



UK Health
Security
Agency

Remote Health Advice Syndromic Surveillance System Bulletin (England) 2021 Week 41

Key messages

Data reported to: 17 October 2021

During week 41, NHS 111 calls for respiratory indicators continued to increase, particularly cold/flu, cough and sore throat, whereas NHS 111 online assessments for respiratory indicators stabilised. Calls for diarrhoea and vomiting increased this week, particularly in young children.

Syndromic indicators at a glance

Table 1: The current trend (based on previous weeks, not only the current week) and the level (compared to the expected baseline), of each indicator included in this bulletin.

Indicator	Trend ¹	Level
Total NHS 111 calls (Figure 1)	Increasing	No baseline
Total NHS 111 online (Figure 2)	Increasing	No baseline
Cold/flu NHS 111 calls (Figure 3)	Increasing	Above baseline
Cold/flu NHS 111 online (Figure 4)	No trend	Below baseline
Fever NHS 111 calls (Figure 5)	Increasing	Similar to baseline
Fever NHS 111 online (Figure 6)	Increasing	Below baseline
Cough NHS 111 calls (Figure 7)	Increasing	Above baseline
Cough NHS 111 online (Figure 8)	No trend	Above baseline
Difficulty breathing NHS 111 calls (Figure 9)	No trend	Above baseline
Difficulty breathing NHS 111 online (Figure 10)	No trend	Below baseline
Sore throat NHS 111 calls (Figure 11)	Increasing	Above baseline
Sore throat NHS 111 online (Figure 12)	No trend	Above baseline
Loss of taste or smell NHS 111 calls (Figure 13)	No trend	No baseline
Loss of taste or smell NHS 111 online (Figure 14)	No trend	No baseline
Potential COVID-19 NHS 111 calls (Figure 15)	Increasing	No baseline
Potential COVID-19 111 online (Figure 16)	No trend	No baseline
Diarrhoea NHS 111 calls (Figure 17)	Increasing	Similar to baseline
Diarrhoea NHS 111 online (Figure 18)	No trend	Above baseline
Vomiting NHS 111 calls (Figure 19)	Increasing	Similar to baseline
Vomiting NHS 111 online (Figure 20)	No trend	Above baseline
Eye problems NHS 111 calls (Figure 21)	Increasing	Similar to baseline
Eye problems NHS 111 online (Figure 22)	No trend	Above baseline

¹ trend reports on the trend seen over most recent and earlier weeks

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About this syndromic surveillance system

This bulletin presents data from the UK Health Security Agency (UKHSA) remote health advice syndromic surveillance system.

Syndromic surveillance can be used to:

- assess current trends
- assess current trends and levels compared to historical baselines
- compare trends between age groups/areas

Syndromic surveillance should not be used to:

- estimate total burden or number of 'cases' of a condition (see **Notes and caveats**)
- compare levels between age groups/areas

Fully anonymised, daily NHS 111 call and NHS 111 online assessment data are analysed and reported here, to identify and describe trends for a variety of syndromic indicators:

- syndromic indicators include groupings such as cold/flu, fever and diarrhoea
- syndromic indicators are based on:
 - symptoms (known as the Pathway) identified from both NHS 111 calls and NHS 111 online assessments
 - the potential COVID-19 syndromic indicator is based on the outcome (known as the Disposition), rather than the Pathway
- **Key messages** describes any notable trends nationally (England), by age group and/or by geographical area (based on UKHSA Regions)
- the full list of syndromic indicators reported here, along with their current level and trend, are summarised in **Table 1**
- charts are provided for each syndromic indicator, on a national basis, by age group and by geographical area (UKHSA Region). Each chart includes a year of data with:
 - 7-day moving averages (adjusted for weekends and bank holidays) to aid in the identification of trend
 - statistical baselines (where available) to aid in the assessment of level compared to historical expectations

For further information please see the **Notes and caveats** section.

Previous weekly bulletins from this system are available [here](#).

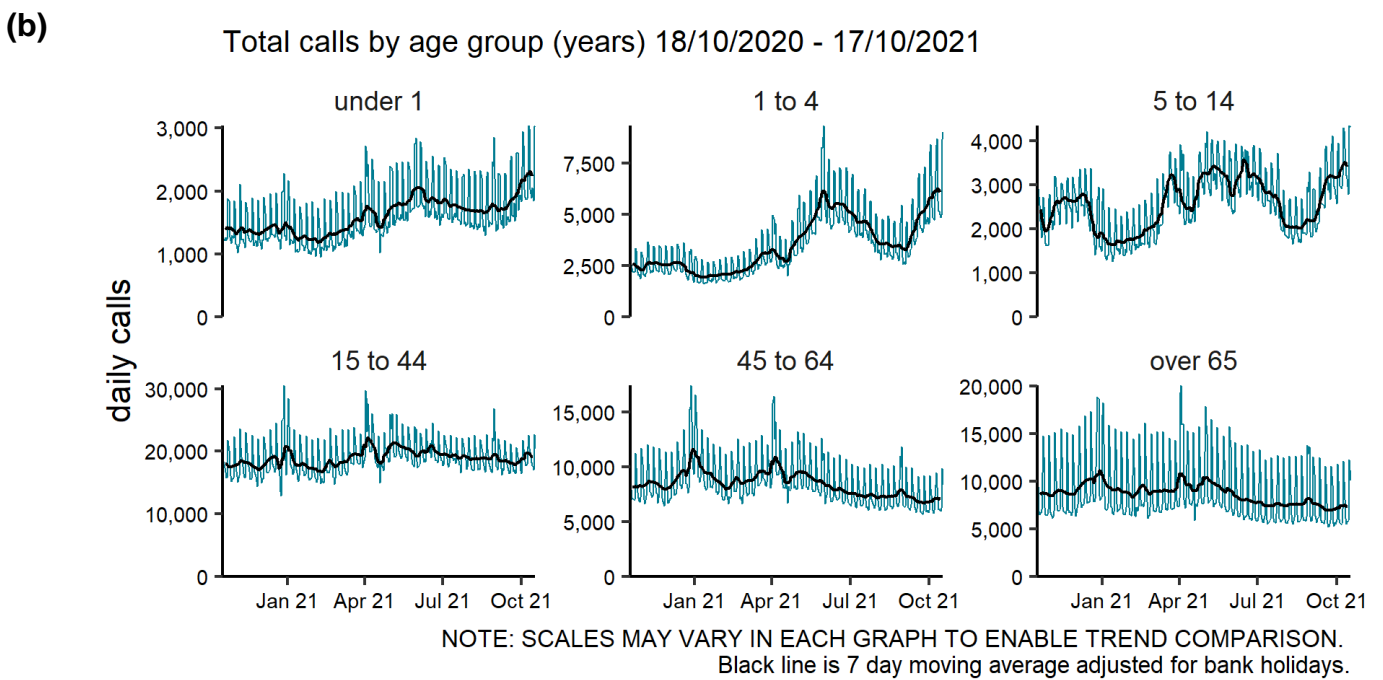
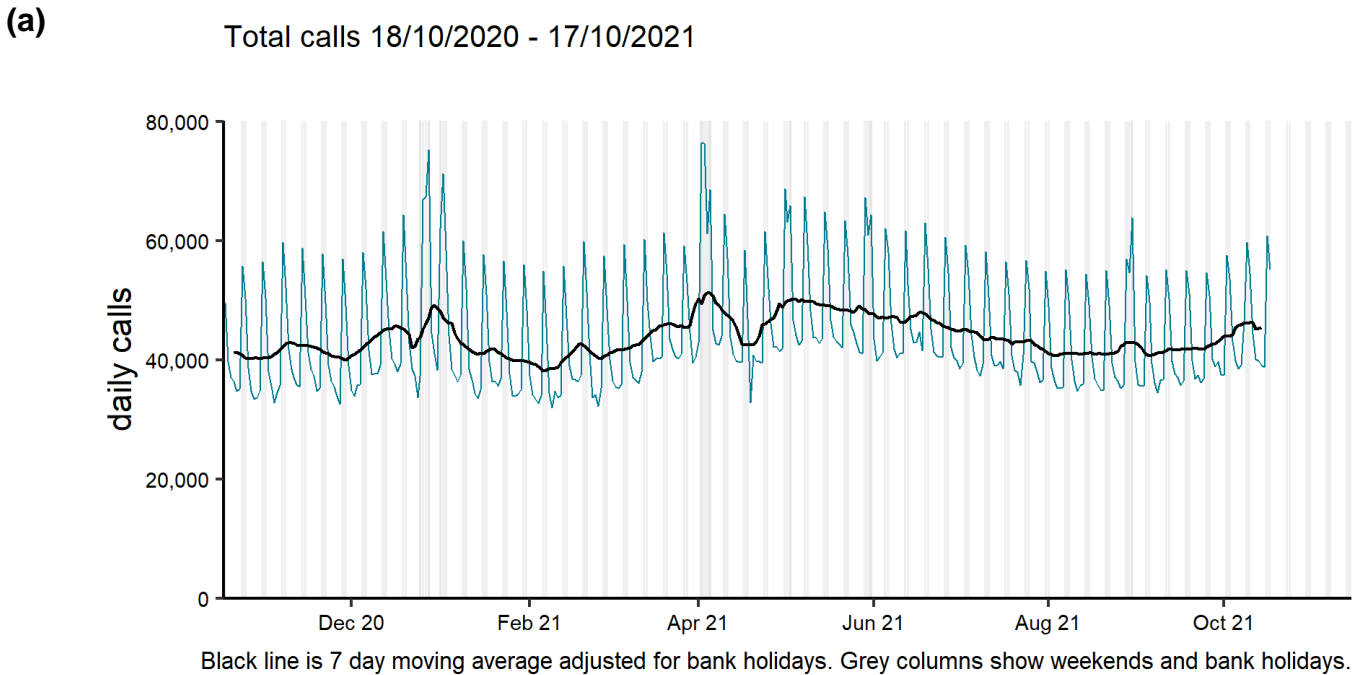
Data quality issues of note this week

Since September 2020, call numbers in the syndromic dataset received for the North West have been lower than previously recorded, this is due to operational changes in this location.

Total contacts

NHS 111 calls

Figure 1: Daily number of NHS 111 calls (with 7-day moving average adjusted for bank holidays) recorded in this syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.



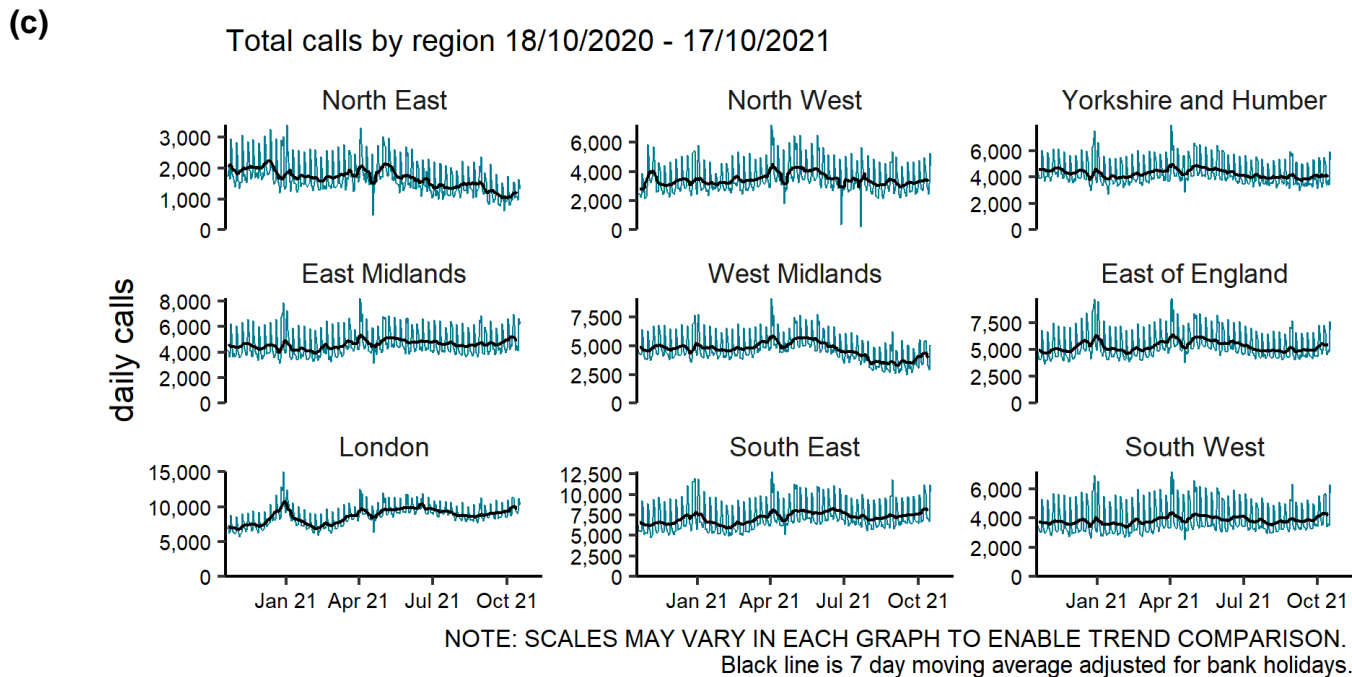


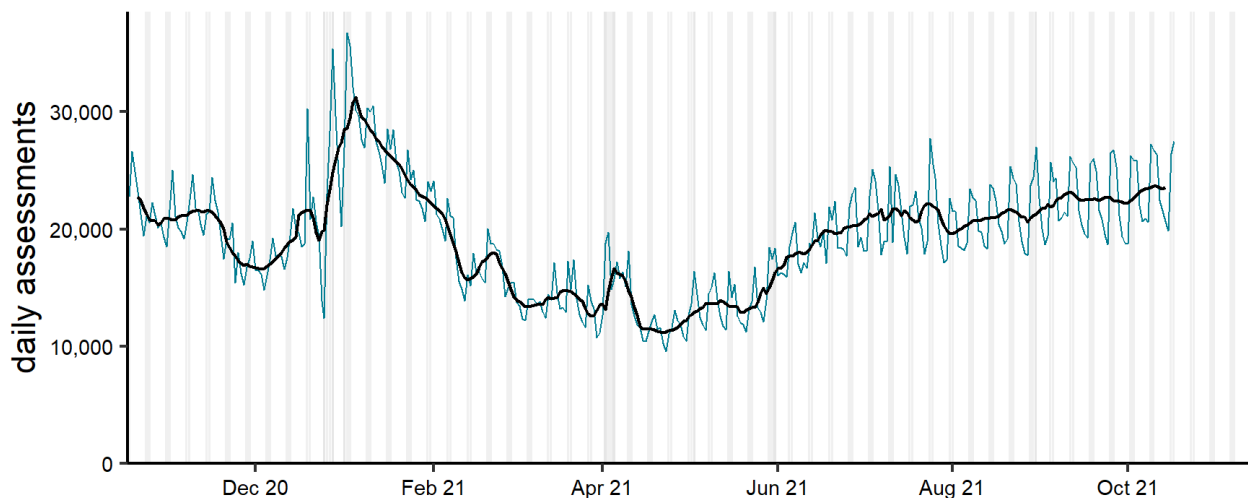
Table 2: The number of NHS 111 calls in England recorded each day in the most recent week.

Date	Number of calls
11 October 2021	44,696
12 October 2021	40,446
13 October 2021	40,229
14 October 2021	39,425
15 October 2021	39,141
16 October 2021	61,185
17 October 2021	55,529

NHS 111 online

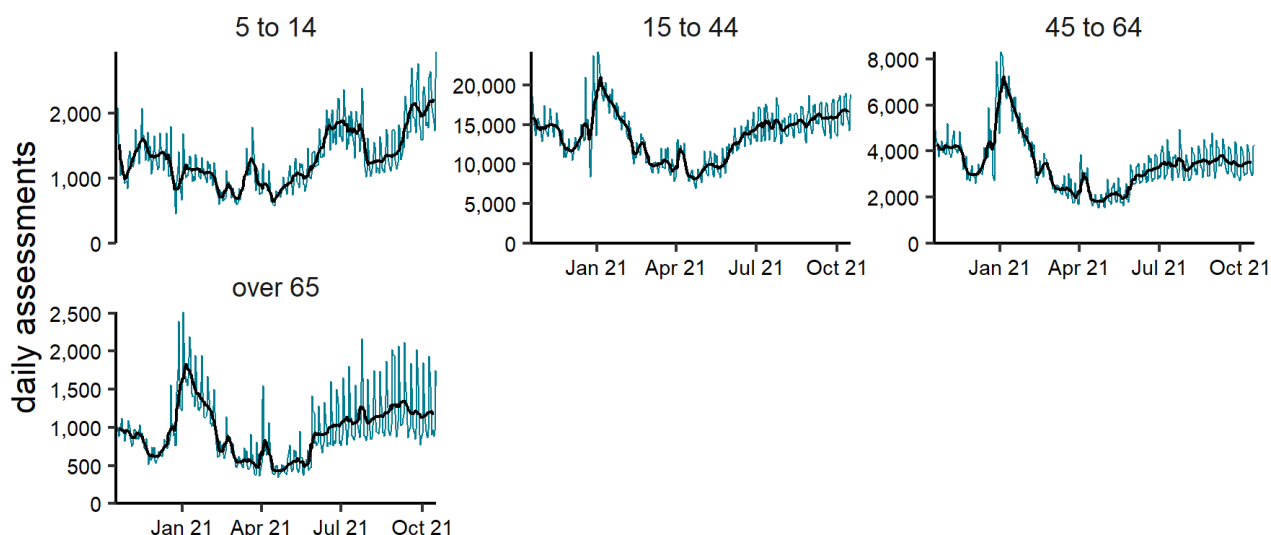
Figure 2: Daily number of completed NHS 111 online assessments (with 7-day moving average adjusted for bank holidays) recorded in this syndromic surveillance system in England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Total assessments 18/10/2020 - 17/10/2021



Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b) Total assessments by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

