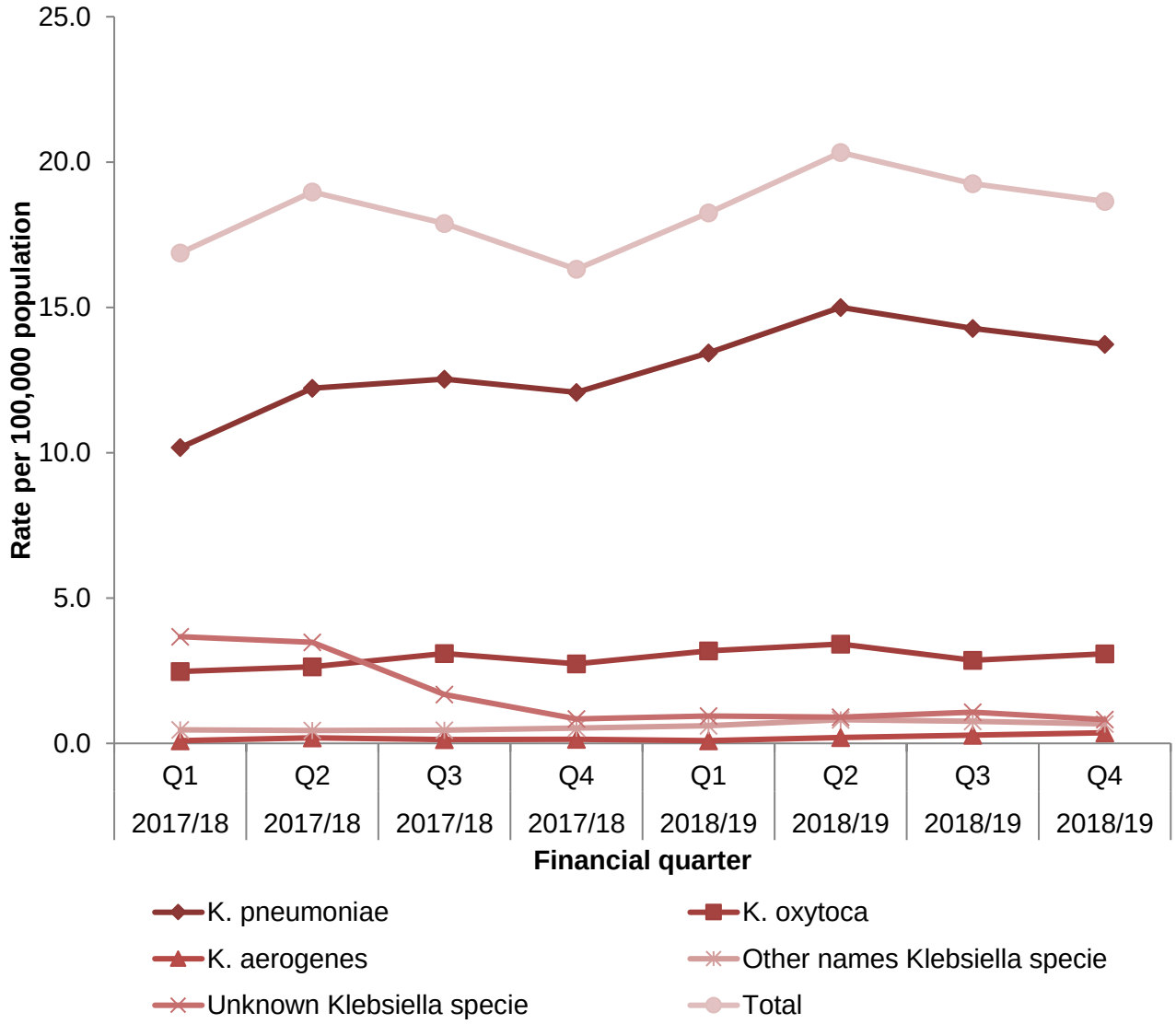
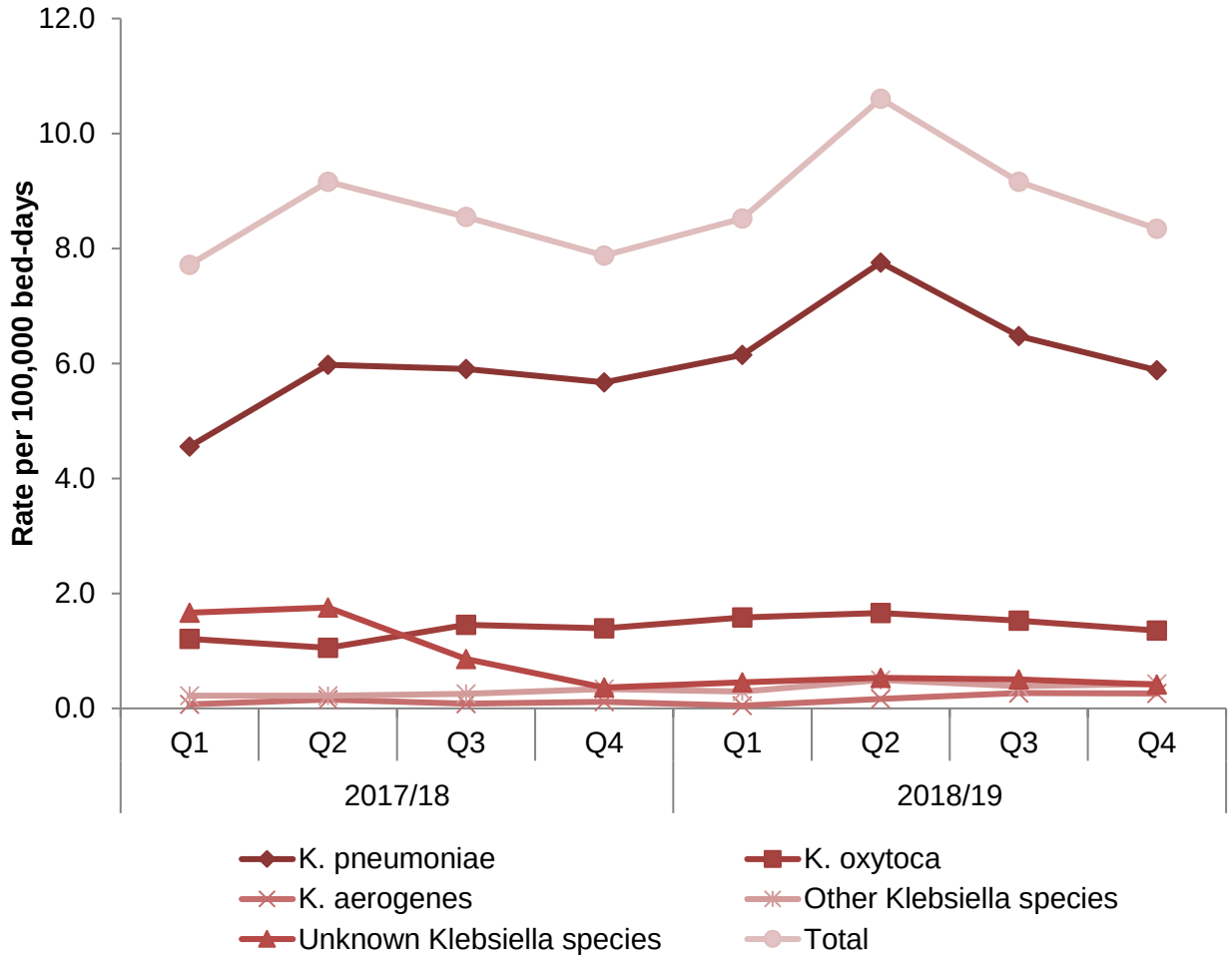


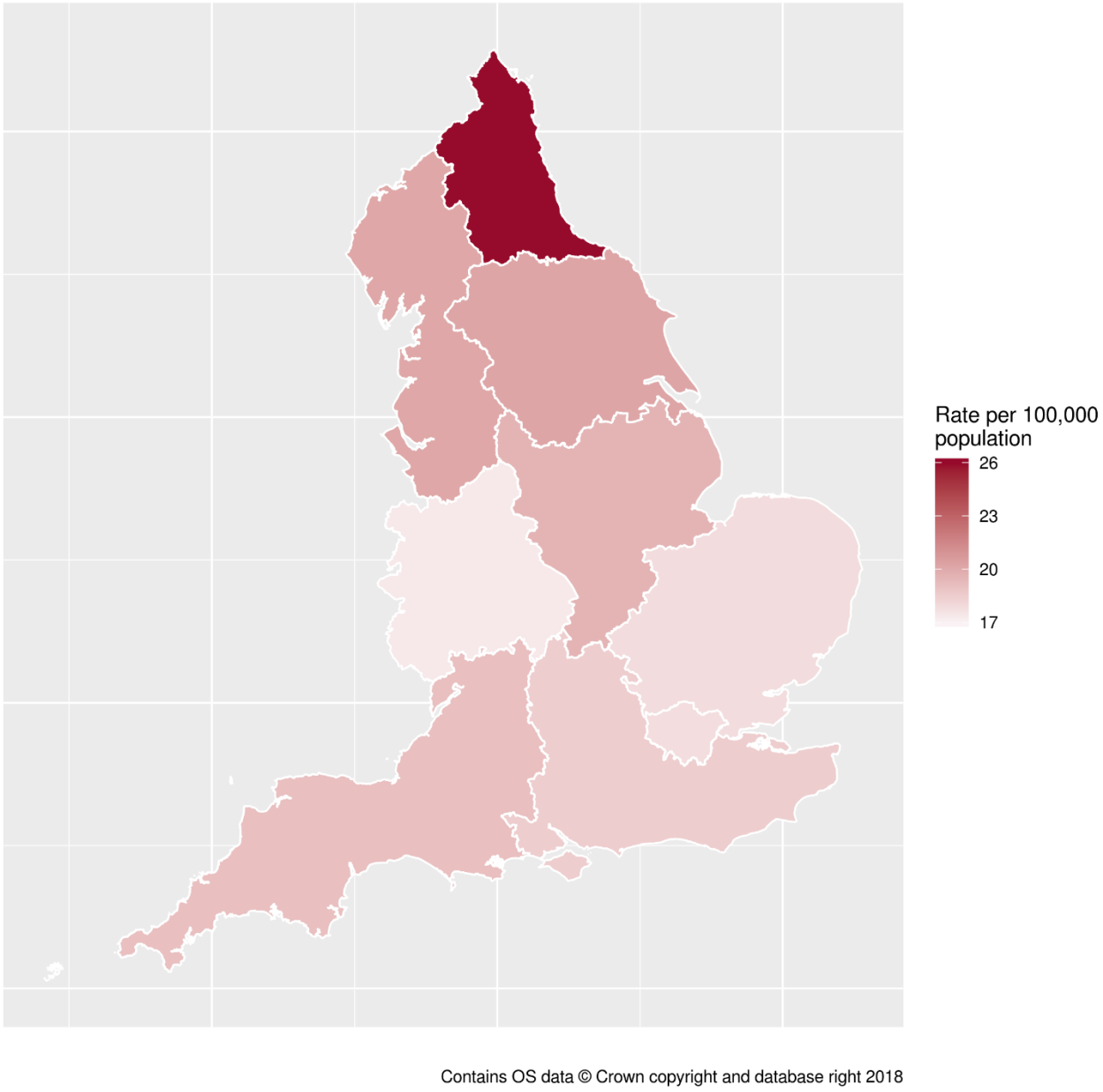
Figure 2b: Quarterly rates of hospital-onset *Klebsiella* spp. bacteraemia: April to June 2017 to January to March 2019



Geographic distribution of *Klebsiella* spp. bacteraemia; financial year 2018/19

During the financial year 2018/19, the highest incidence rates (per 100,000 population) of *Klebsiella spp.* was in PHE North East at 26.0. The lowest rate reported was in PHE West Midlands at 17.4 (figure 2c).

Figure 2c: Incidence rate of *Klebsiella* spp. bacteraemia by PHE centre, financial year 2018/19



Pseudomonas aeruginosa bacteraemia

Between April to June 2017 and January to March 2019, there was a 4.7% decrease in the count and a 3.7% decrease in the incidence rate of all reported *Pseudomonas aeruginosa* bacteraemia cases from 1,011 to 963 and from 7.3 to 7.0 cases per 100,000 population respectively (figure 3a). The count and the incidence rate of community-onset cases also decreased by 5.2% from 637 to 604 cases and by 4.1% from 4.6 to 4.4 cases per 100,000 population respectively. Over the same period, the count and the incidence rate of hospital-onset cases decreased by 4.0% from 374 to 359 cases and by 6.9% from 4.3 to 4.0 cases per 100,000 bed-days respectively (figure 3b).

Comparing the most recent quarter (January to March 2019) to the same period in the previous year (January to March 2018) shows no change in the count of all reported cases or the incidence rate (7.0 cases per 100,000 population). However, hospital-onset *P aeruginosa* cases decreased 9.1% from 395 to 359 which corresponds to a decrease in the incidence rate of 9.1% from 4.5 to 4.0 per 100,000 bed-days. Community-onset *P aeruginosa* cases increased 6.2% from 569 to 604 per 100,000 bed-days, while the community-onset incidence rate increased 6.2% from 4.1 to 4.4 per 100,000 population (table S3a).

There is evidence of seasonality to the incidence of all-reported *P. aeruginosa* bacteraemia cases, with the highest rates observed in July to September of each year. Due to this seasonality, and the limited data points, trends of *P. aeruginosa* need to be interpreted with caution.

Figure 3a: Quarterly rates of all reported *P. aeruginosa* bacteraemia: April to June 2017 to January to March 2019

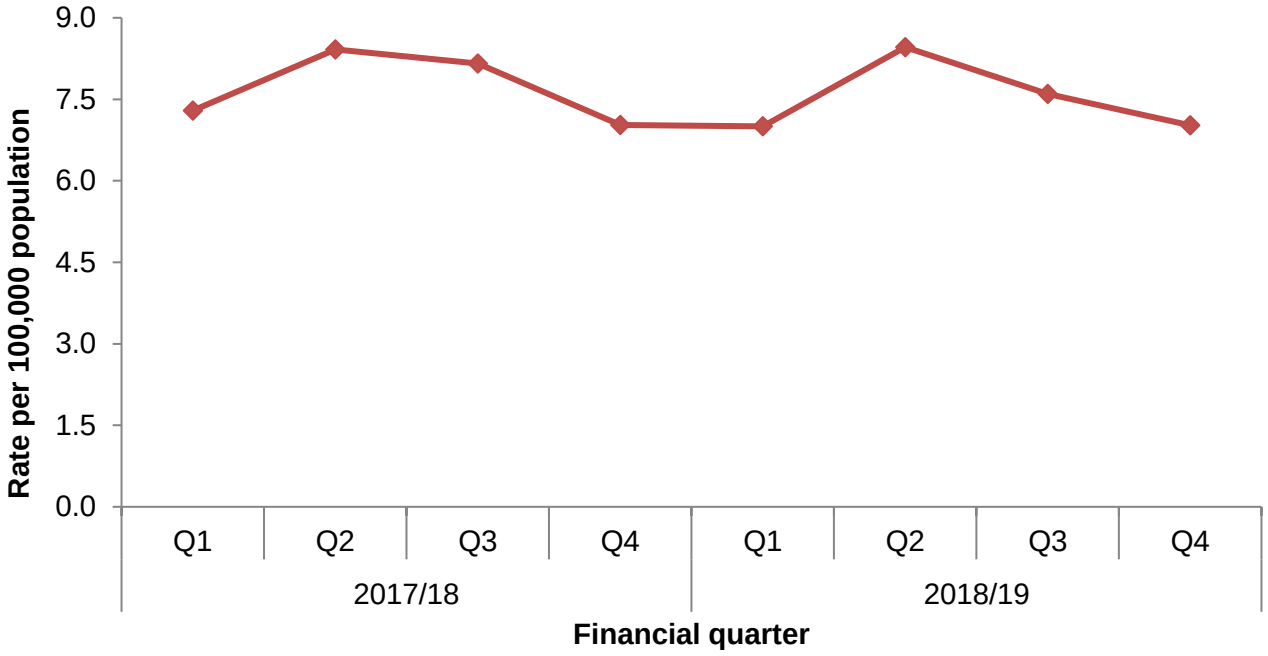
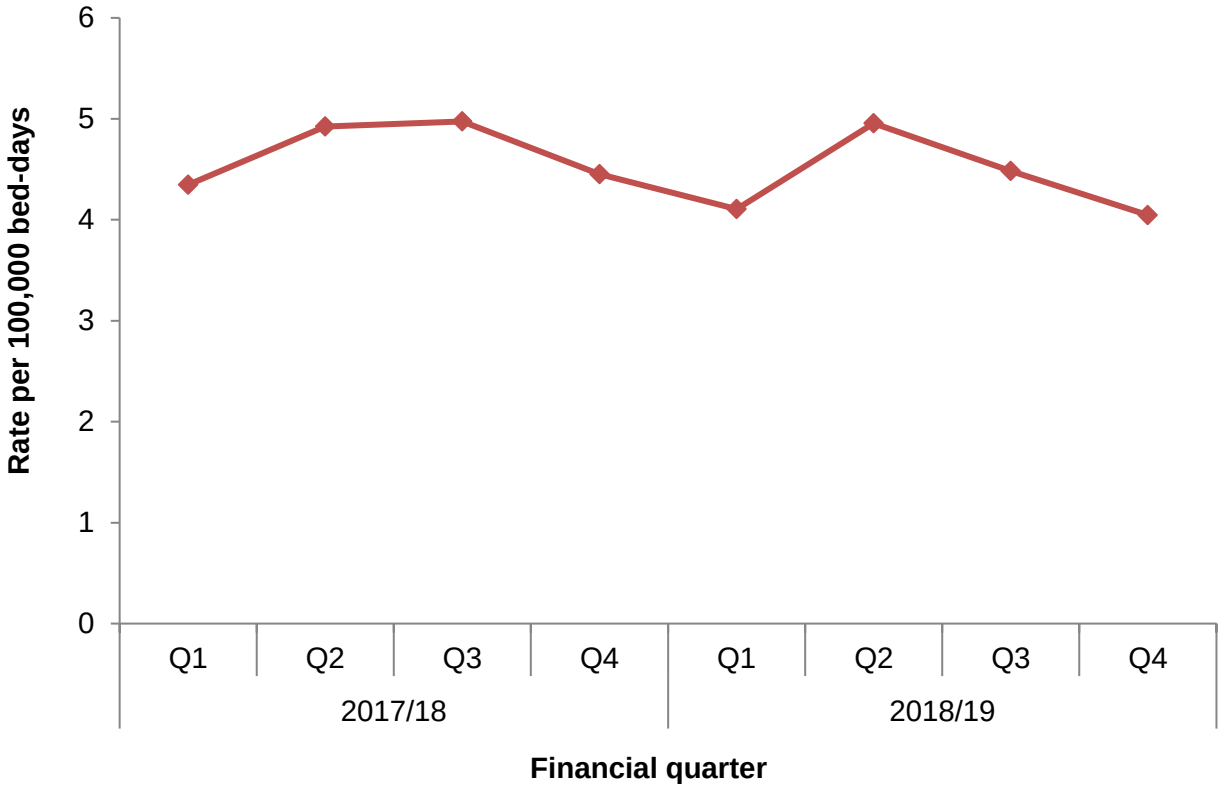