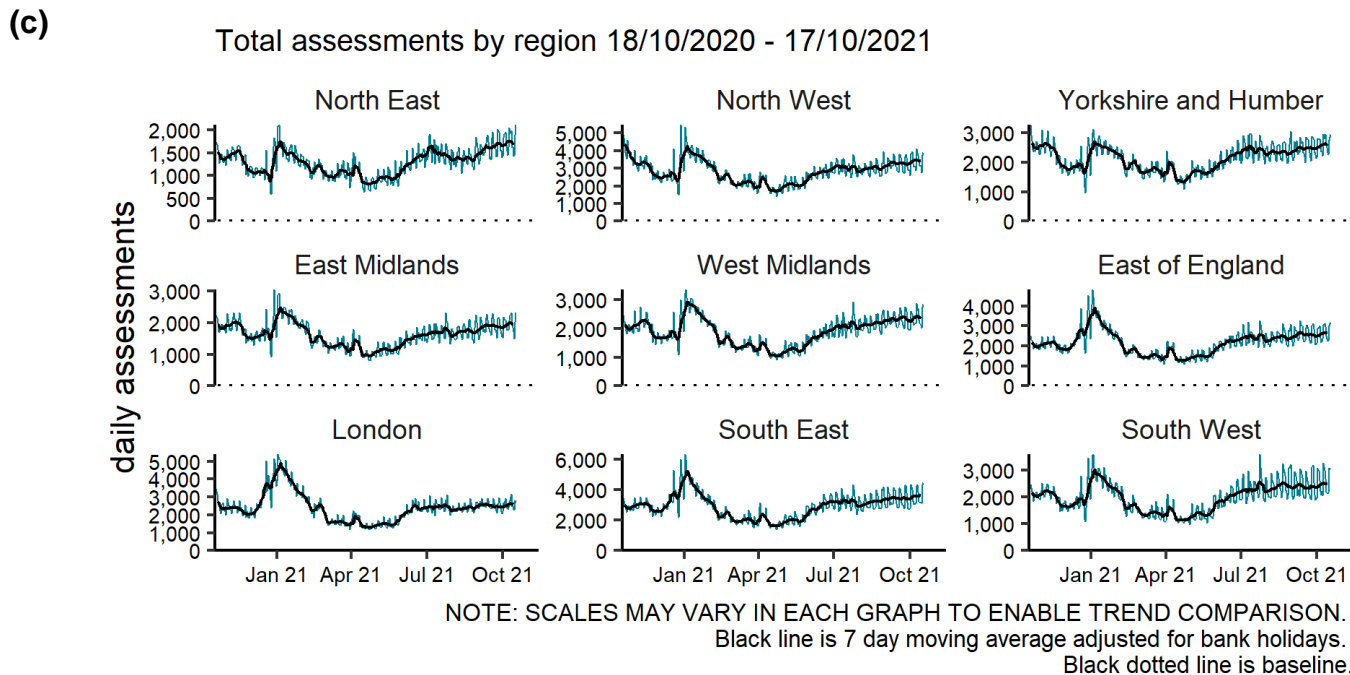


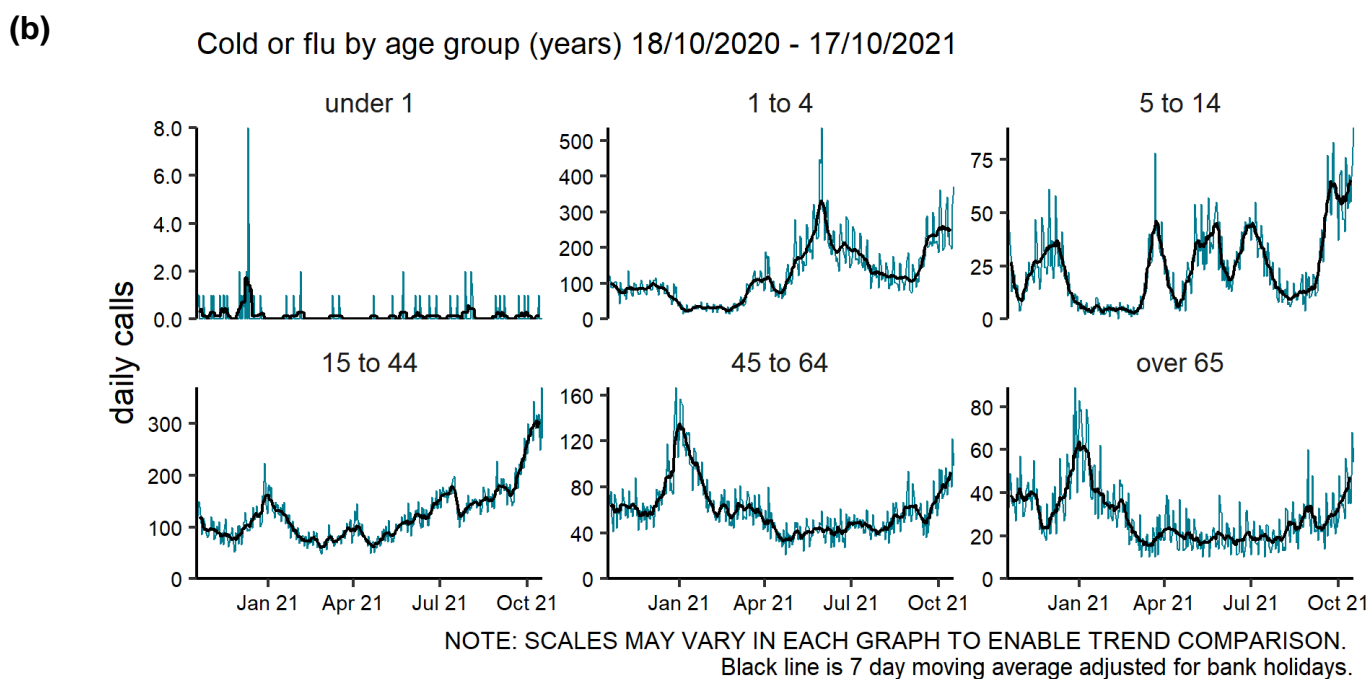
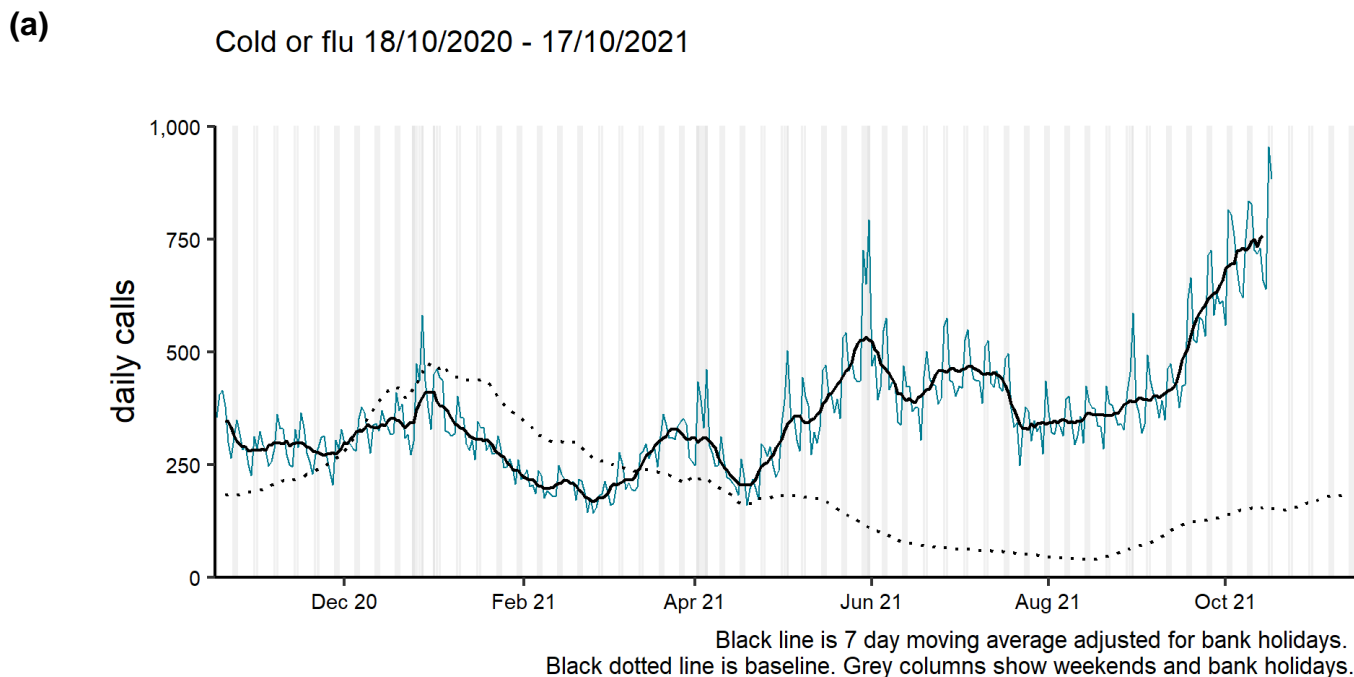
Table 3: The number of completed NHS 111 online assessments in England recorded each day in the most recent week.

Date	Number of completed assessments
11 October 2021	26,536
12 October 2021	22,578
13 October 2021	21,672
14 October 2021	20,744
15 October 2021	19,942
16 October 2021	26,583
17 October 2021	27,609

Respiratory conditions

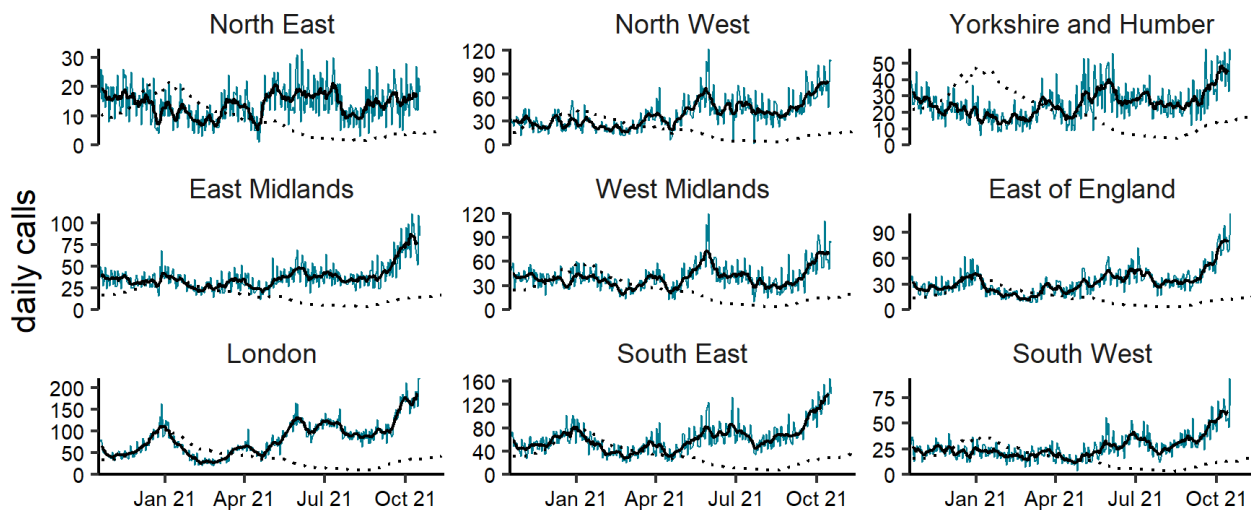
Cold/flu NHS 111 calls

Figure 3: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for cold/flu, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

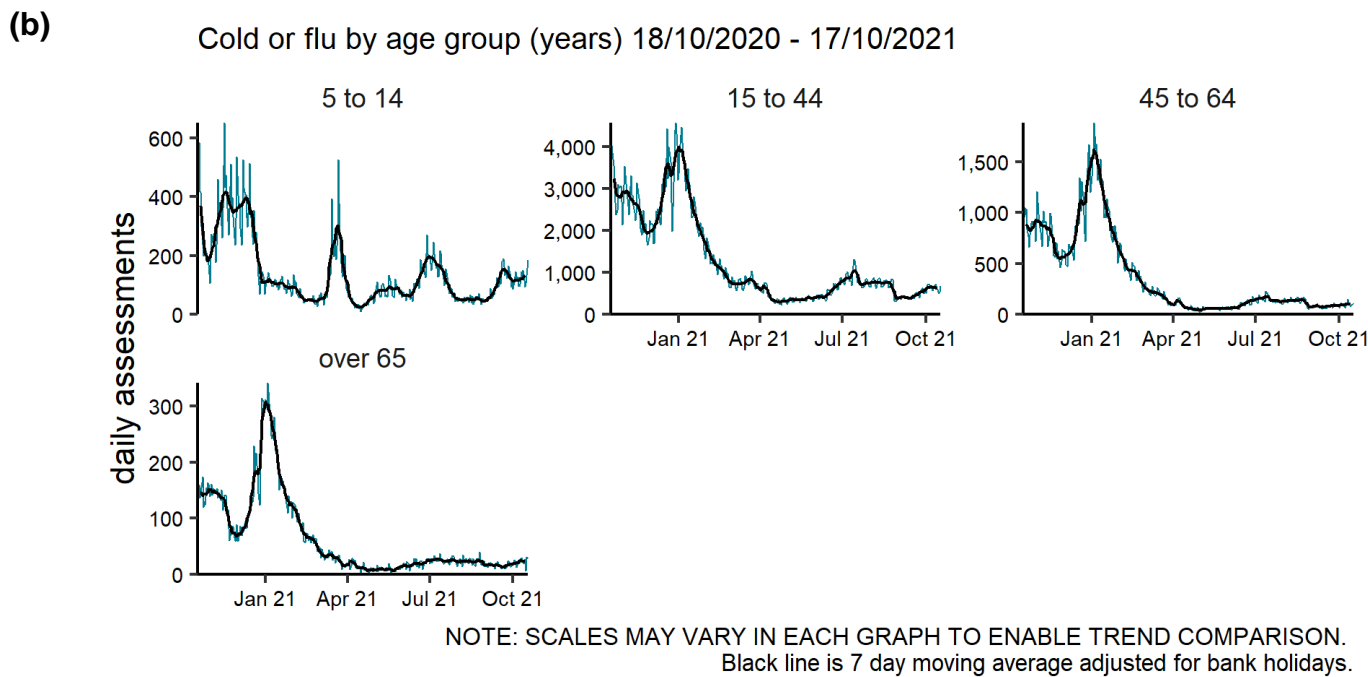
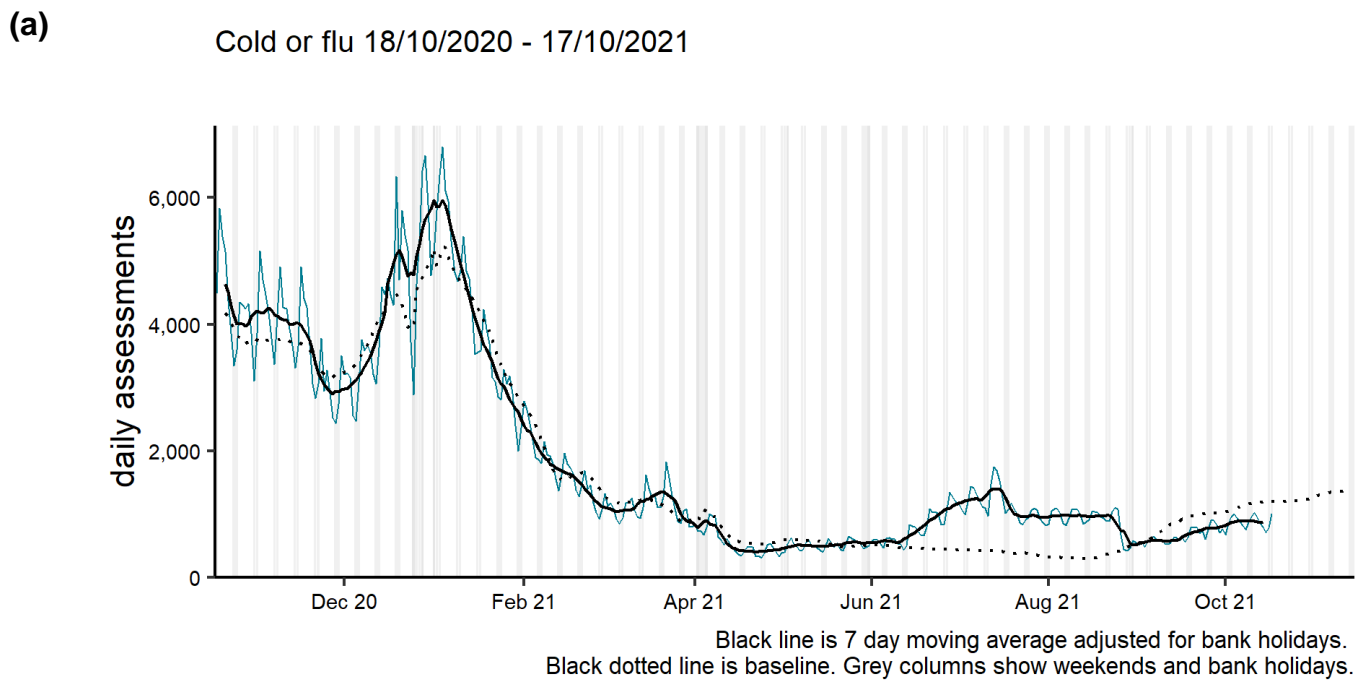
Cold or flu by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

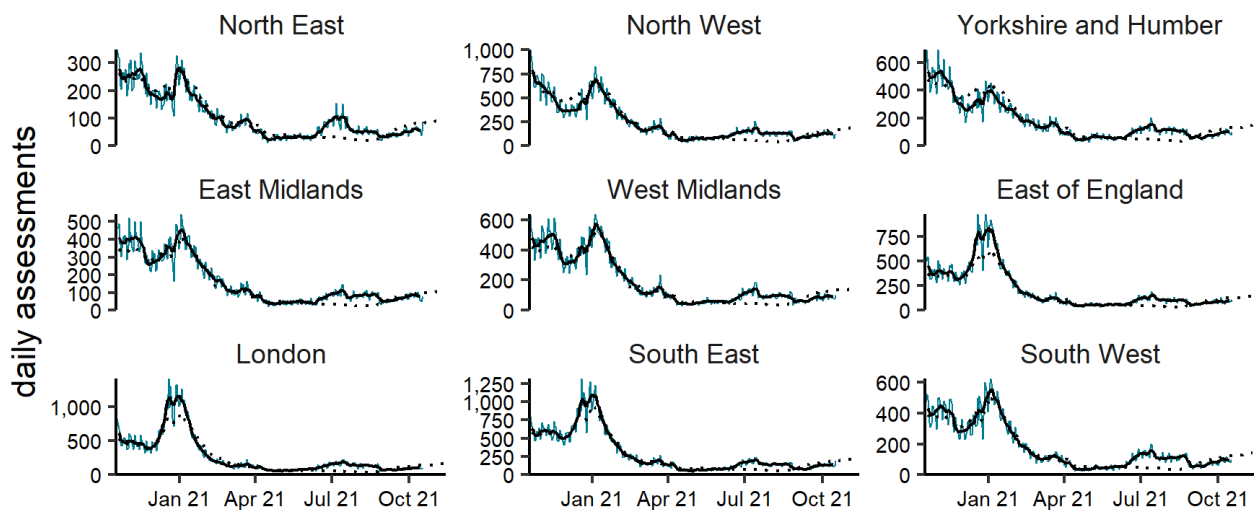
Cold/flu NHS 111 online

Figure 4: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for cold/flu, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