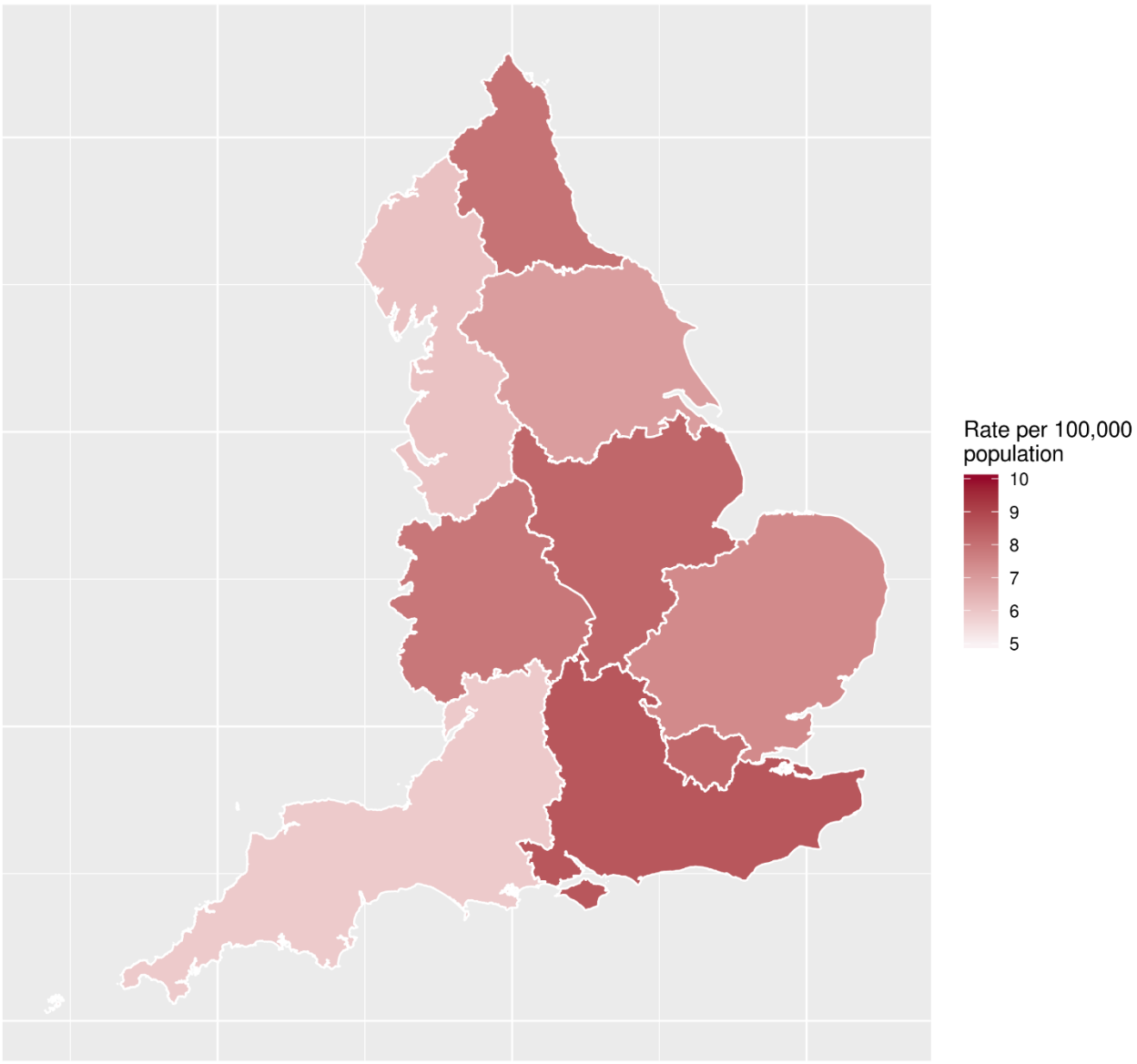
Figure 3b: Quarterly rates of hospital-onset *P. aeruginosa* bacteraemia: April to June 2017 to January to March 2019



Geographic distribution of *P. aeruginosa* bacteraemia; financial year 2018/19

During the financial year 2018/19, the highest incidence rates (per 100,000 population) of *P. aeruginosa* was in PHE South East at 8.6 The lowest rate reported was in PHE South West at 5.9 (figure 3c).

Figure 3c: Incidence rate of *P. aeruginosa* bacteraemia by PHE centre, financial year 2018/19



Epidemiological analyses of *Staphylococcus aureus* bacteraemia data

MRSA bacteraemia

There has been a considerable decrease in the incidence rate of all reported MRSA bacteraemia since the enhanced mandatory surveillance of methicillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia began in April 2007 (figures 4a, table S4a). The incidence rate of all reported cases fell by 85% from 10.2 cases per 100,000 population April to June 2007 to 1.5 cases per 100,000 population in January to March 2014. The rate has subsequently decreased to 1.3 cases per 100,000 population between January to March 2014 and January to March 2019.

A similar trend was observed with the incidence rate of hospital-onset cases (figures 4b, table S4a). There was a steep decrease of 79% from 4.9 cases per 100,000 bed-days in April to June 2008 to 1.0 cases per 100,000 bed-days in January to March 2014. Subsequently, between January to March 2014 and January to March 2019, the rate has subsequently decreased to 0.7 cases per 100,000 bed-days.

Comparing the most recent quarter (January to March 2019) to the same period in the previous year (January to March 2018) shows a 26.9% decrease in the count of all reported cases from 242 to 177, while the incidence rate decreased 26.9% from 1.8 to 1.3 cases per 100,000 population. Community-onset MRSA bacteraemia cases decreased 35.0% from 180 to 117, while the community-onset incidence rate decreased 35.0% from 1.3 to 0.9 cases per 100,000 population. The count and incidence rate of hospital-onset MRSA bacteremia remained broadly similar between the two periods (table S4a).

Figure 4a: Quarterly rates of all reported MRSA bacteraemia: April to June 2007 to January to March 2019

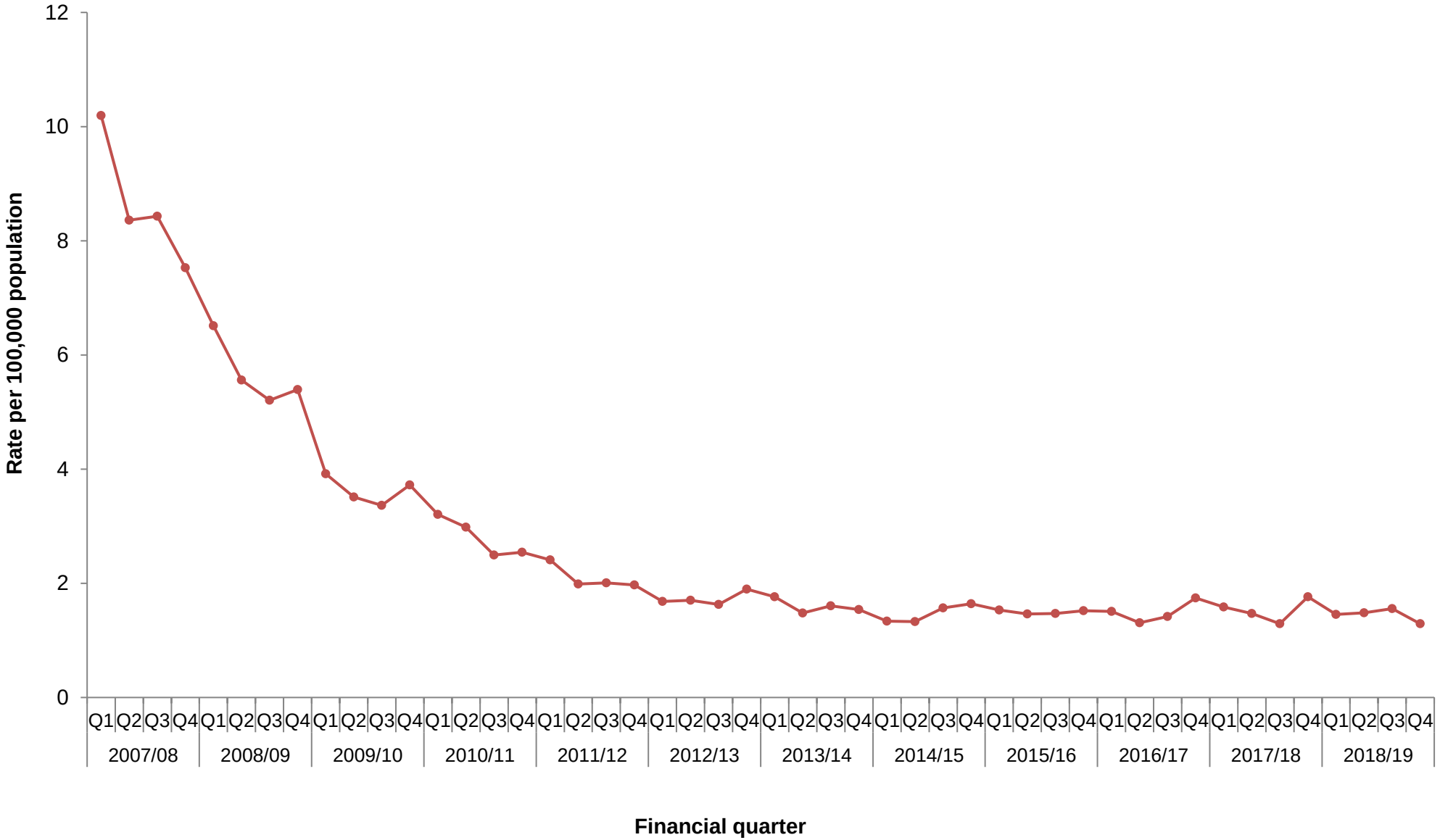
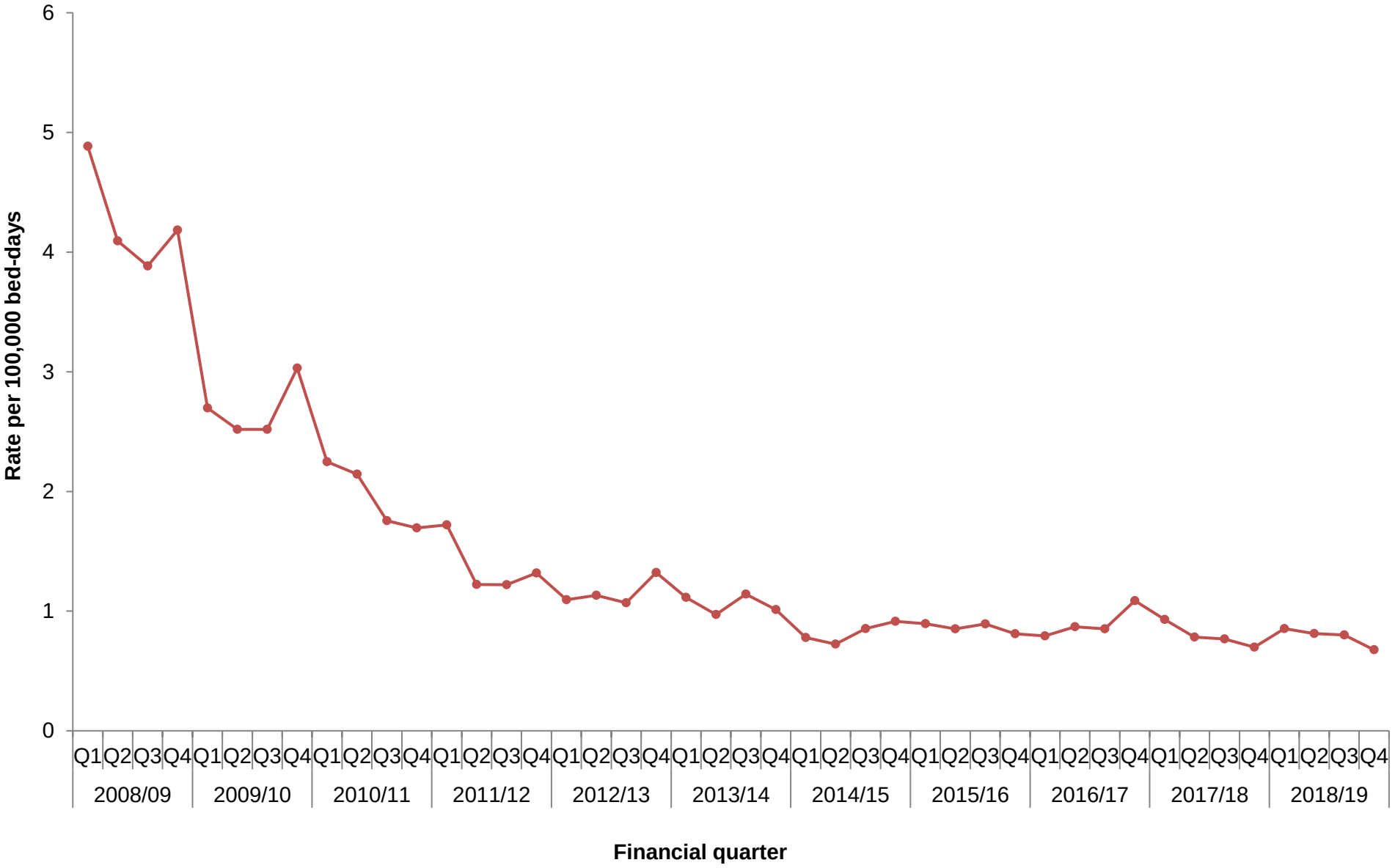


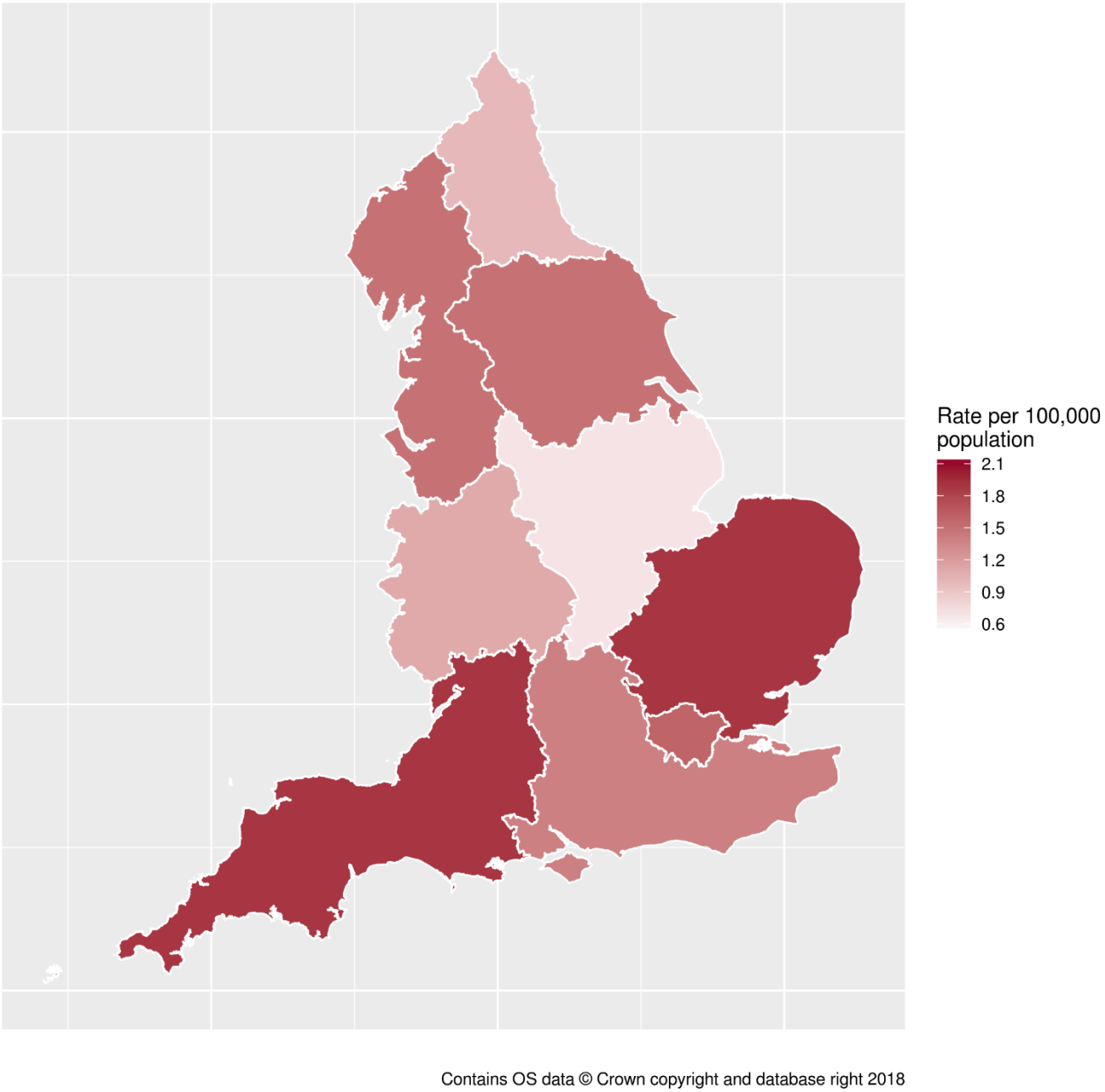
Figure 4b: Quarterly rates of hospital-onset MRSA bacteraemia: April to June 2008 to January to March 2019



Geographic distribution of MRSA bacteraemia; financial year 2018/19

During the financial year 2018/19, the highest incidence rates (per 100,000 population) of MRSA was in PHE South West at 1.9 The lowest rate reported was in PHE East Midlands at 0.7 (figure 4c).

Figure 4c: Incidence rate of MRSA bacteraemia by PHE centre, financial year 2018/19



MSSA bacteraemia

Since the mandatory reporting of methicillin-susceptible *Staphylococcus aureus* (MSSA) bacteraemia began in January 2011 there has been a general trend of increasing counts and incidence rates. The count of all reported cases of MSSA bacteraemia increased by 37.3% from 2,199 to 3,020 between January to March 2011 and January to March 2019. This was accompanied by a 31.1% increase in incidence rate from 16.8 cases per 100,000 population to 22.0 (figure 5a, table S5a).