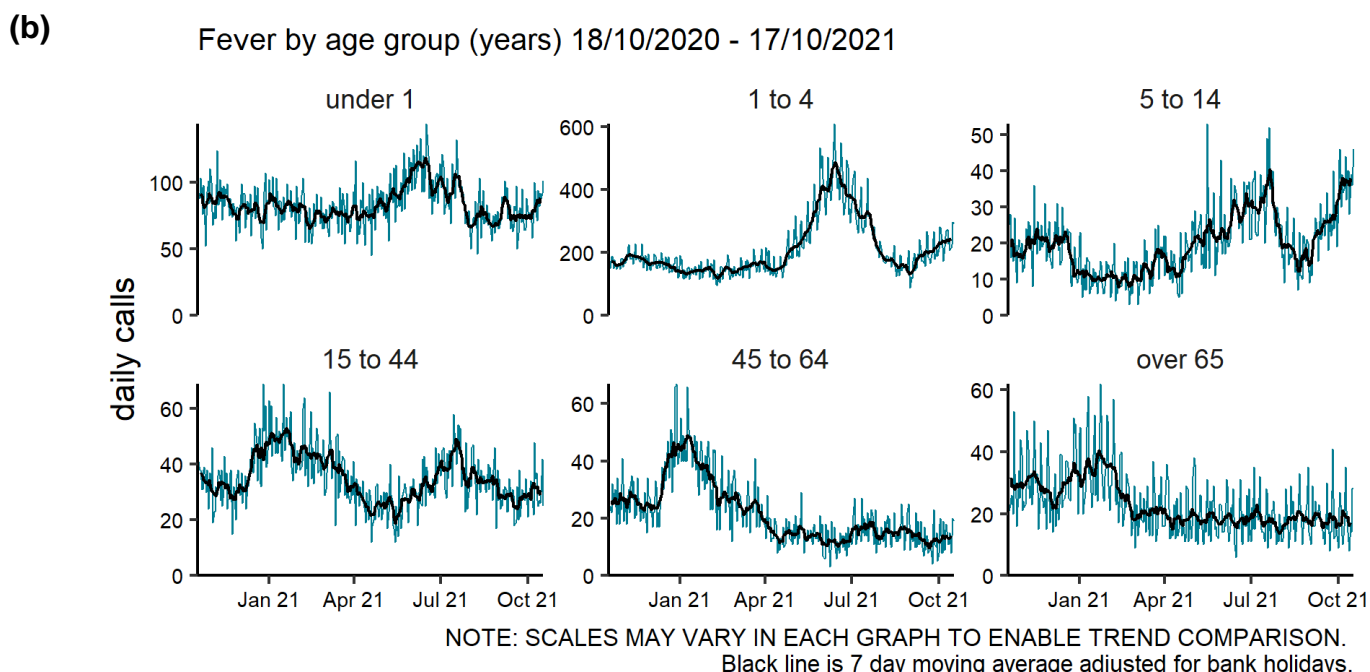
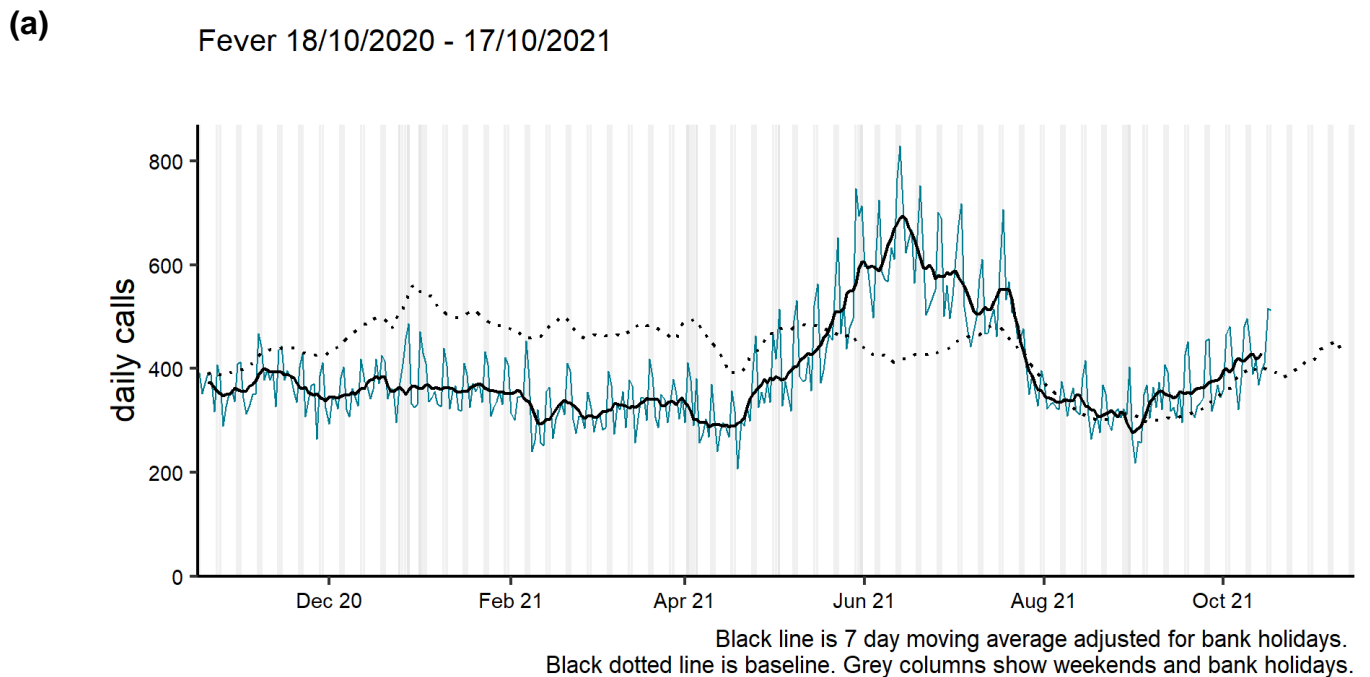
Cold or flu by region 18/10/2020 - 17/10/2021



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Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

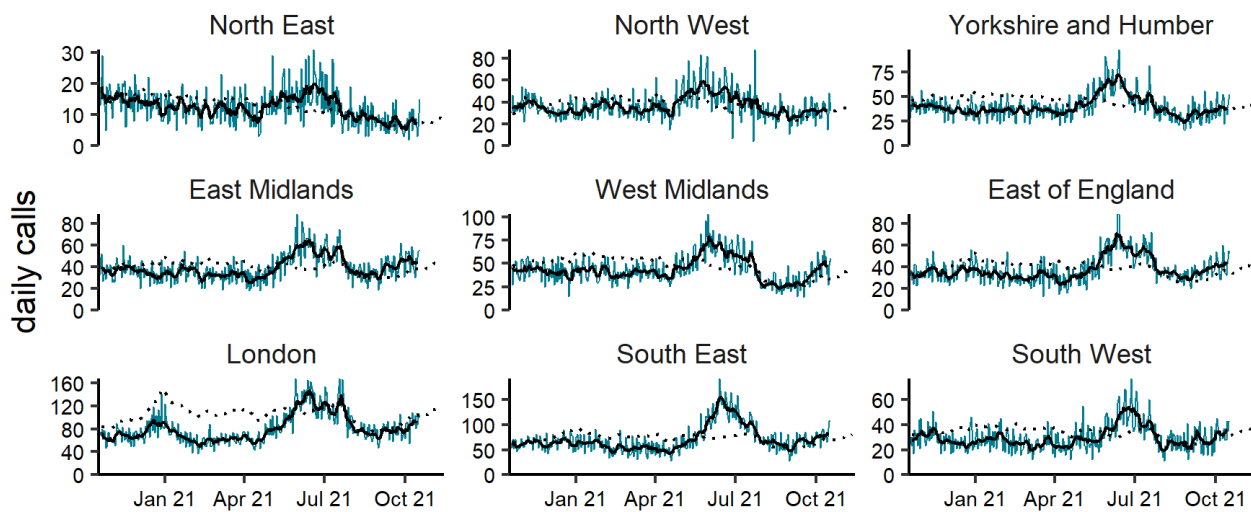
Fever NHS 111 calls

Figure 5: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for fever, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

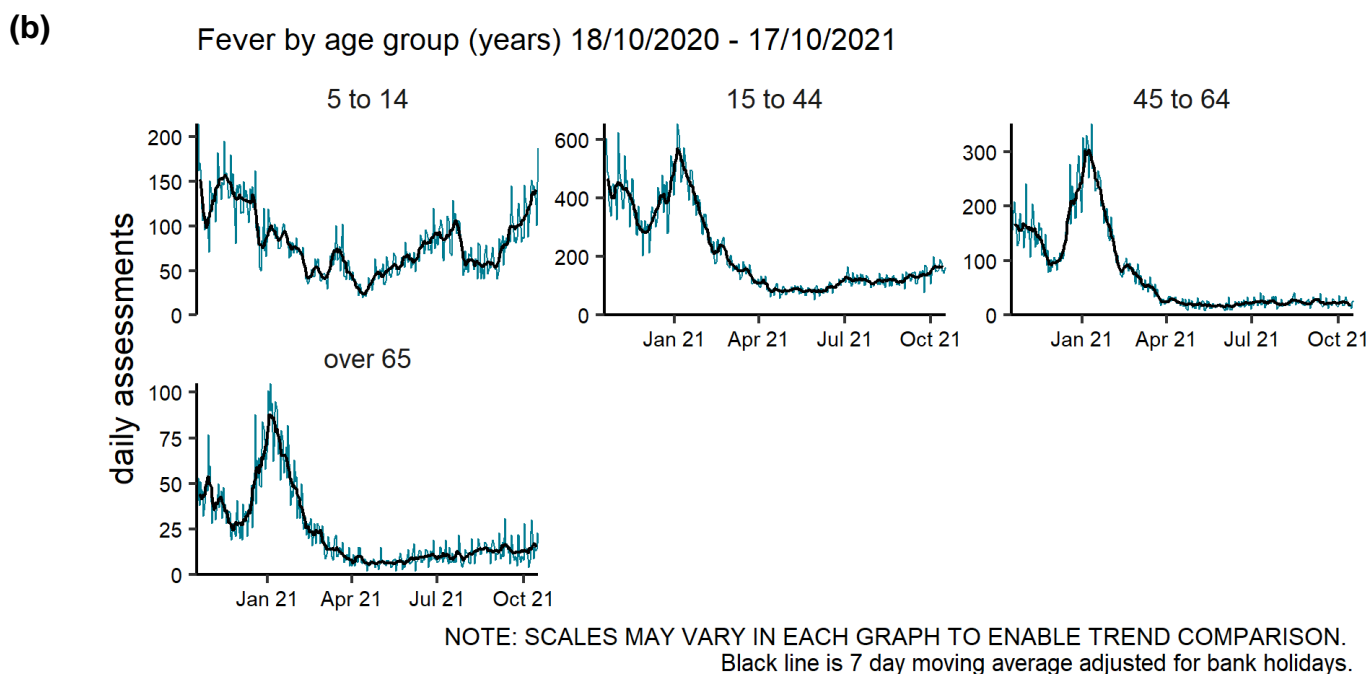
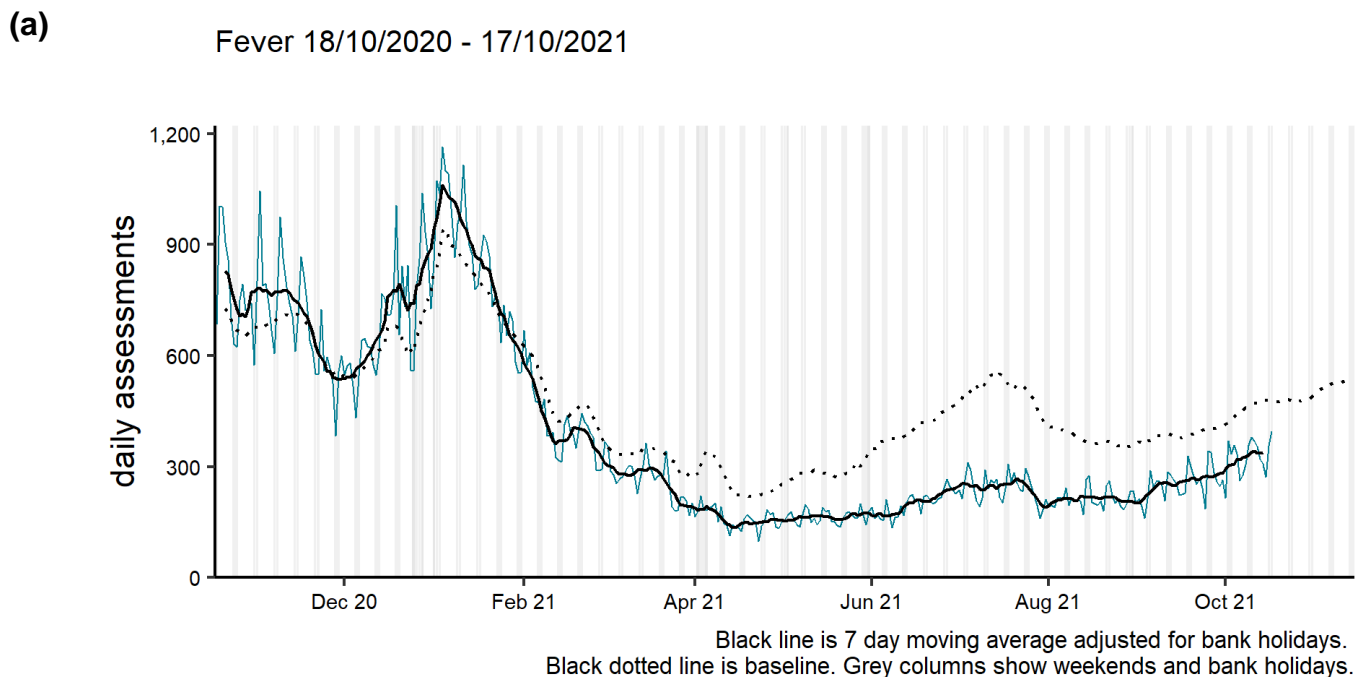
Fever by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

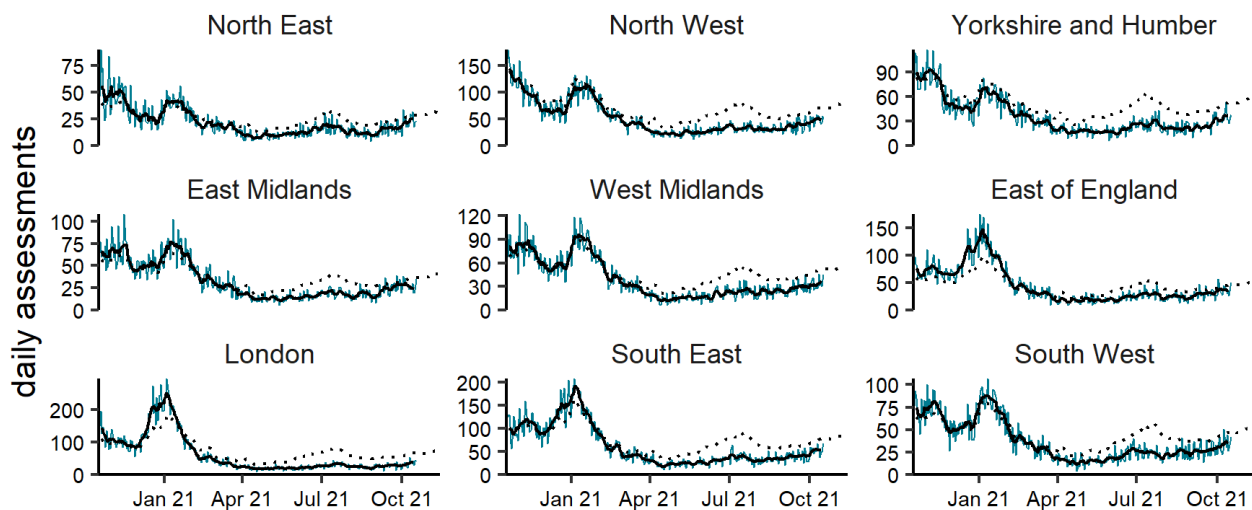
Fever NHS 111 online

Figure 6: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for fever, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

Fever by region 18/10/2020 - 17/10/2021

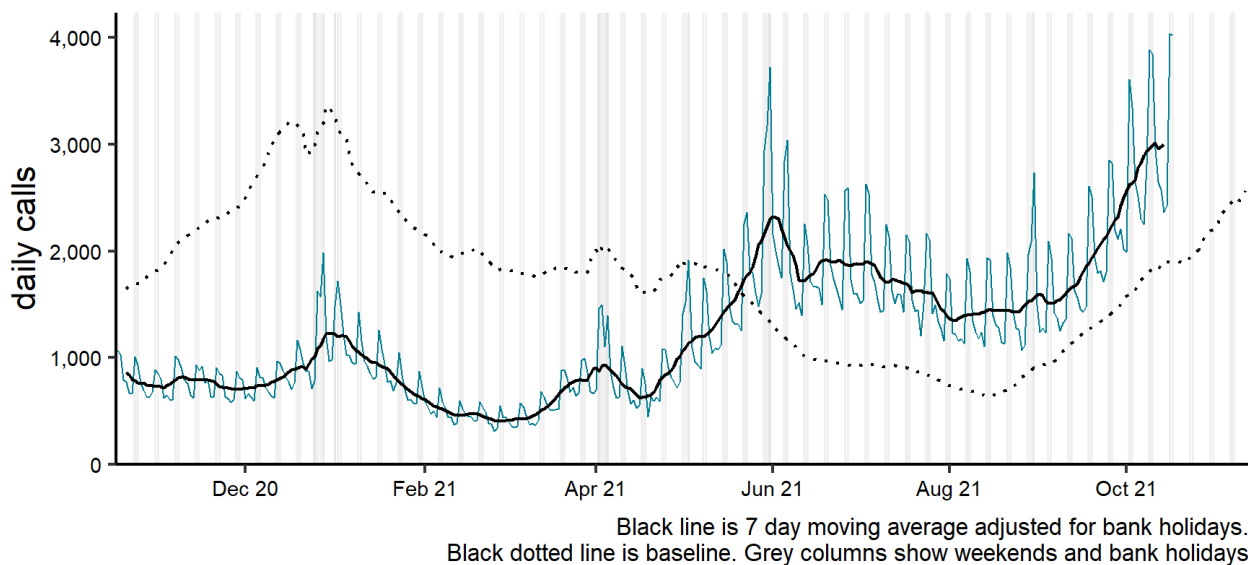


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
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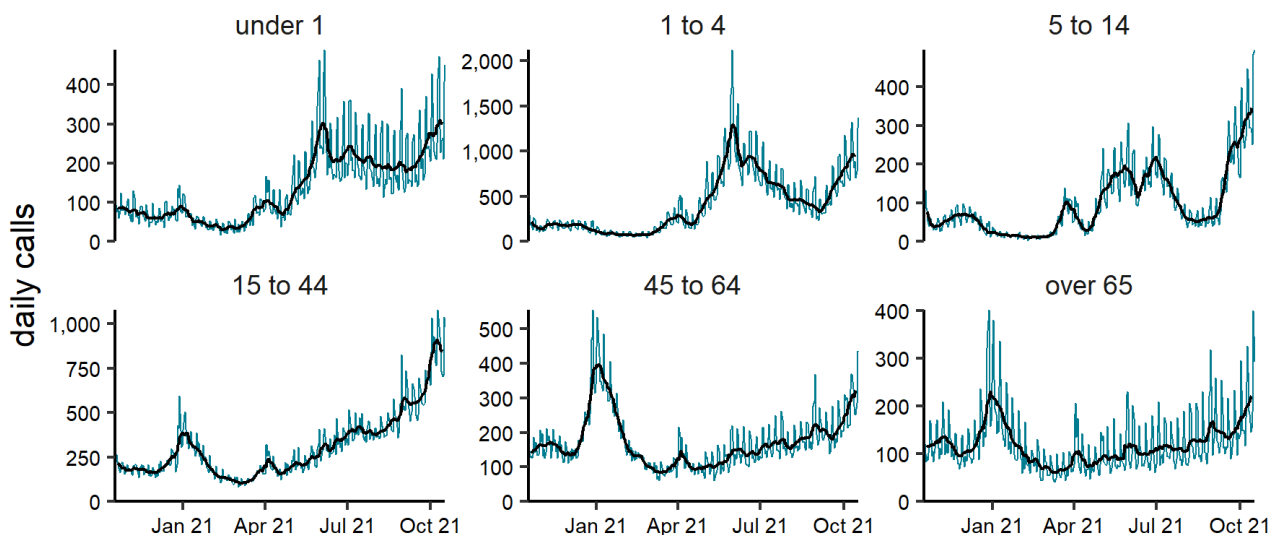
Cough NHS 111 calls