These increases are primarily driven by the increase in community-onset cases. Between January 2011 to March 2019, the count and the incidence rate of community-onset cases increased by 48.9% and 42.2% respectively from 1,464 to 2,180 cases and from 11.2 to 15.9 cases per 100,000 population. Over the same period, the count of hospital-onset cases increased by 14.3% from 735 to 840 cases, while the incidence rate increased 13.3% from 8.4 cases per 100,000 bed-days to 9.5 (figure 5a and 5b, table S5a).

Comparing the most recent quarter (January to March 2019) to the same period in the previous year (January to March 2018) shows the count of all reported cases and the incidence rate remained broadly similar. While there was no change overall, hospital-onset MSSA bacteraemia cases increased 11.3% from 755 to 840 which corresponds to an incidence rate increase of 11.3% from 8.5 to 9.5 per 100,000 bed-days. In contrast, community-onset MSSA bacteraemia cases decreased 4.7% from 2,287 to 2,180, while the community-onset incidence rate decreased 4.7% from 16.7 to 15.9 per 100,000 population.

Figure 5a: Quarterly rates of all reported MSSA bacteraemia: January to April 2011 to January to March 2019

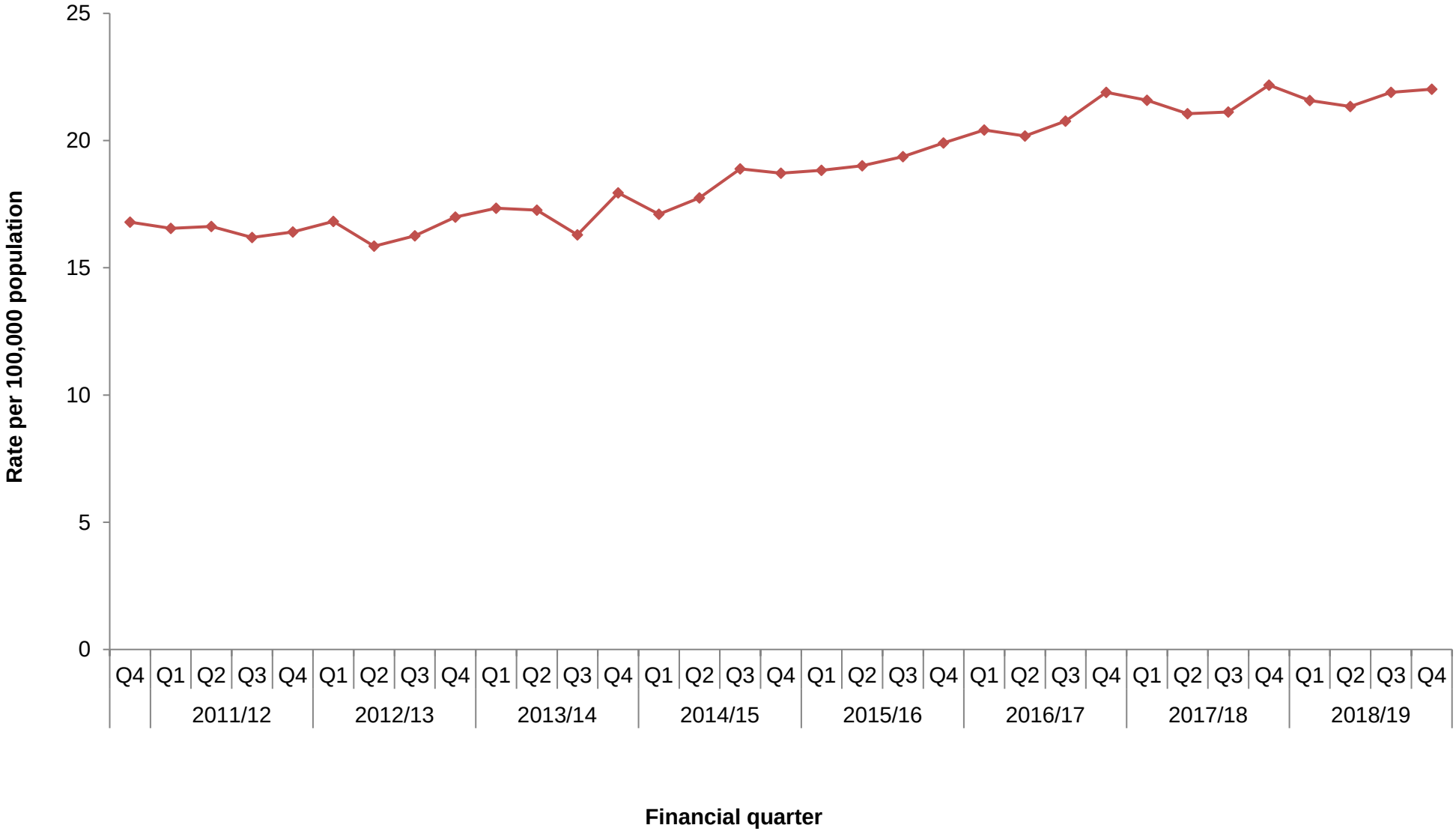
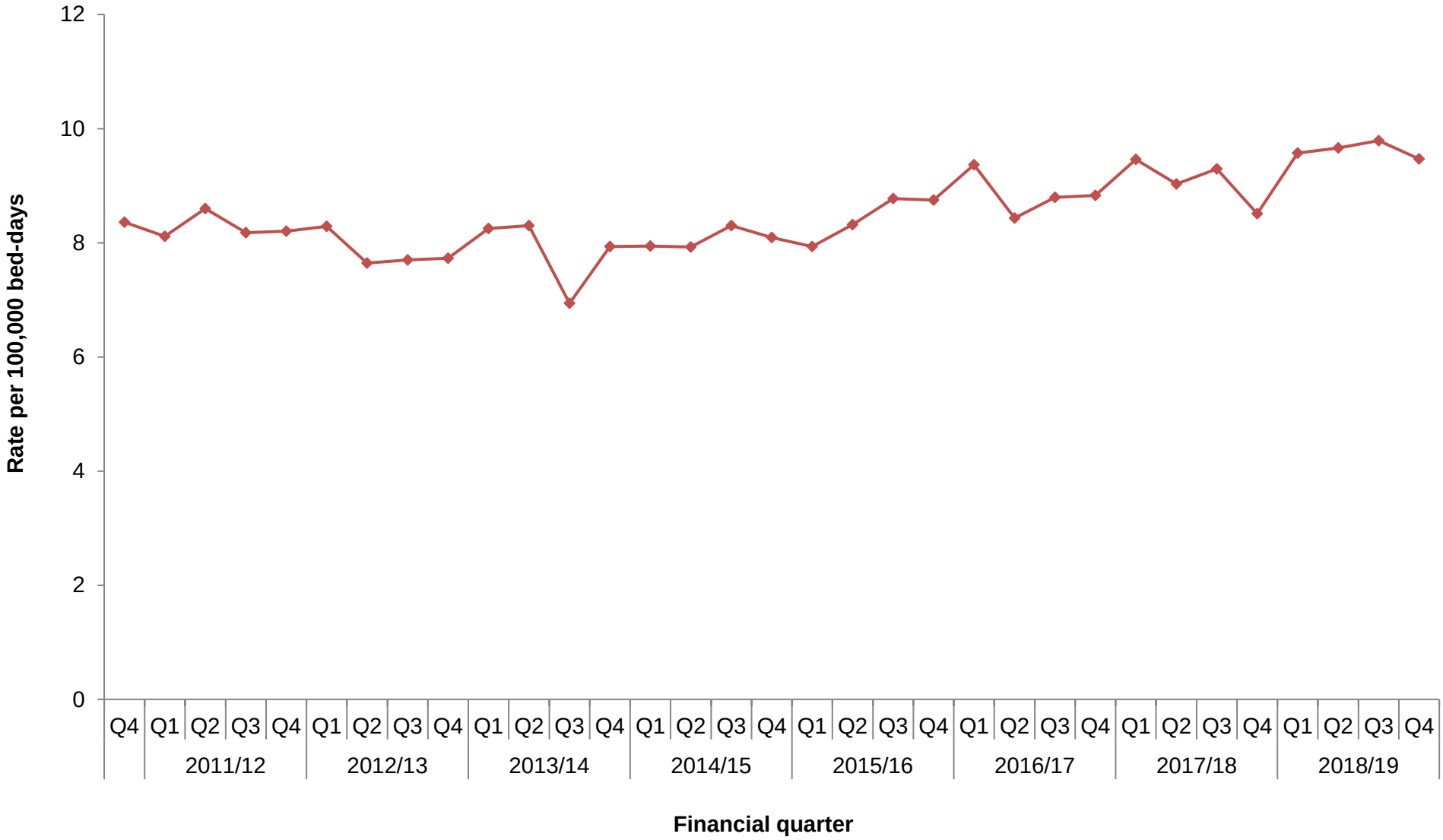


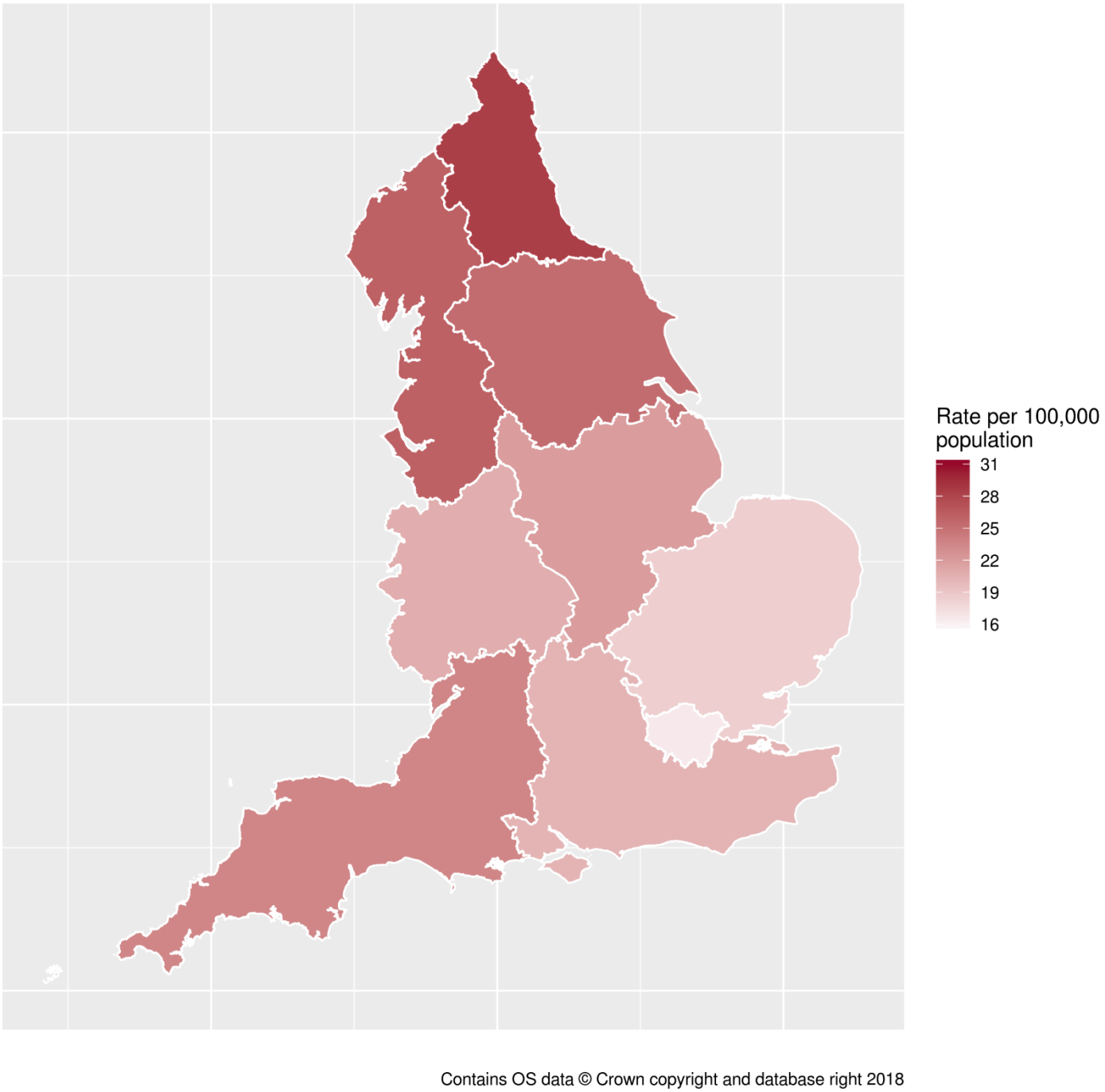
Figure 5b: Quarterly rates of hospital-onset MSSA bacteraemia: January to April 2011 to January to March 2019



Geographic distribution of MSSA bacteraemia; financial year 2018/19

During the financial year 2018/19, the highest incidence rates (per 100,000 population) of MRSA was in PHE North East at 28.5 The lowest rate reported was in PHE London at 16.6 (figure 5c).

Figure 5c: Incidence rate of MSSA bacteraemia by PHE centre, financial year 2018/19



Epidemiological analyses of *Clostridium difficile* infection data

Since the initiation of *Clostridium difficile* infection (CDI) surveillance in April 2007, there has been an overall decrease in the count and associated incidence rate of both all-reported and hospital-onset cases of CDI (figure 6a, 6b and table S6).

Most of the decrease in the incidence rate occurred between April to June 2007 and January to March 2012 with a 78% decrease in all-reported cases of CDI from 16,864 to 3,711 cases and an associated 79% reduction in incidence rate from 131.6 cases per 100,000 population to 27.9. Subsequently, between January to March 2012 and January to March 2019, the count of all-reported cases decreased a further 29.6% from 3,711 to 2,611 cases and the incidence rate reduced by 31.8% from 27.9 cases per 100,000 population to 19.0.

There were similar, but greater, reductions among hospital-onset CDI cases with an 85% reduction in count of cases between April to June 2007 and January to March 2012 from 10,436 to 1,613 cases and 84% reduction in the incidence rate from 112.5 per 100,000 bed-days to 18.2. This was followed by a further 41.0% decrease in the count of cases from 1,613 to 951 cases and a decrease of 41.0% in the incidence rate from 18.2 cases per 100,000 bed-days to 10.7 between January to March 2012 and January to March 2019.

Comparing the most recent quarter (January to March 2019) to the same period in the previous year (January to March 2018) shows a 15.5% decrease in the count of all reported cases from 3,090 to 2,611, while the incidence rate decreased 15.5% from 22.5 cases per 100,000 population to 19.0. Hospital-onset CDI cases decreased 20.2% from 1,191 to 951 which corresponds to an incidence rate decrease of 20.2% from 13.4 cases per 100,000 bed-days to 10.7. Community-onset CDI cases also decreased by 12.6% from 1,899 to 1,660, while the community-onset incidence rate decreased 12.6% from 13.8 per 100,000 population to 12.1.

Figure 6a: Quarterly rates of all reported *C. difficile:* April to June 2007 to January to March 2019