Figure 7: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for cough, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Cough 18/10/2020 - 17/10/2021

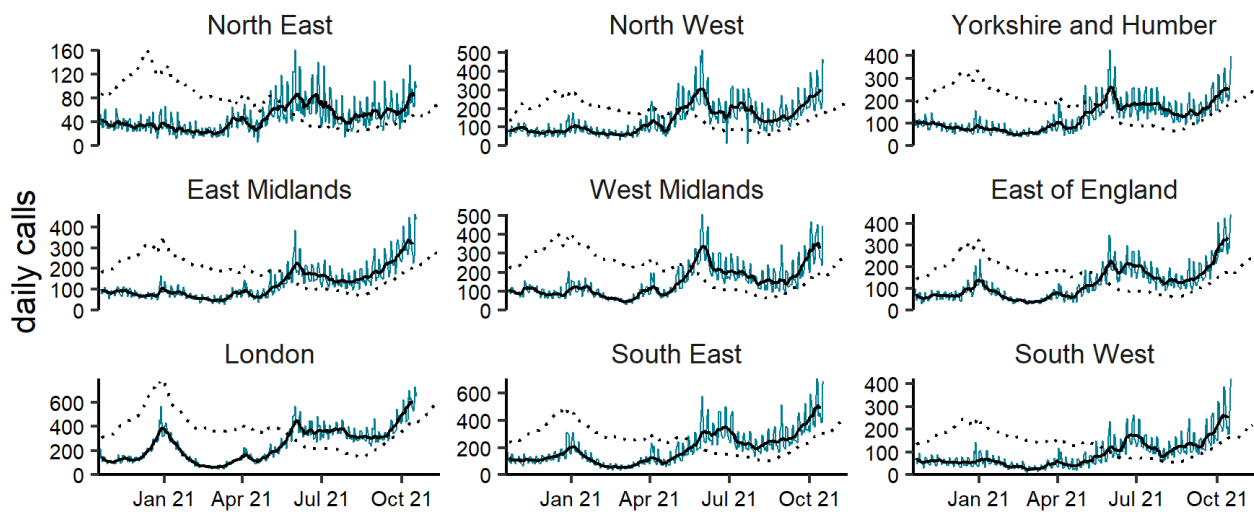


(b) Cough by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

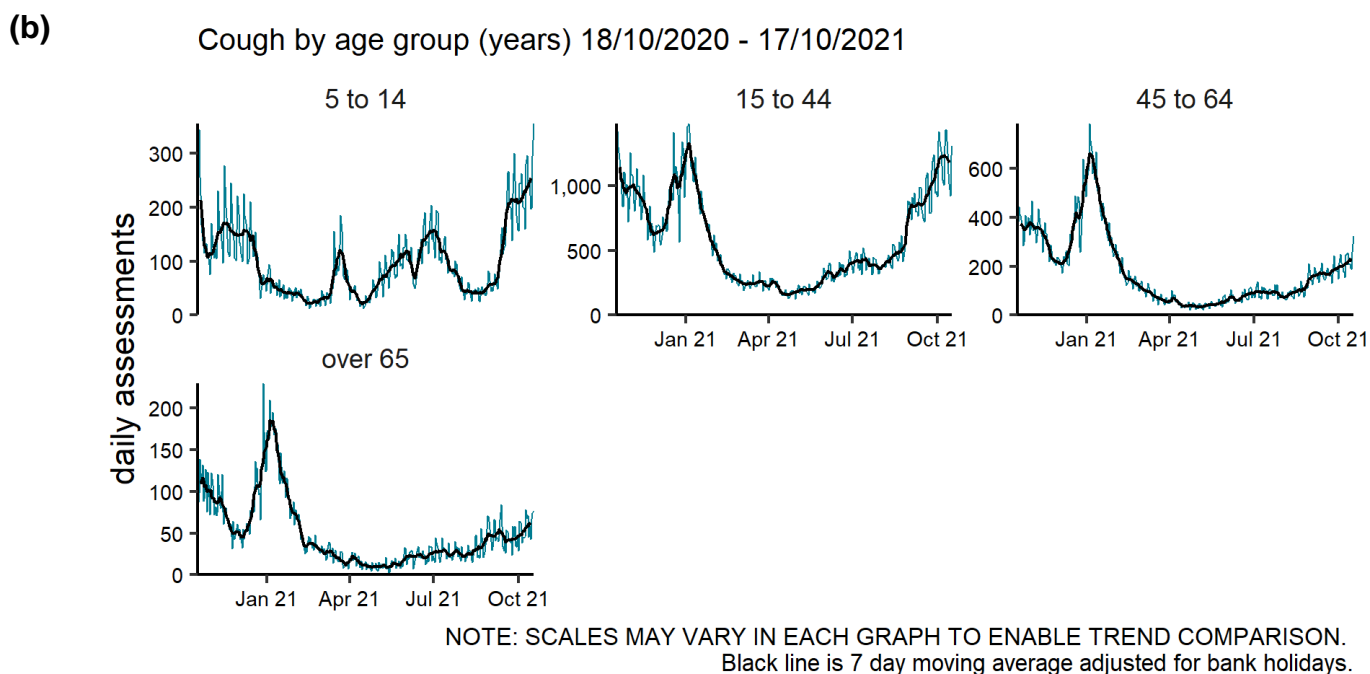
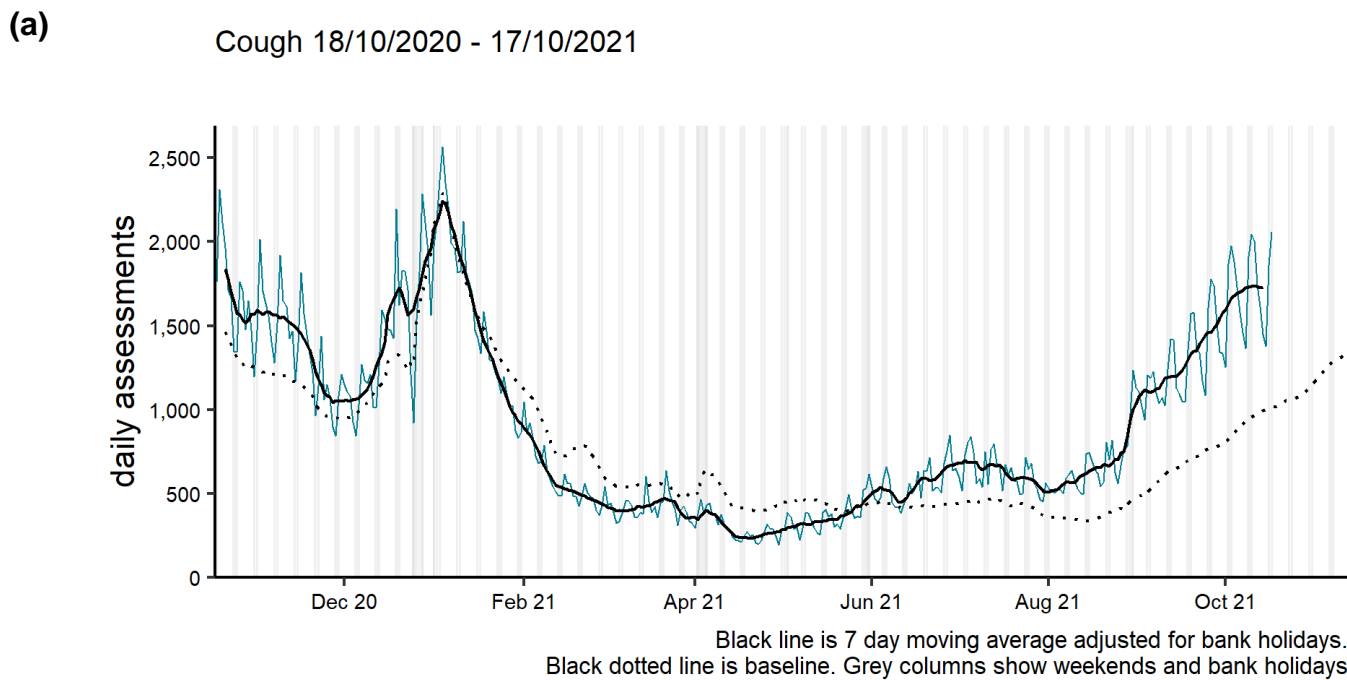
(c) Cough by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
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Black dotted line is baseline.

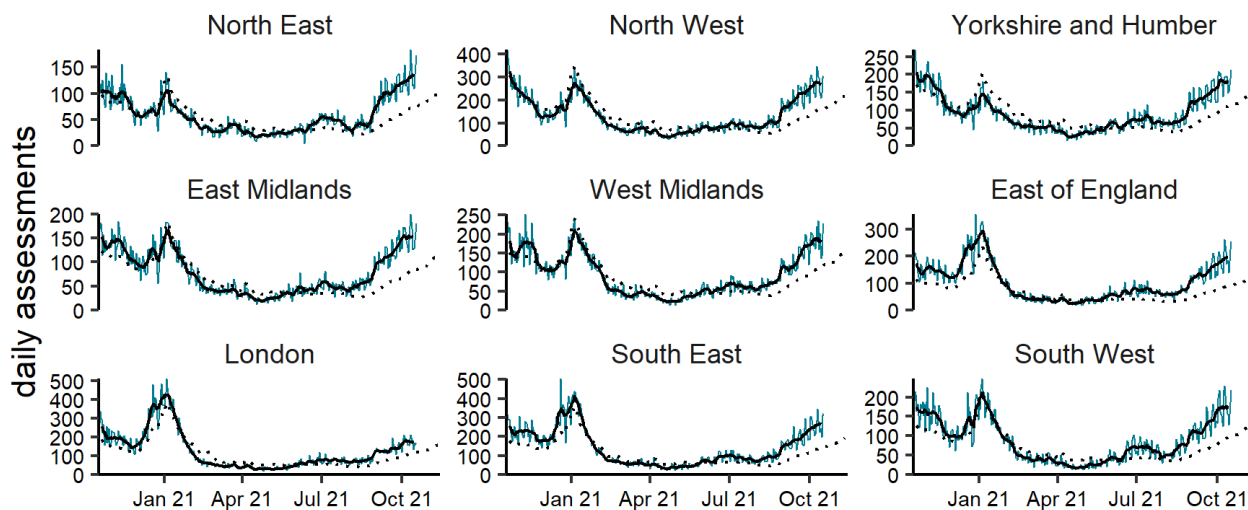
Cough NHS 111 online

Figure 8: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for cough, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

Cough by region 18/10/2020 - 17/10/2021

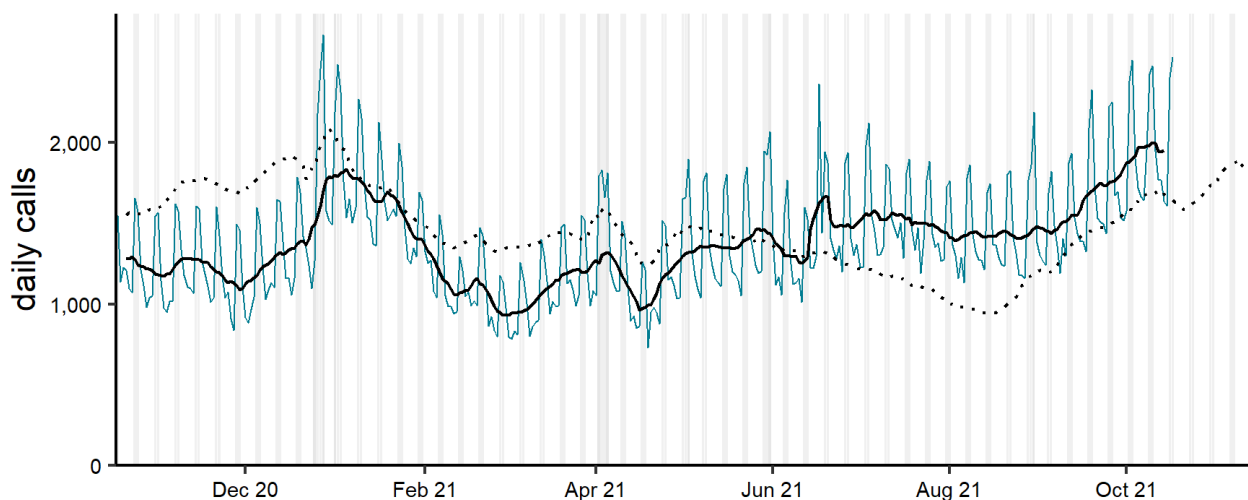


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Difficulty breathing NHS 111 calls

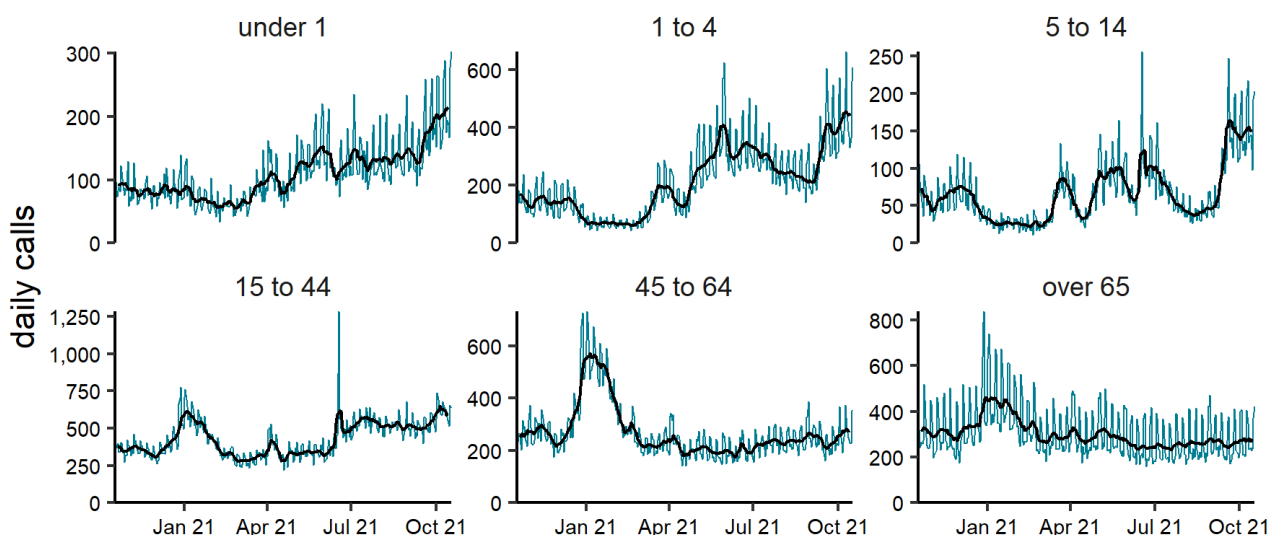
Figure 9: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for difficulty breathing, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Difficulty breathing 18/10/2020 - 17/10/2021



Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

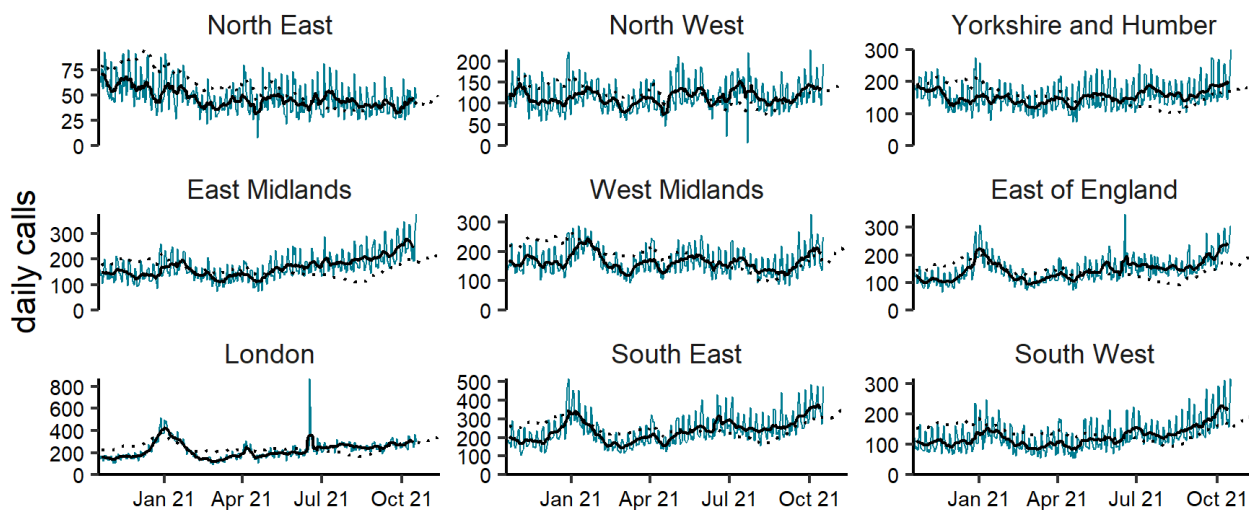
(b) Difficulty breathing by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

Difficulty breathing by region 18/10/2020 - 17/10/2021

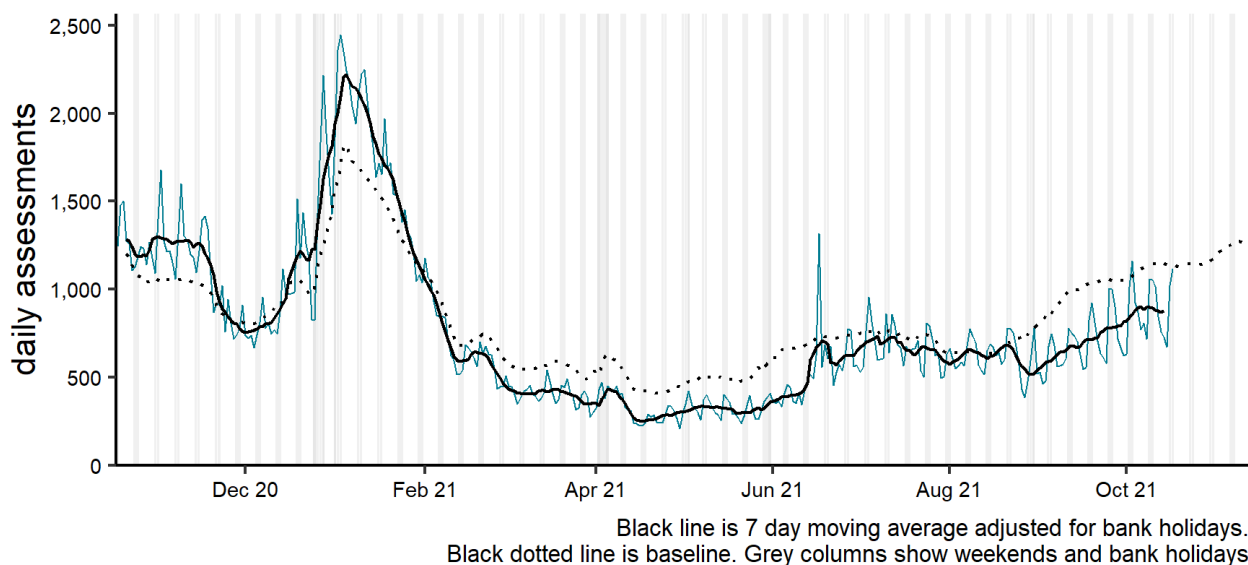


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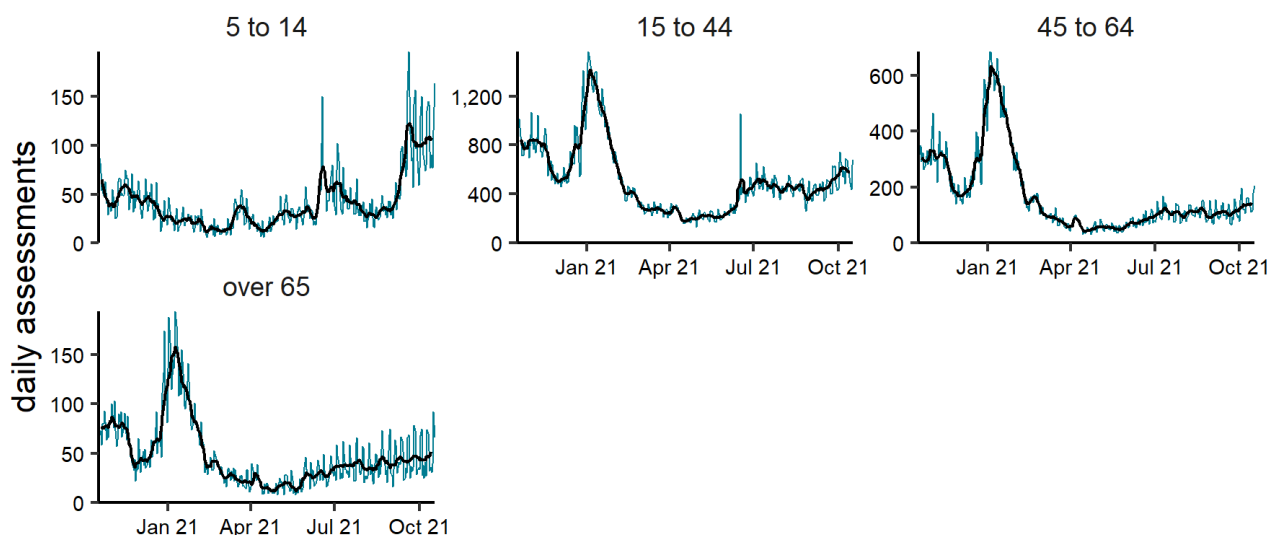
Difficulty breathing NHS 111 online

Figure 10: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for difficulty breathing, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Difficulty breathing 18/10/2020 - 17/10/2021



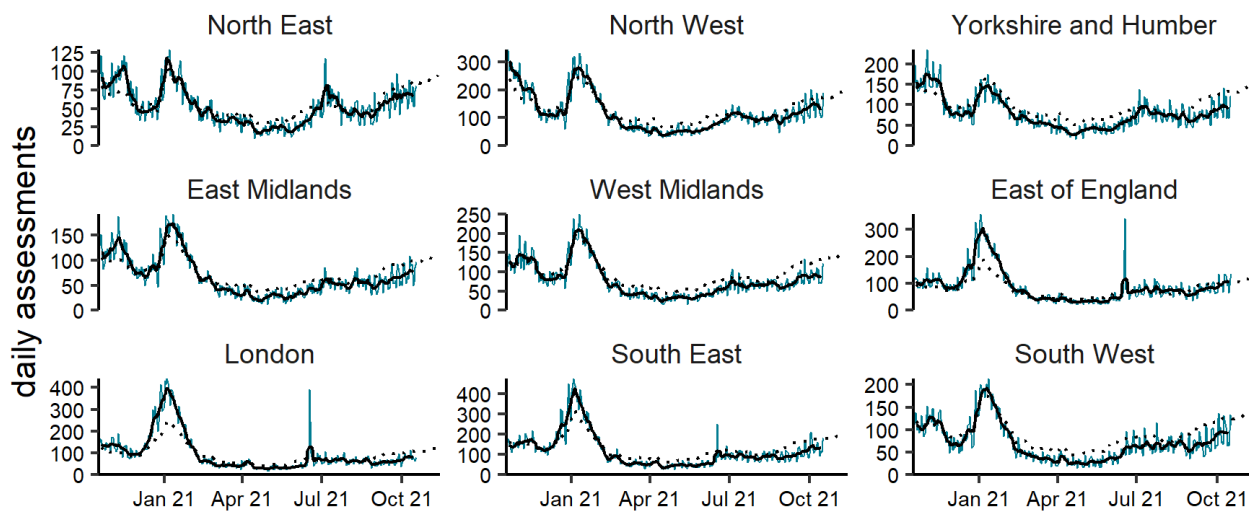
(b) Difficulty breathing by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

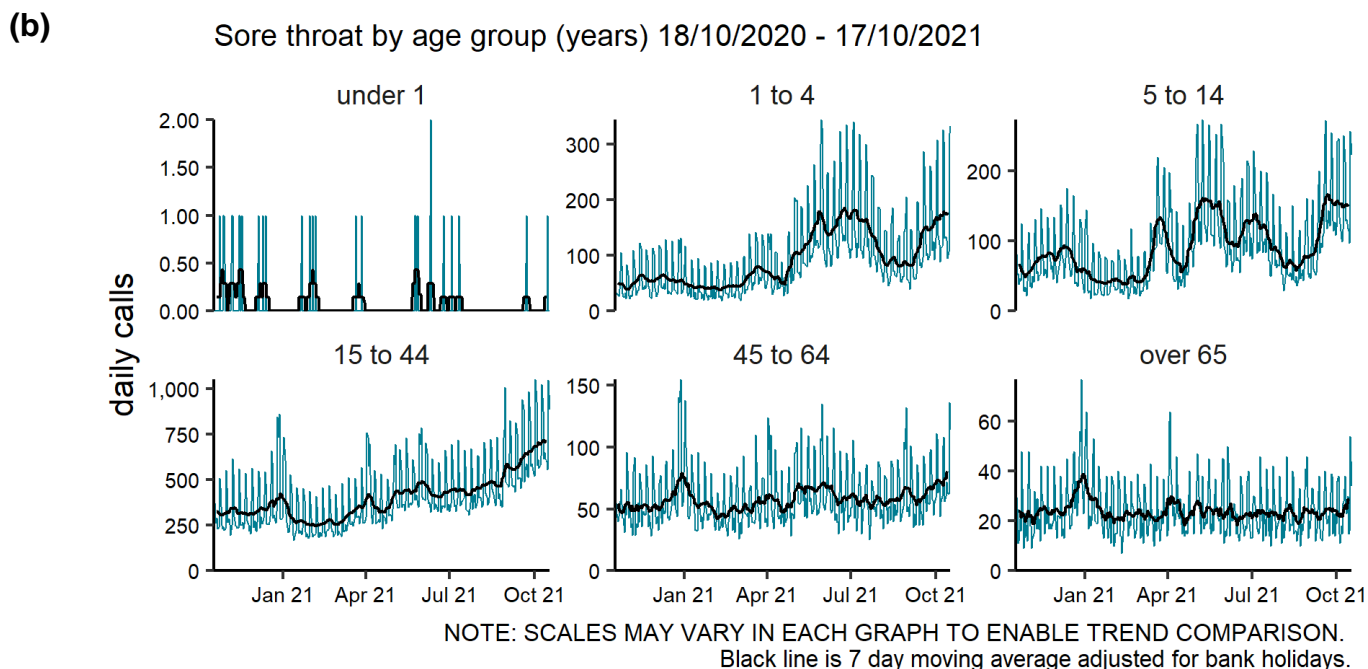
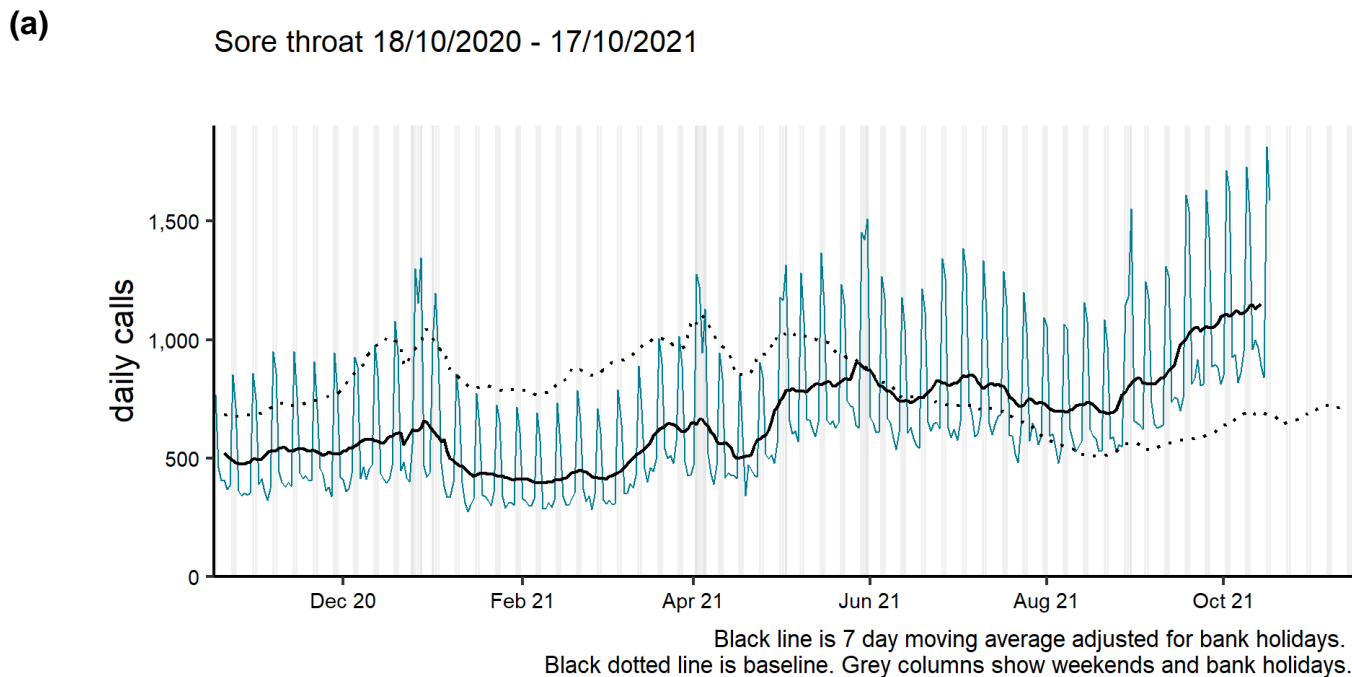
Difficulty breathing by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

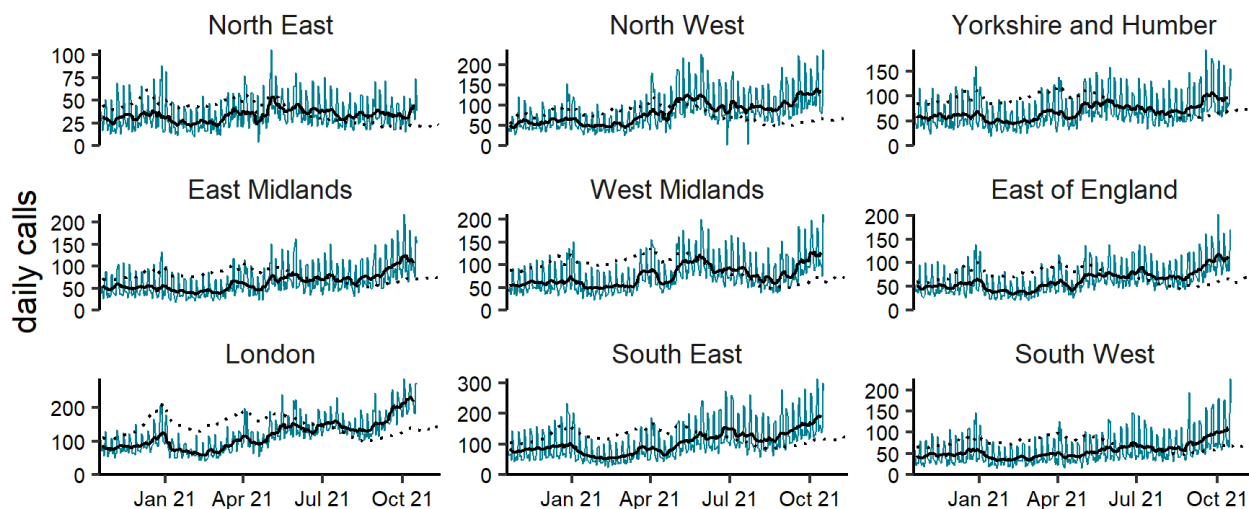
Sore throat NHS 111 calls

Figure 11: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for sore throat, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

Sore throat by region 18/10/2020 - 17/10/2021

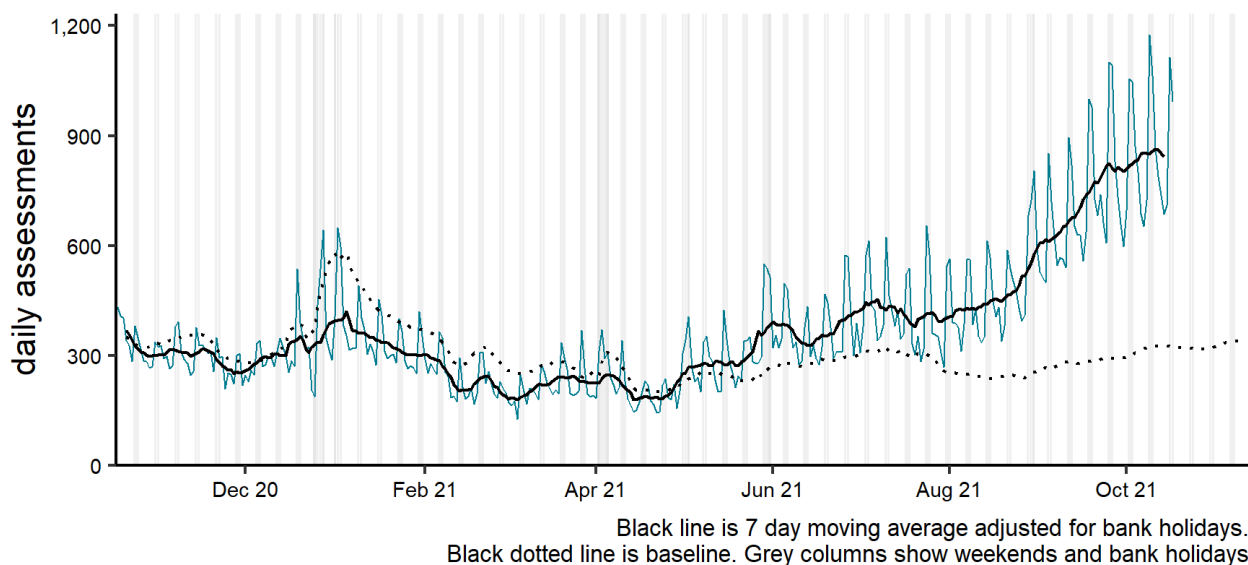


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
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Black dotted line is baseline.