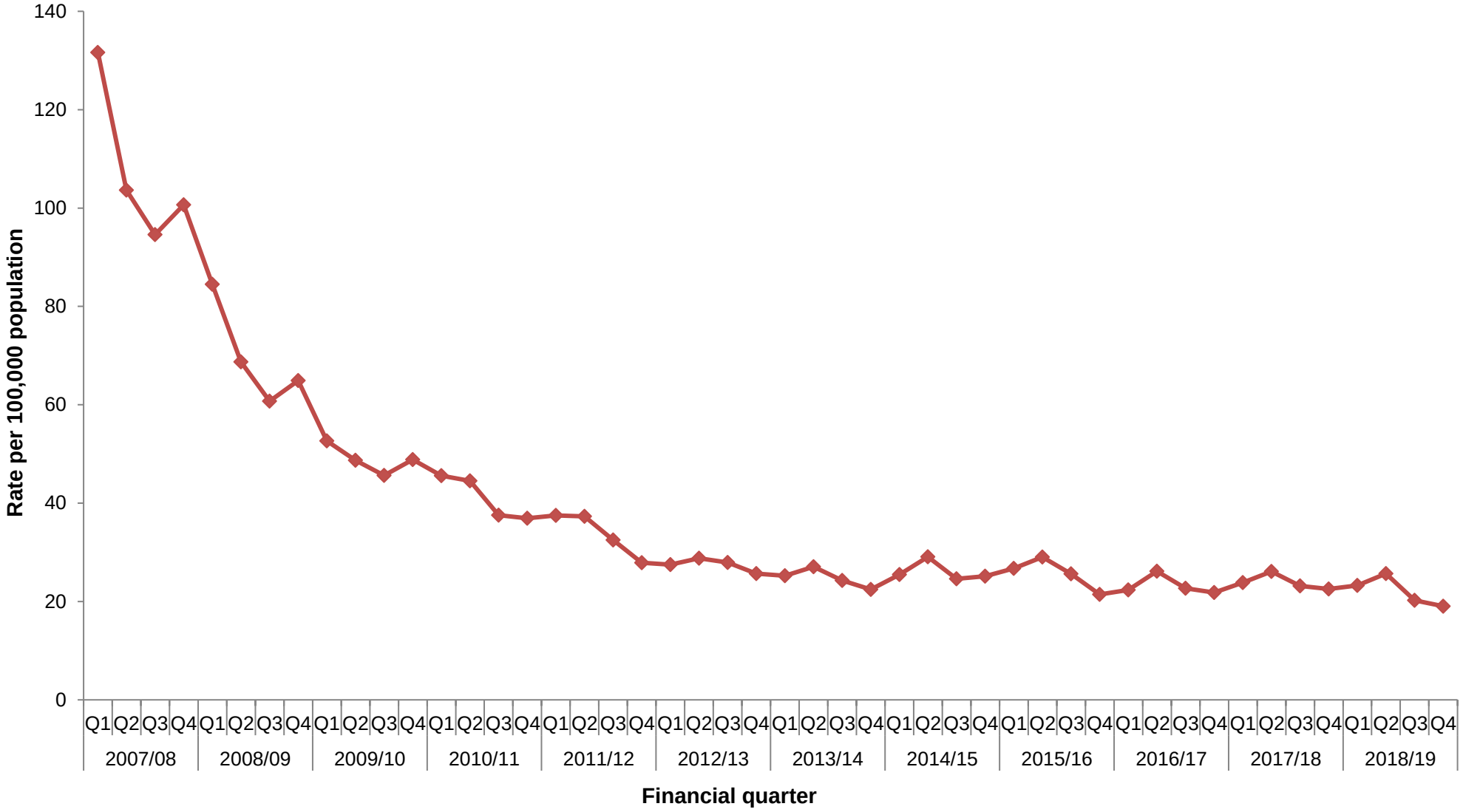
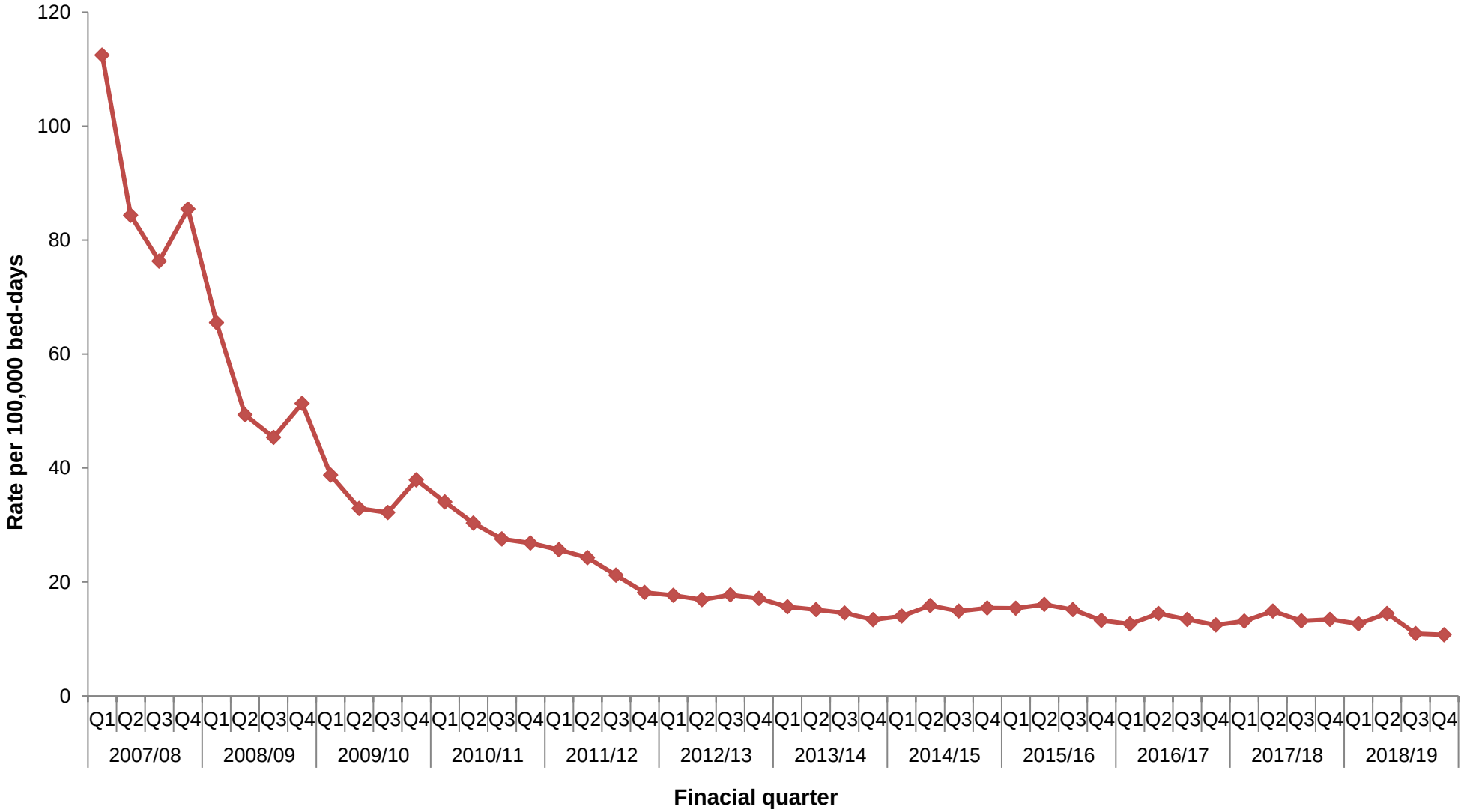


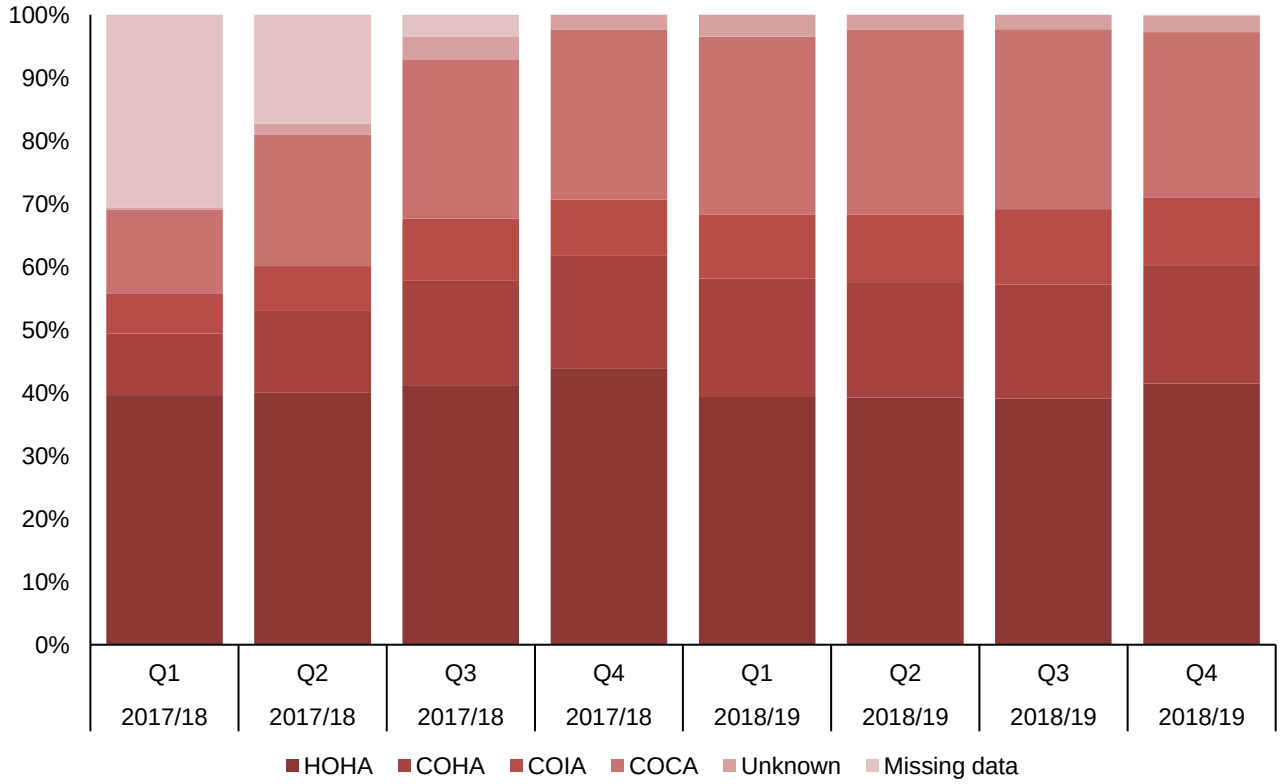
Figure 6b: Quarterly rates of hospital-onset *C. difficile*: April to June 2007 to January to March 2019



From April 2017 CDI data capture has included questions relating to prior admissions to the same hospital. These additional, mandatory, items will help align English CDI surveillance with other internationally recognised definitions (ECDC, CDC). Cases are now catagorised as; Healthcare Onst Healthcare Associated (HOHA), Community Onset Healthcare Associated (COHA), Community Onset Indeterminate Association (COIA) or Community Onset Community Associated (COCA). Cases where prior admission details were recorded as 'Don't know', are assigned as 'Unknown' and those with missing information as 'missing information'.

Between April to June 2017 and January to March 2019 the largest proportion of cases are HOHA, this has remained stable at around 40% of all cases. Over the same period COCA increased from 13.4% to 26.3% of all CDI, although most of this increase was observed during 2017/18. Similiarly COHA cases have increased from 9.7% to 18.8% of all CDI, with most of the increase being observed during 2017/18. COIA cases have increased from 6.3% to 10.7% of all CDI. It should be noted much of the increase observed is likely due to an increase in data quality as shown by the sharp decline of cases with missing data (figure 6b Table S6b).