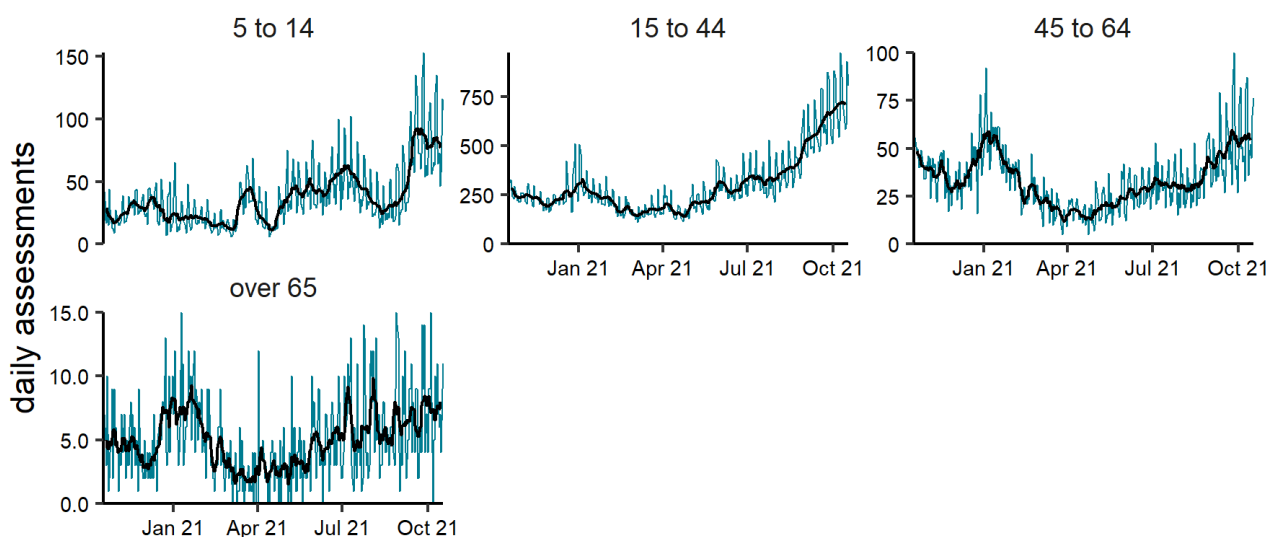
Sore throat NHS 111 online

Figure 12: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for sore throat, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Sore throat 18/10/2020 - 17/10/2021



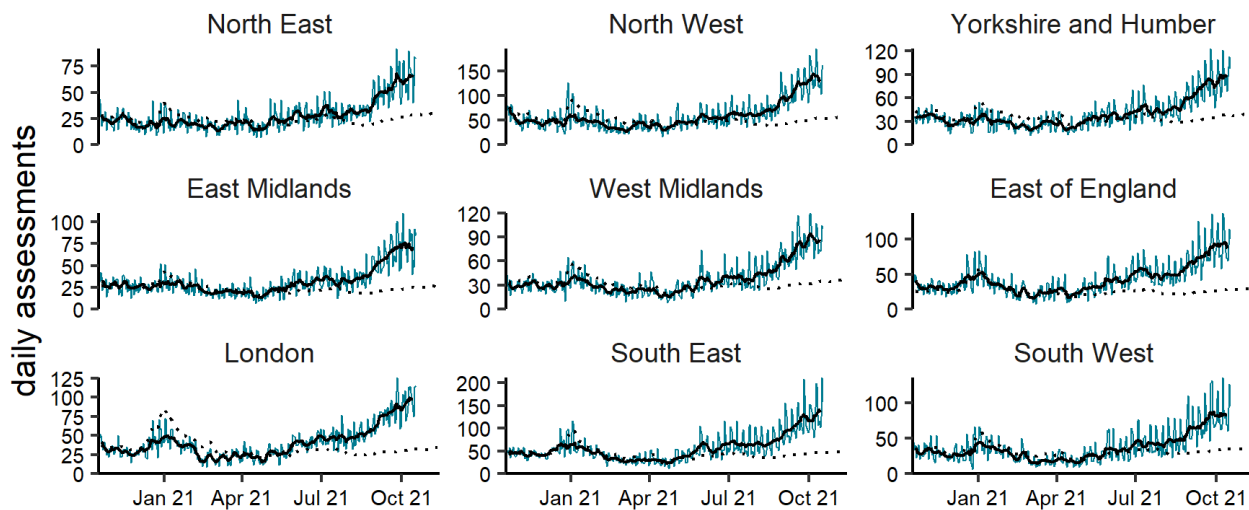
(b) Sore throat by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

Sore throat by region 18/10/2020 - 17/10/2021

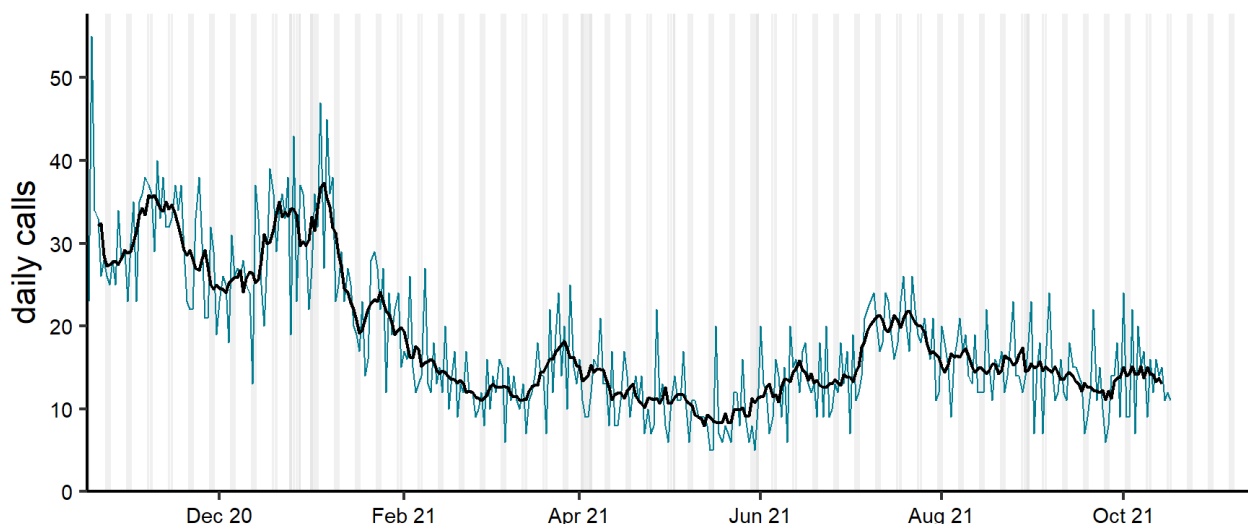


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Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Loss of taste or smell NHS 111 calls

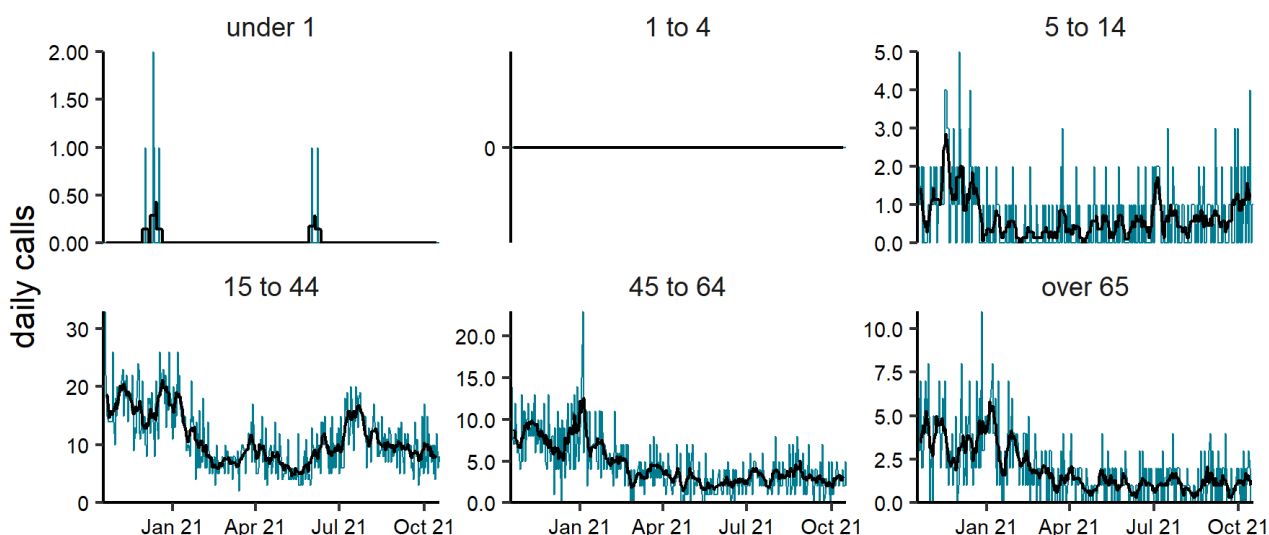
Figure 13: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for loss of taste or smell, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Loss of taste or smell 18/10/2020 - 17/10/2021



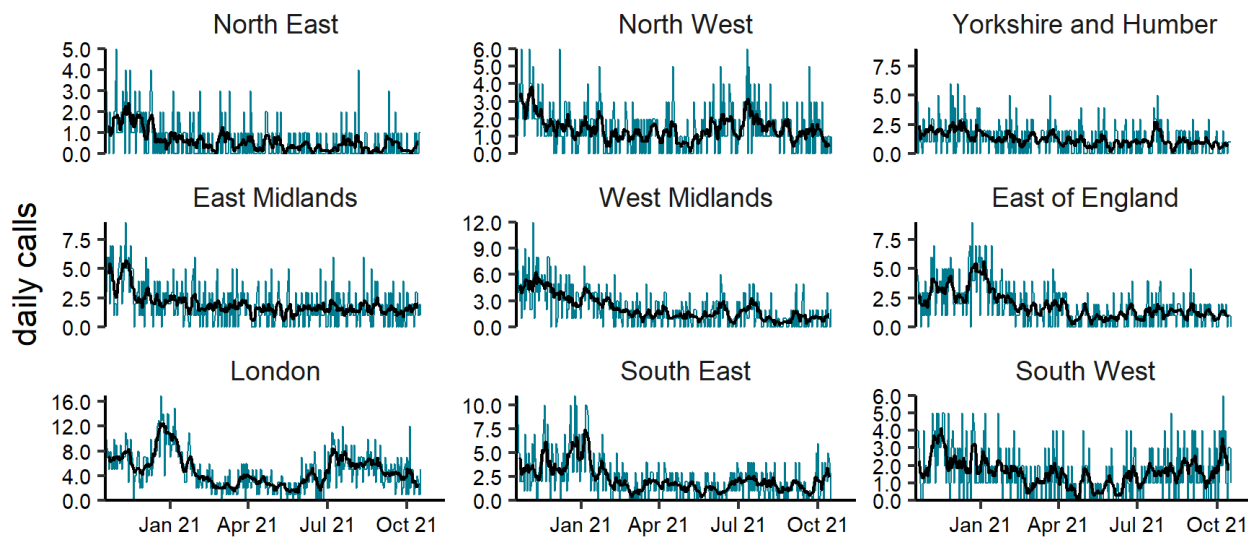
Black line is 7 day moving average adjusted for bank holidays. Grey columns show weekends and bank holidays.

(b) Loss of taste or smell by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

(c) Loss of taste or smell by region 18/10/2020 - 17/10/2021

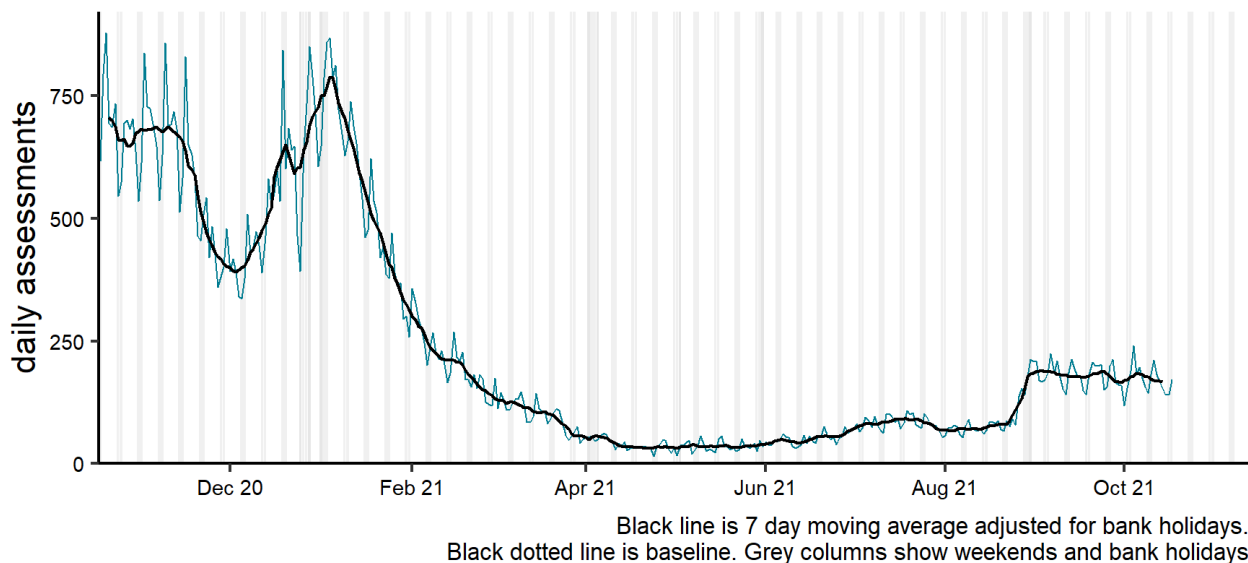


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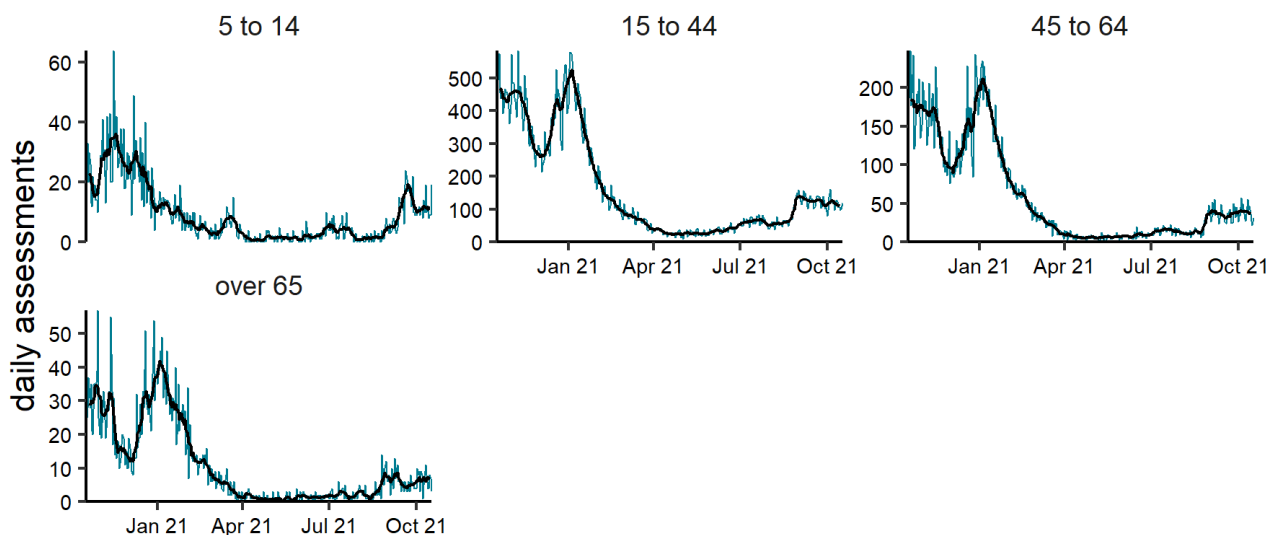
Loss of taste or smell NHS 111 online

Figure 14: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for loss of taste or smell, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Loss of taste or smell 18/10/2020 - 17/10/2021



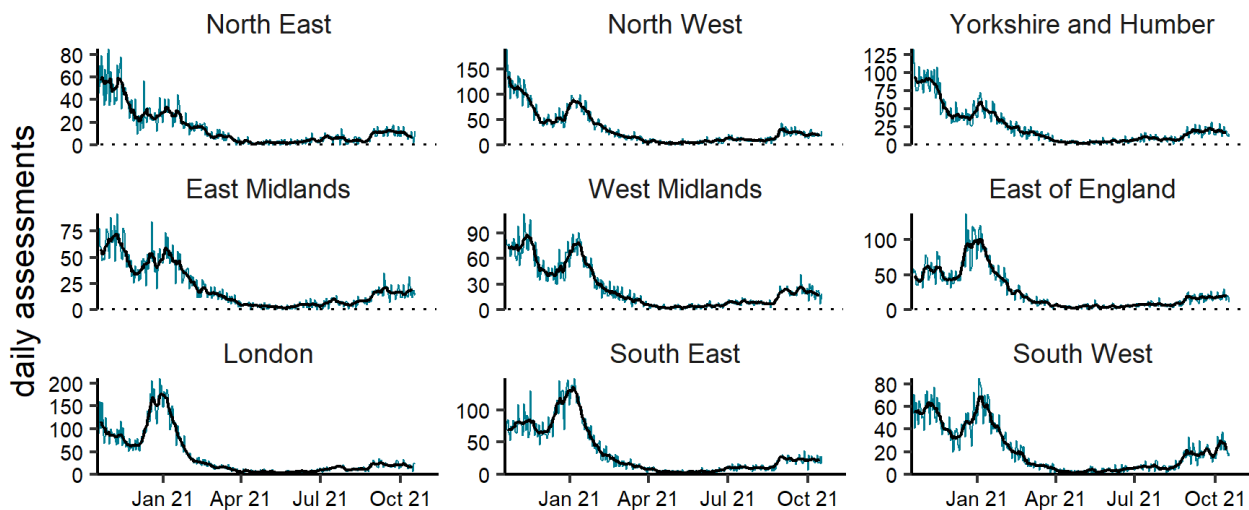
(b) Loss of taste or smell by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

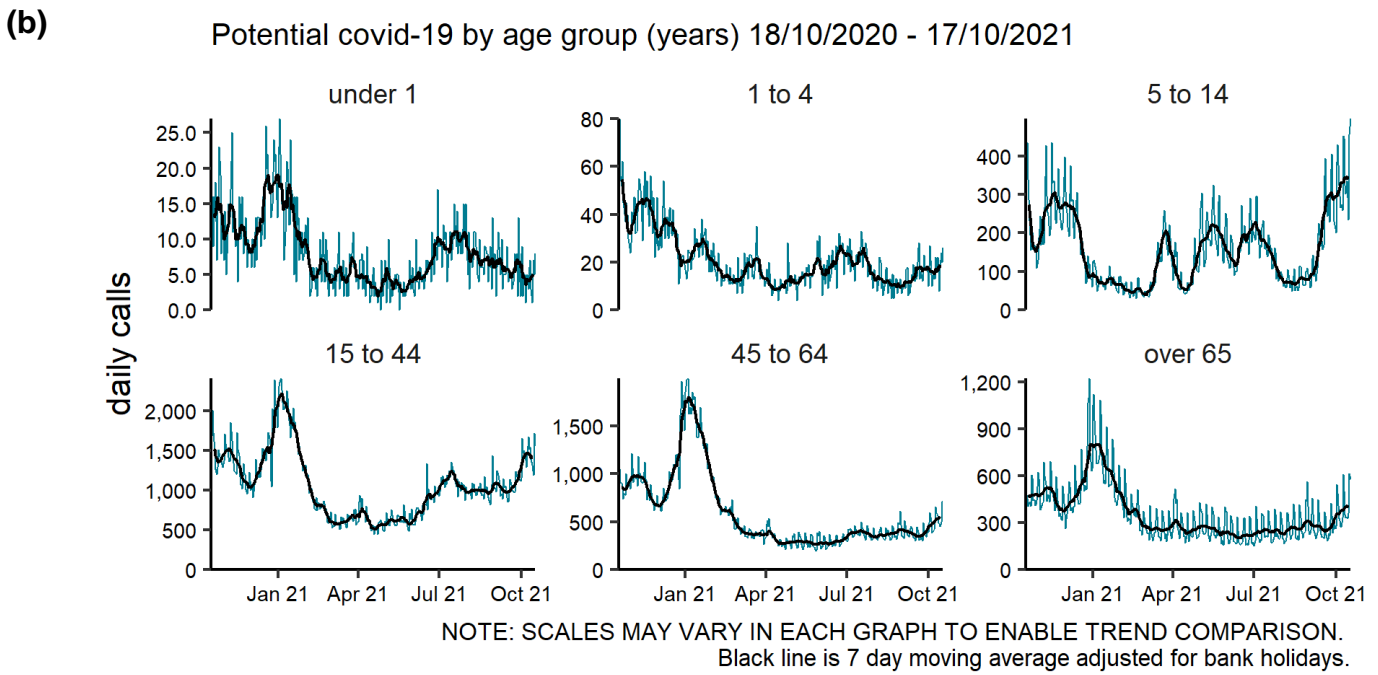
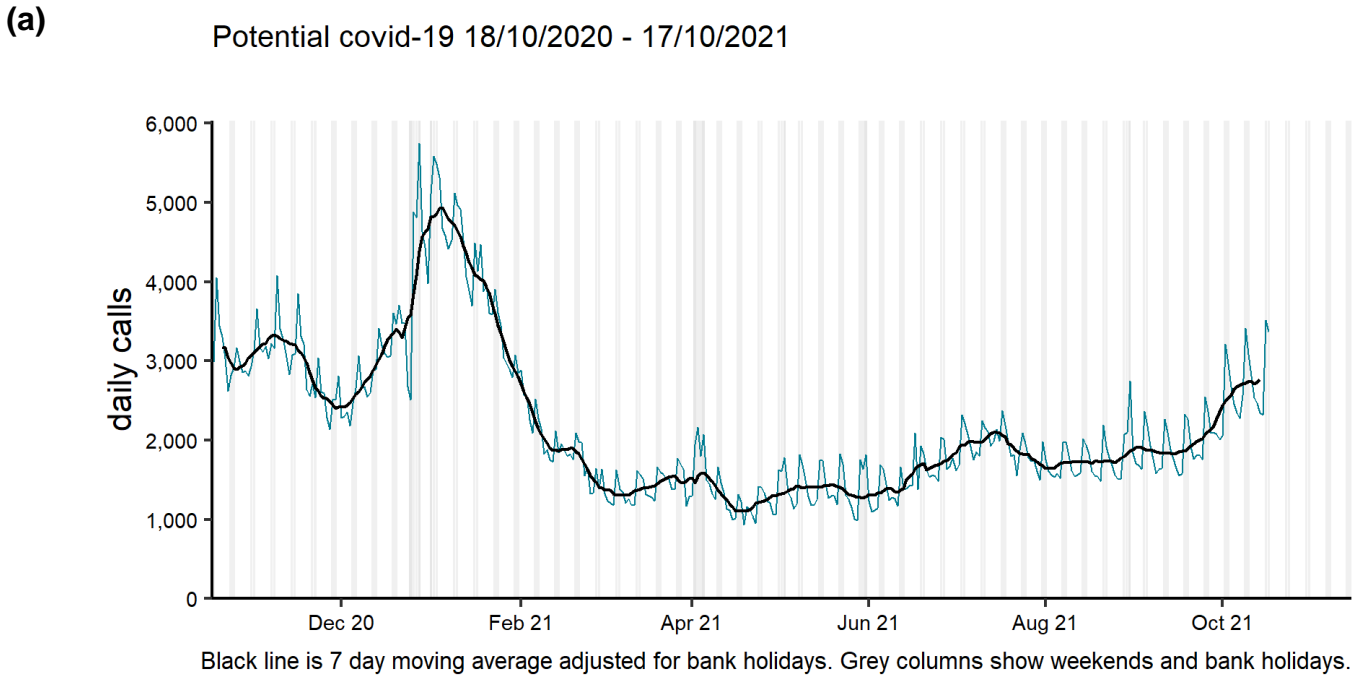
Loss of taste or smell by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

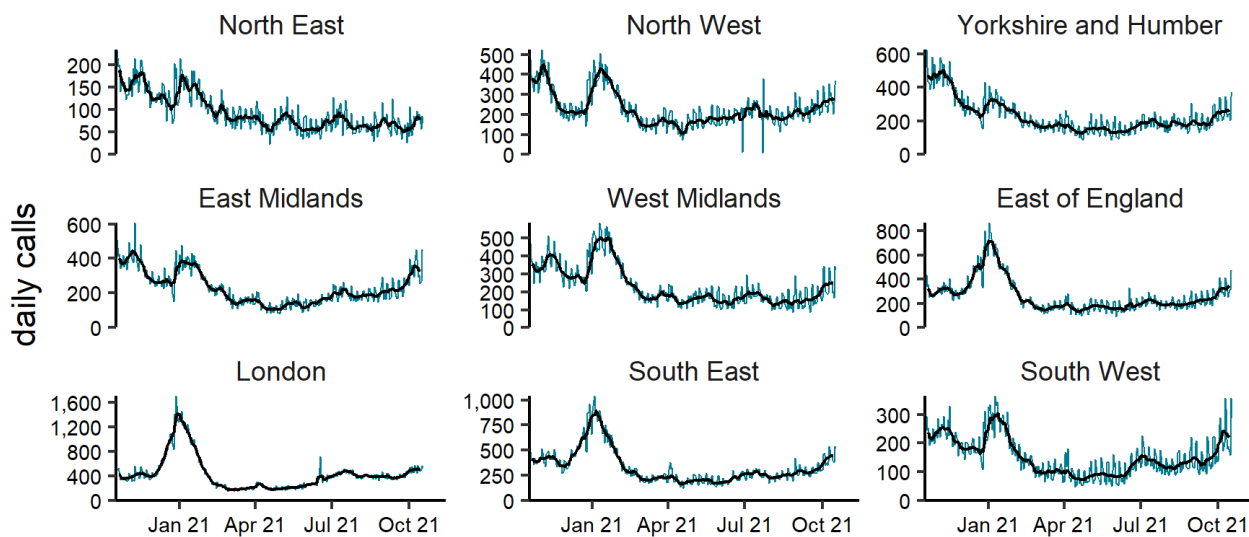
Potential COVID-19 NHS 111 calls

Figure 15: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for potential COVID-19, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

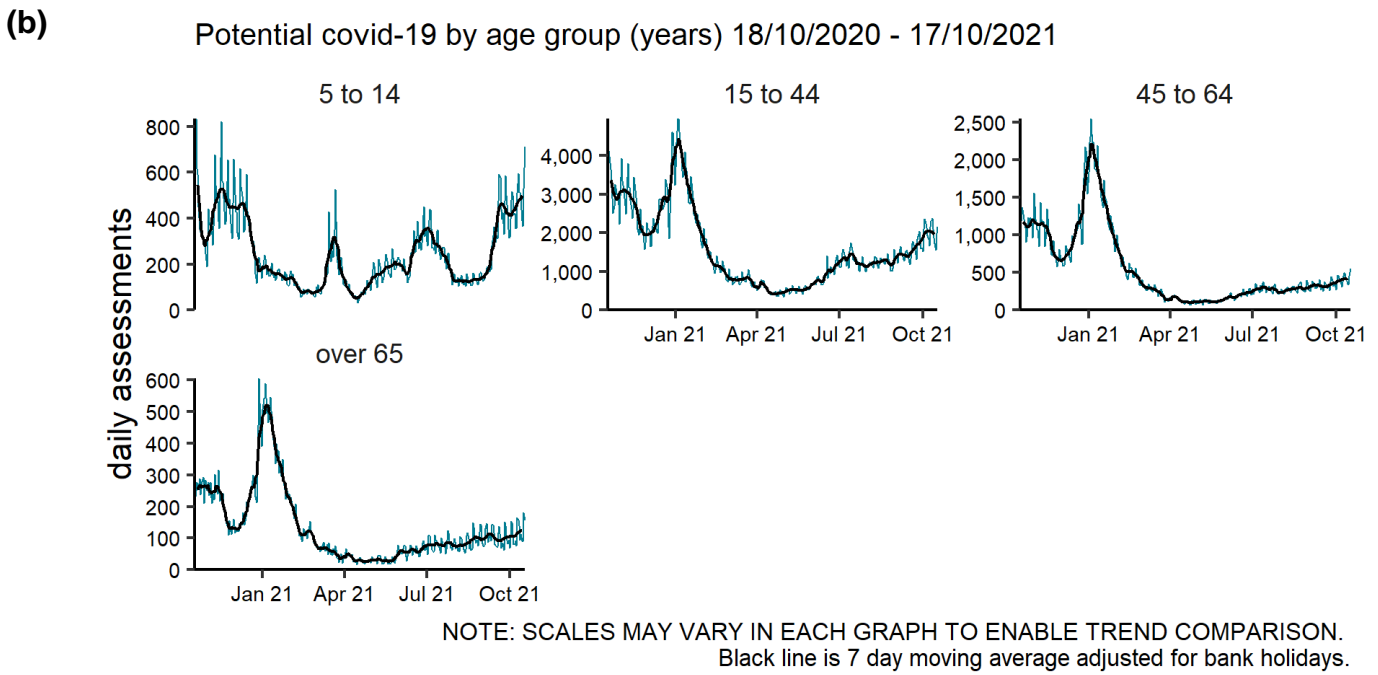
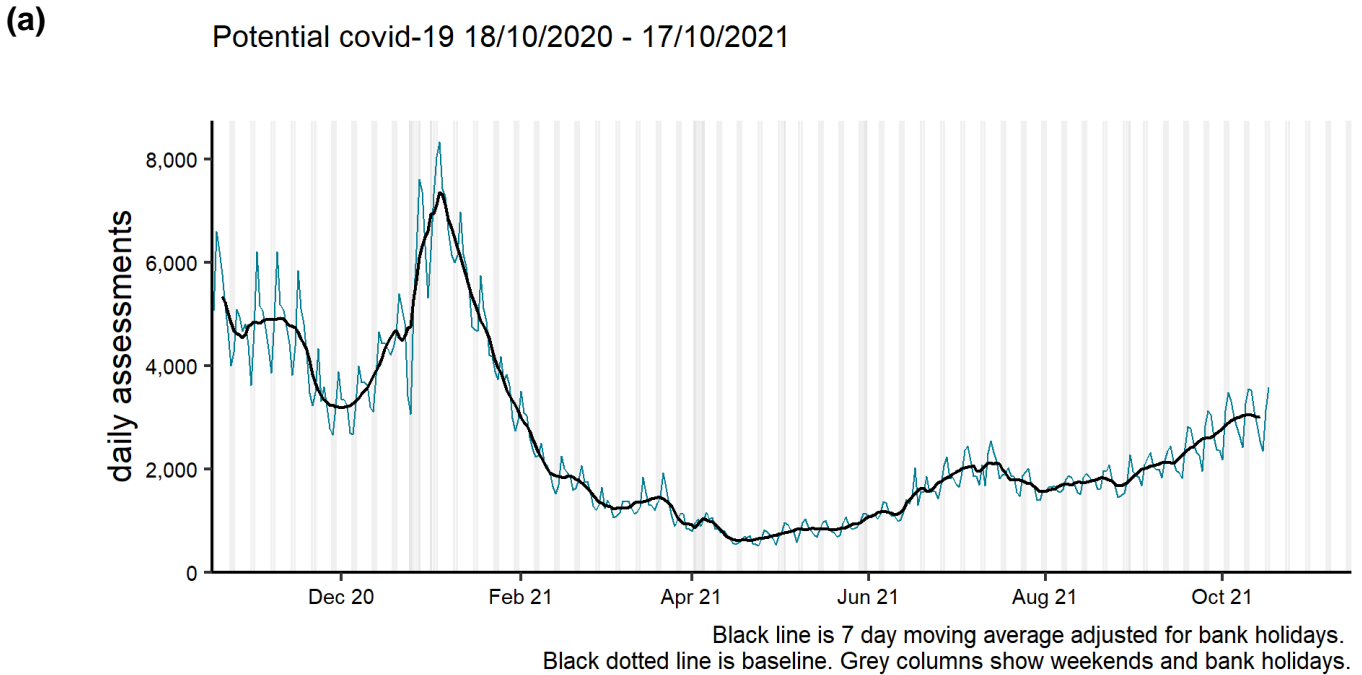
Potential covid-19 by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

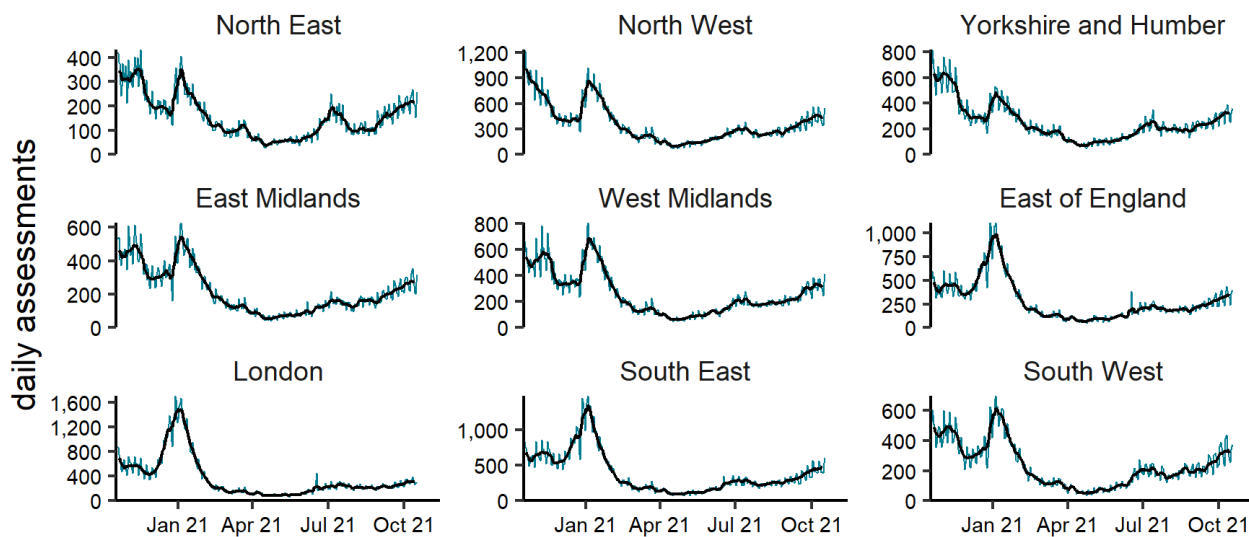
Potential COVID-19 NHS 111 online

Figure 16: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for potential COVID-19, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

Potential covid-19 by region 18/10/2020 - 17/10/2021

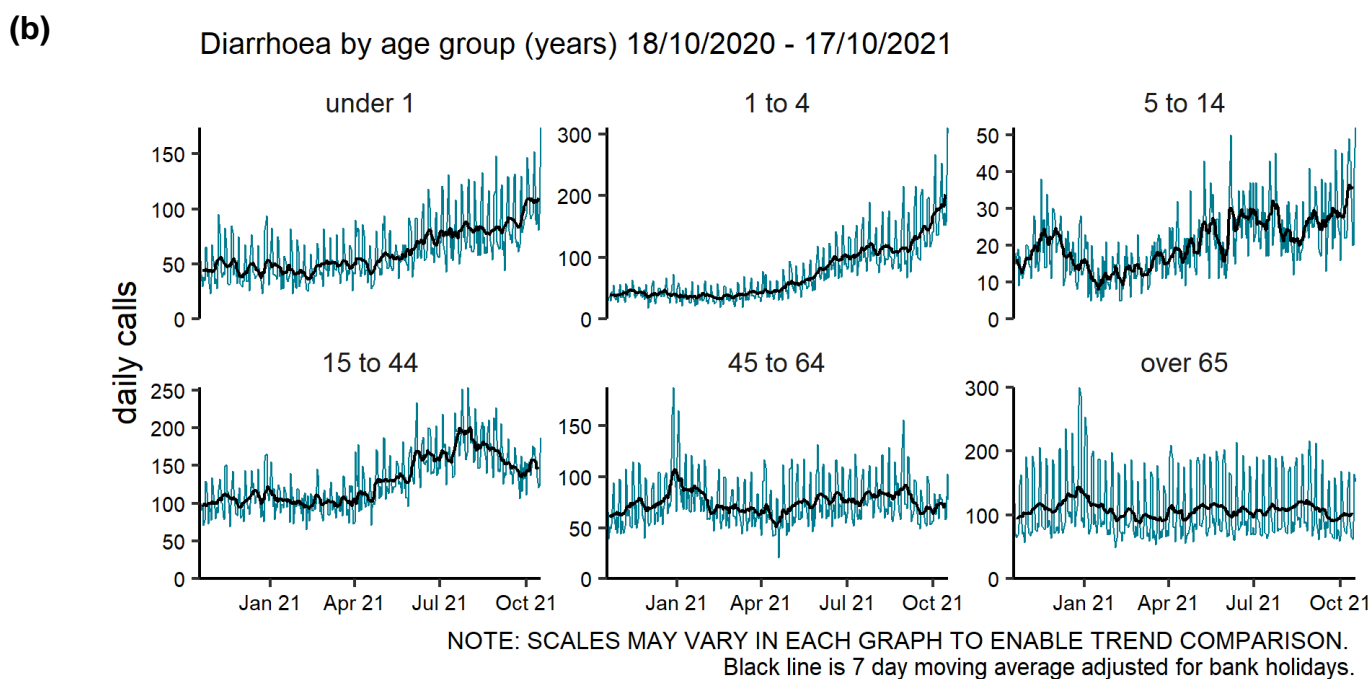
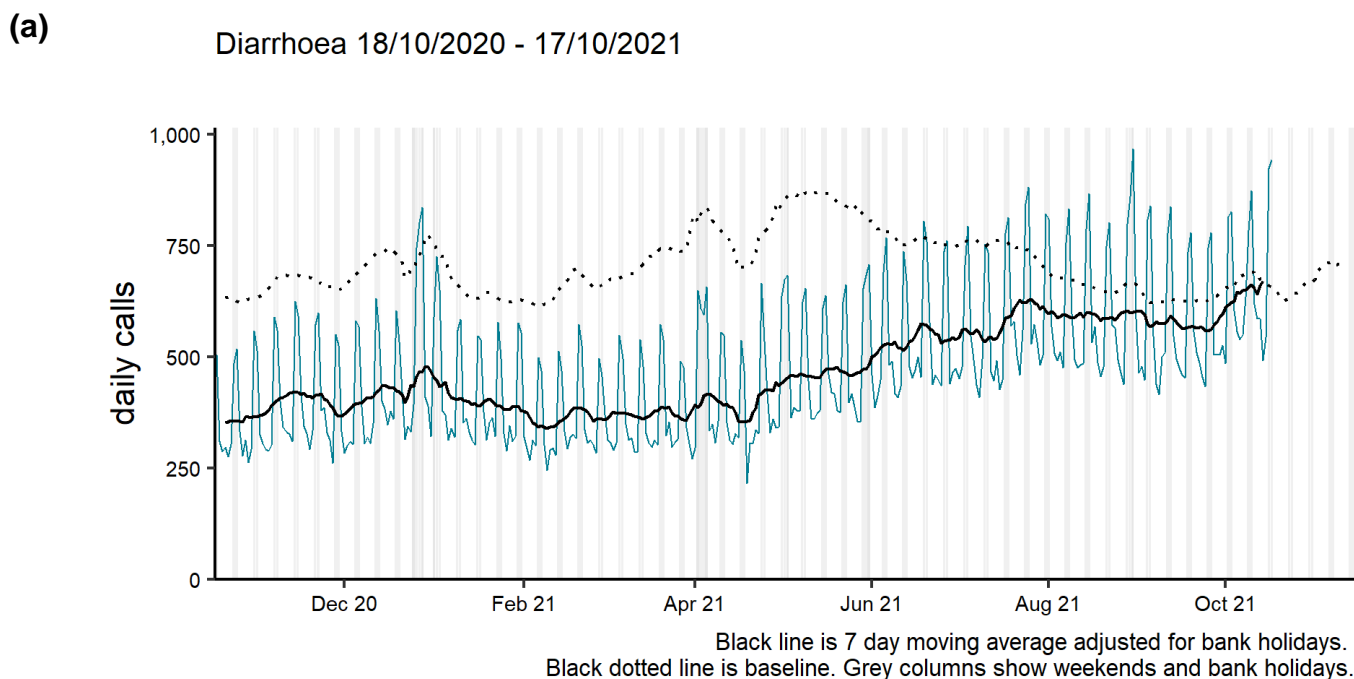