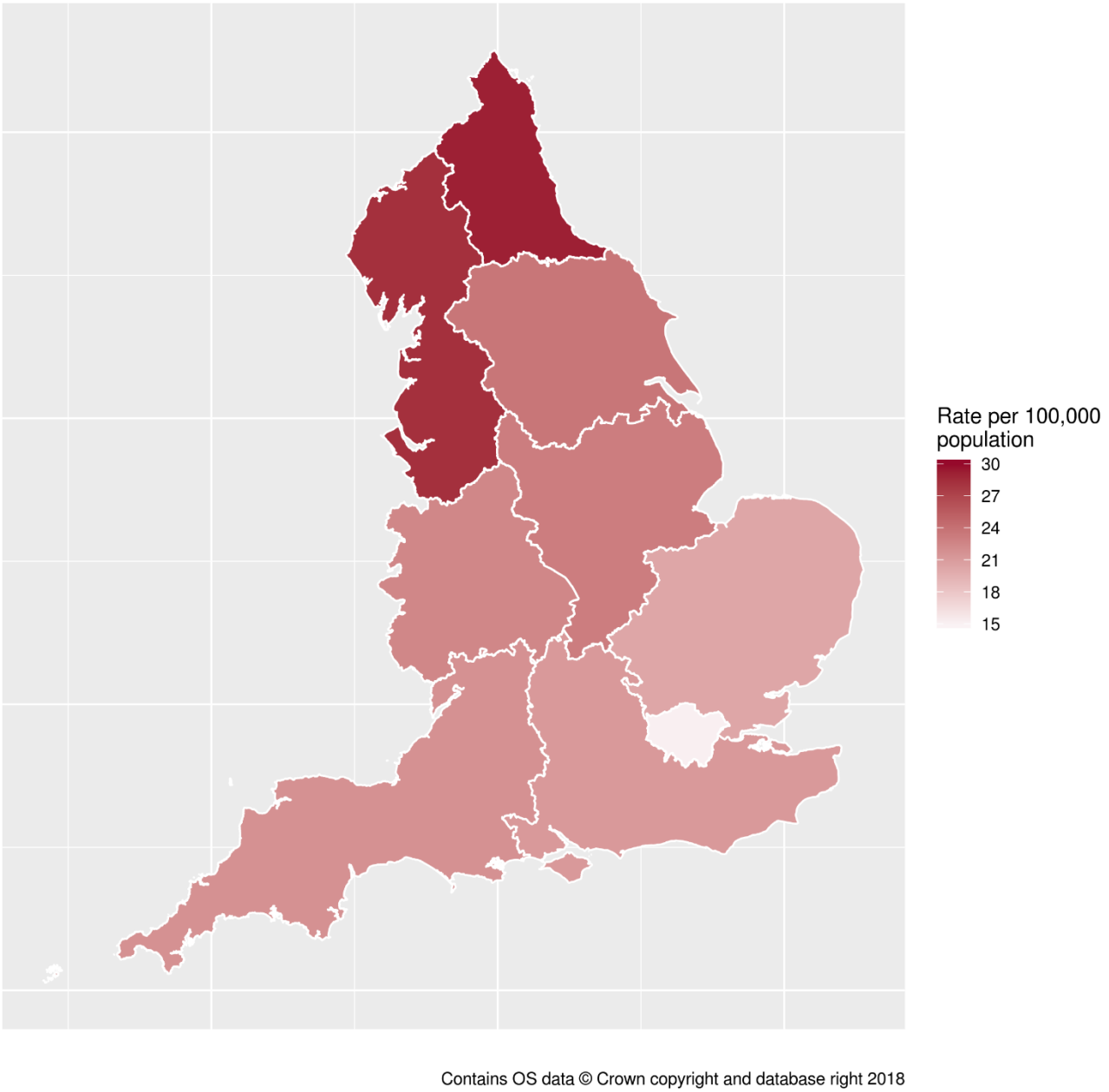
Table S6b: CDI bacteraemia rates by prior trust exposure April 2017 - March 2019



Geographic distribution of *C. difficile*; financial year 2018/19

During the financial year 2018/19, the highest incidence rates (per 100,000 population) of *C. difficile* was in PHE North East at 29.2. The lowest rate reported was in PHE London at 15.2 (figure 6c).

Figure 6c: Incidence rate *C. difficile* bacteraemia by PHE centre, financial year 2018/19



Appendix

Bed-day data

For bacteraemia and CDI, the average bed-day activity reported by acute trusts via KH03 returns is used to derive the bed-day denominator for acute trust incidence rate rates (assigned and apportioned). As of Q1 2011/12, bed-day data has been available on a quarterly basis and has been used as such for Q2 2011/12 to Q3 2018/19. This data is available at: www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and- occupancy/bed-data-overnight

Amendments to the published figures on KH03 included the following.

Q4 2018/19 bed-day data was not available at the time of writing this report; therefore, bed-day data for the same quarter of the previous year (Q4 2017/18) was used as a proxy for this quarter.

In Quarterly Epidemiological Commentaries published prior to 1 December 2015, April to June 2014 to October to December 2014 quarterly KH03 figures for one acute trust (RWD) had a percentage change of more than 20% compared with the previous quarter and the same quarter in the previous year. As a result, it was replaced with the KH03 data of the same quarter in the previous year (April to June 2013 to October to December 2013).

However, PHE has reviewed its policy for processing KH03 data. Data irregularities identified have been flagged with colleagues at NHS England (data owners of the KH03 dataset). Until we receive confirmation that any identified change in the occupied overnight bed-days for an acute trust is anomalous, PHE now uses the data as published in the KH03 dataset. This affects all reports published since 1 December 2015 and incidence rate rates published prior that time will differ slightly as a result. For the KH03 data used to calculate rates included in this report to be consistent over the full-time period, previously amended KH03 data for trust United Lincolnshire Hospitals (RWD) for FY 2014/2015 has been altered to reflect that published in the KH03 dataset. Please note that this could lead to slight differences in hospital- onset/assigned rates when compared with publications prior to 1 December 2015.

Missing data for acute trusts in the KH03 returns will continue to be processed as before, where the KH03 return for the same quarter from the previous year will be used as a proxy.

The following acute trusts were thus affected:

- Moorfields Eye Hospital NHS Foundation Trust (RP6) 2007/08 and 2008/09 KH03 figures: replaced with 2006/07 KH03 figure
- Rotherham NHS Foundation Trust (RFR): 2009/10 and April-June 2010 to April-June 2011 KH03 figures: replaced with 2008/09 KH03 figure
- Sheffield Teaching Hospitals NHS Foundation Trust (RHQ) April-June 2010 to April-June 2011 KH03 figures: replaced with 2009/10 KH03 data
- The Princess Alexandra Hospital NHS Trust (RQW) April-June 2014 and October-December 2014 KH03 figures: replaced with April-June 2013 to October- December 2013 KH03 figures, respectively
- Ipswich Hospital NHS Trust (RGQ) January-March 2016 KH03 figure: replaced with January-March 2015 figures
- West Suffolk NHS Foundation Trust (RGR) April-June 2016 to October-December 2016 and April-June 2017 KH03 figures: replaced with April-June 2015 to October-December 2015 KH03 figures
- Gloucestershire Hospitals NHS Foundation Trust (RTE) October-December 2016 to January-March 2017 KH03 figures: replaced with October-December 2015 to January-March 2016 KH03 figures

The KH03 data used for this report was published on 21 February 2019. This includes revisions of previously published KH03 data and so these data may differ from those used in earlier reports.

Population data

National incidence rates are calculated using 2007 to 2018 mid-year resident population estimates which are based on the 2011 census for England (2019 estimates are based on 2018 mid-year estimates).

Definitions

Bacteraemia hospital-onset (trust-apportioned) cases:
Include patients who are (i) in-patients, day-patients, emergency assessment patients or not known; AND (ii) have had their specimen taken at an acute trust or not known; AND (iii) specimen was taken on or after day 3 of the admission (admission date is considered day ‘one’). Cases that do not meet these criteria are categorised as community-onset (not-trust apportioned).

CDI hospital-onset (trust-apportioned) cases:
Include patients who are (i) in-patients, day-patients, emergency assessment patients or not known; AND (ii) have had their specimen taken at an acute trust or not known; AND (iii) specimen was taken on or after day 4 of the admission (admission date is

considered day ‘one’). Cases that do not meet these criteria are categorised as community-onset (not-trust apportioned).

Historically, report published before September 2017 have used the term ‘trust-apportioned’ to describe cases meeting the above conditions for apportionment and ‘not trust-apportioned’ for those that do not. Moving forward, these terminologies have been updated to ‘hospital-onset’ and ‘community-onset’ respectively. Please note that this is simply a change in terminology and does not constitute a change in the methodology for apportionment.

Total reported cases:
This is the total count of infections for each organism as of the date of extraction. Please note that for *C. difficile*, this count excludes those from patients less than 2 years old.

Episode duration:
The length of an infection episode is defined as 14 days for MRSA, MSSA and *E. coli* bacteraemia and 28 days for CDI, with the date of specimen being considered day ‘one’.

Incidence rate calculations:

MRSA, MSSA and *E. coli, Klebsiella* spp., *P. aeruginosa* bacteraemia, and CDI population incidence rate (episodes per 100,000):
This incidence rate is calculated using the mid-year England population and is

$$= \frac{\text{n episodes}}{\left(\frac{\text{mid-year population for England}}{\text{days in quarter}}\right)} \times 100{,}000$$

MRSA, MSSA and *E. coli, Klebsiella* spp., *P. aeruginosa* and CDI hospital-onset incidence:
This incidence rate is calculated using KH03 average bed-day activity (see bed-day data above) and is calculated as follows:

$$= \frac{\text{n episodes}}{\text{average KH03 beds per day} \times \text{days in quarter}} \times 100{,}000$$

Graphs and percentage change calculation:
Please note that percentage changes in rate have been calculated using raw rate figures while those presented in the tables and commentary have been rounded to one decimal place. Similarly, graphs included in this report were plotted using raw rates

figures. The raw rate figures are included in the accompanying Quarterly Epidemiological Commentary's accompanying data.

Quarters:
In publications prior to March 2016, all references to quarterly data are based on calendar year definitions and NOT financial year definitions, that is:

Q1 2014: January to March 2014
Q2 2014: April to June 2014
Q3 2014: July to September 2014
Q4 2014: October to December 2014

However, for all subsequent publications, including this one, all references to quarterly data are based on financial year definitions and NOT calendar year definitions, that is:

Q1 2014/15: April to June 2014
Q2 2014/15: July to September 2014
Q3 2014/15: October to December 2014
Q4 2014/15: January to March 2015