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

Gastrointestinal conditions

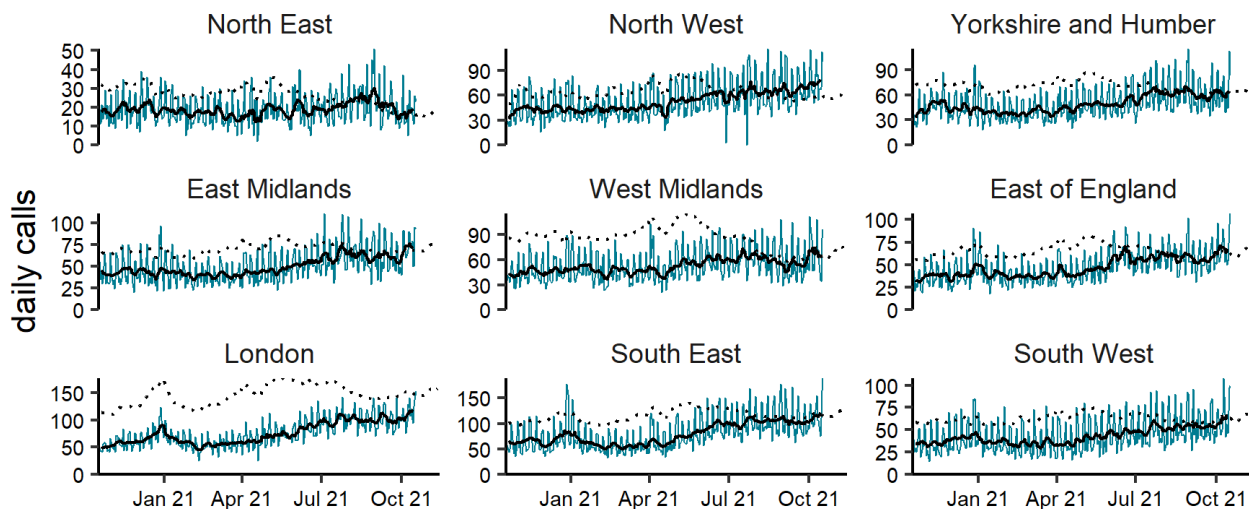
Diarrhoea NHS 111 calls

Figure 17: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for diarrhoea, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

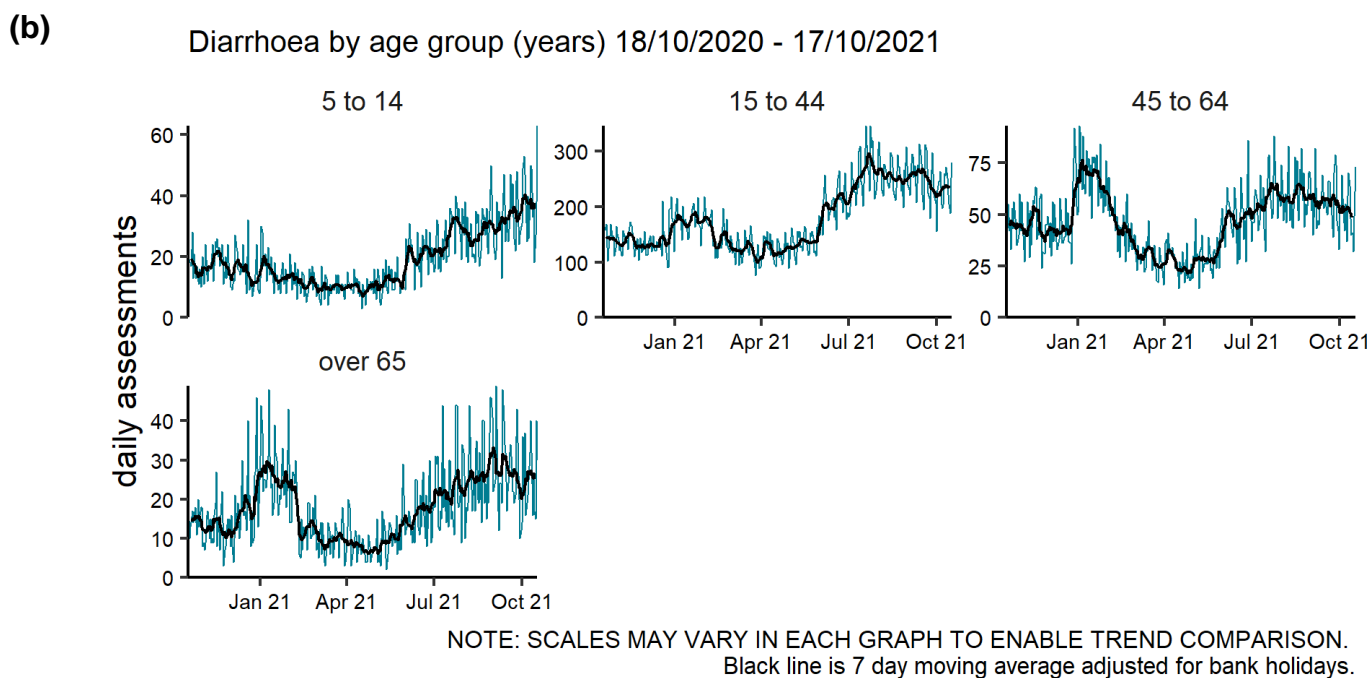
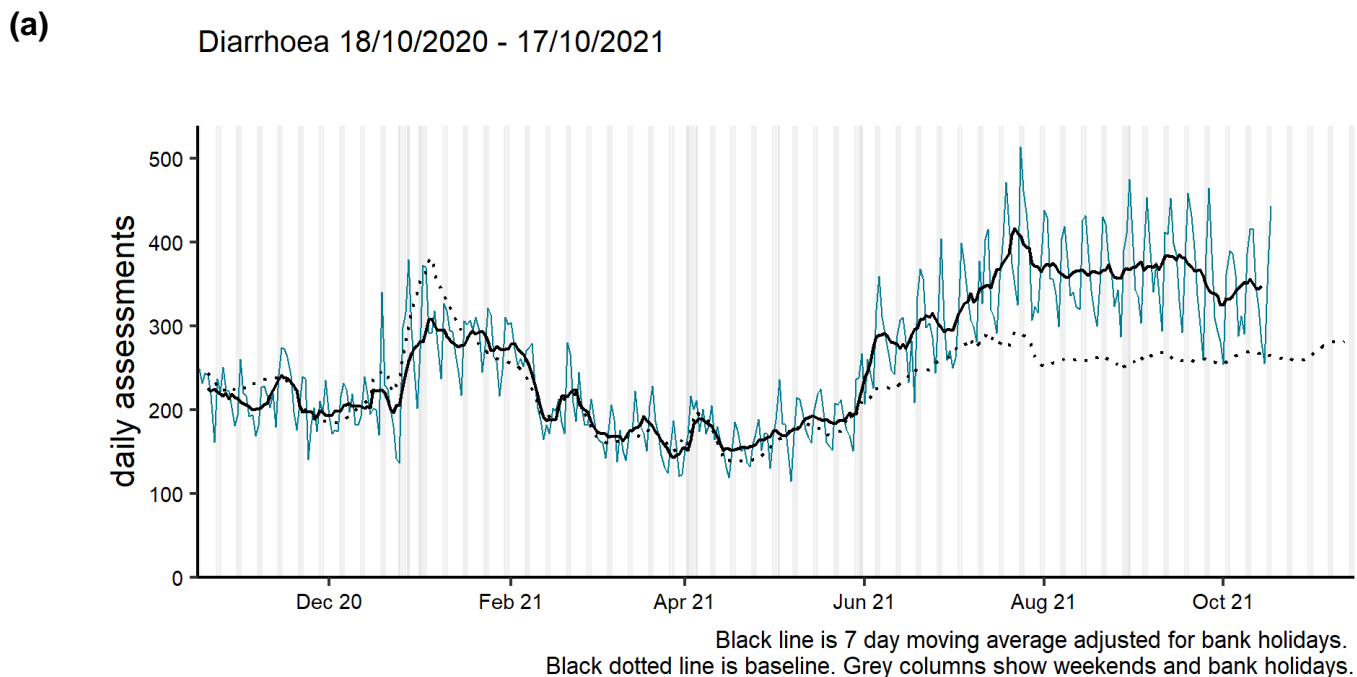
Diarrhoea by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

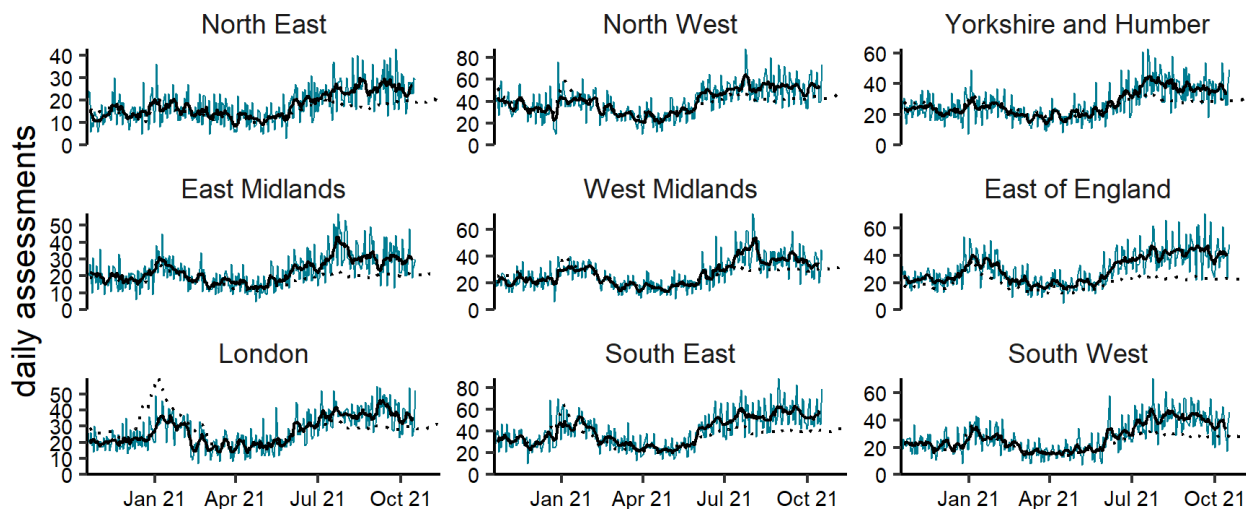
Diarrhoea NHS 111 online

Figure 18: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for diarrhoea, England (a) nationally, (b) by age and (c) by UKHSA Region.



(c)

Diarrhoea by region 18/10/2020 - 17/10/2021

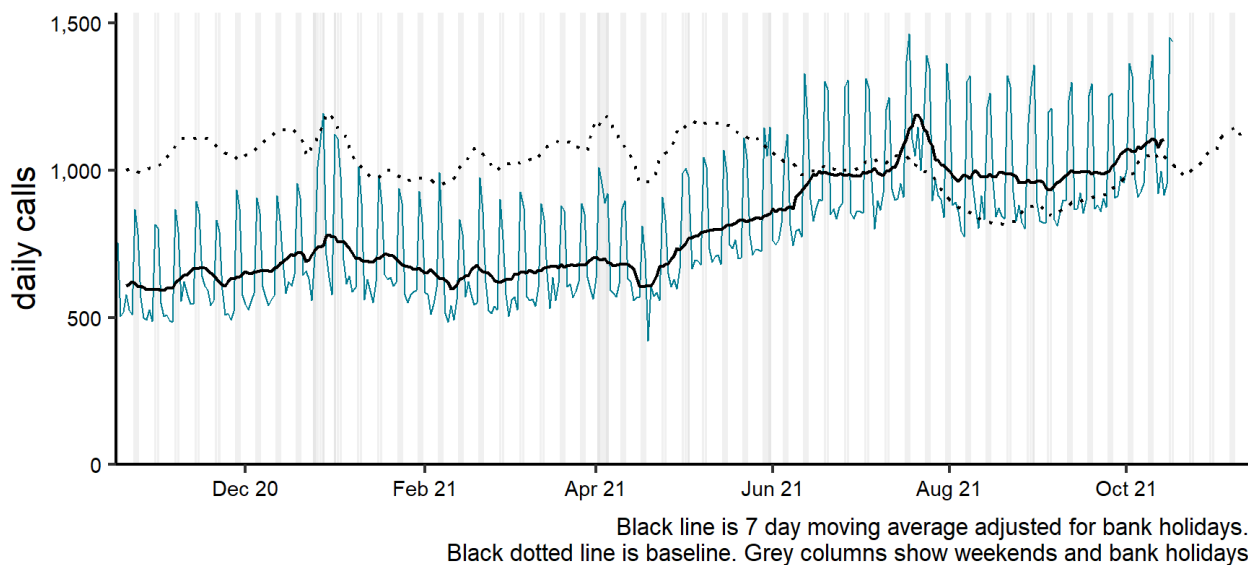


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

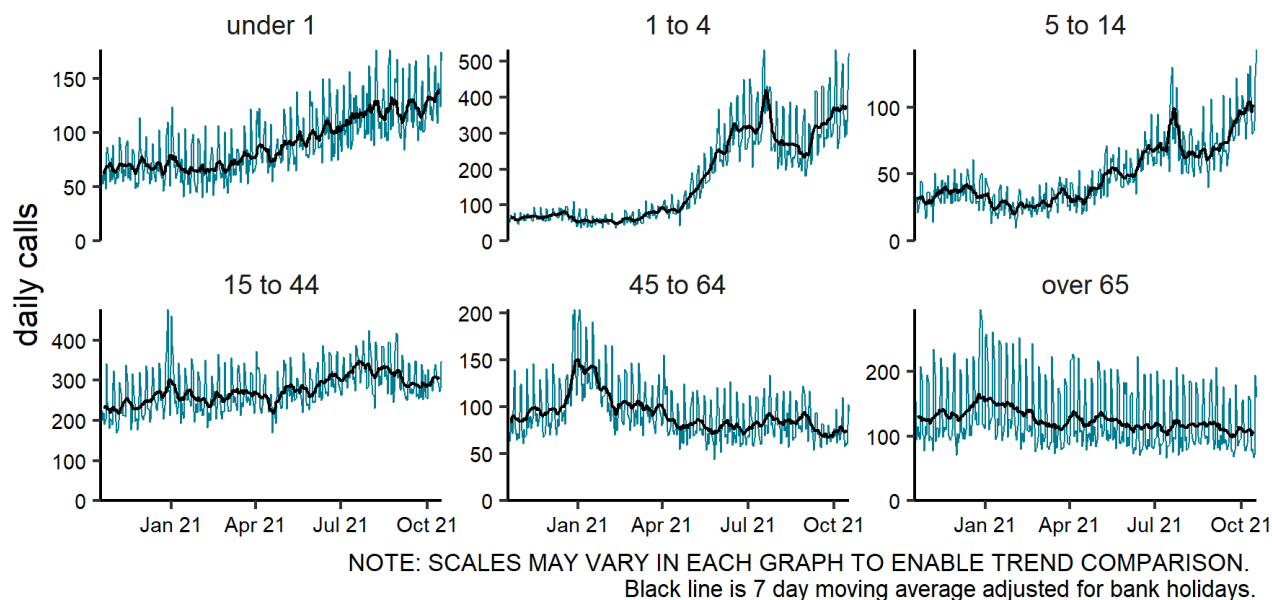
Vomiting NHS 111 calls

Figure 19: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for vomiting, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Vomiting 18/10/2020 - 17/10/2021

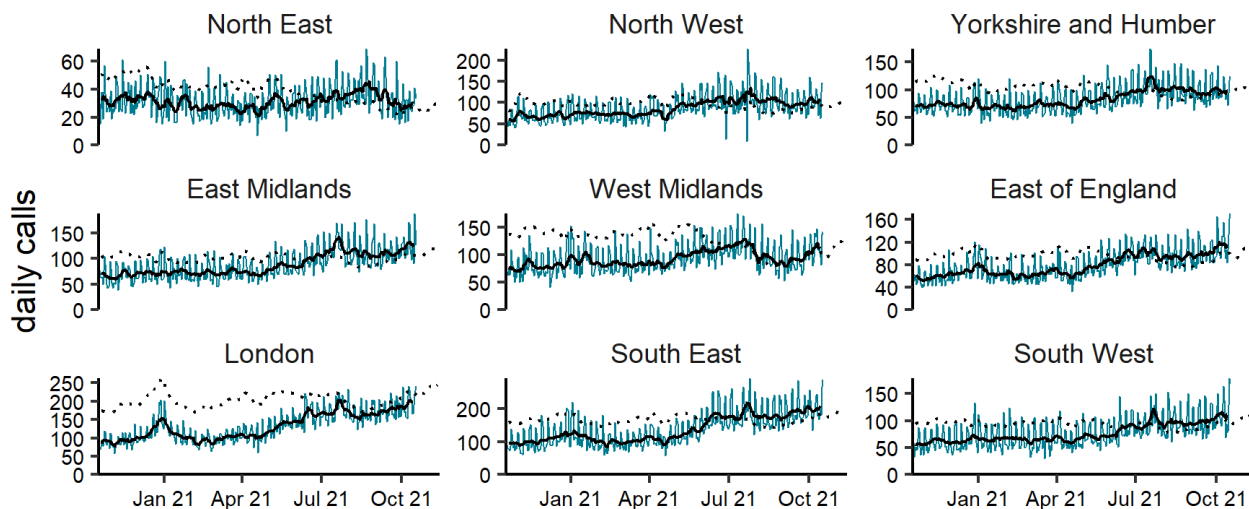


(b) Vomiting by age group (years) 18/10/2020 - 17/10/2021



(c)

Vomiting by region 18/10/2020 - 17/10/2021

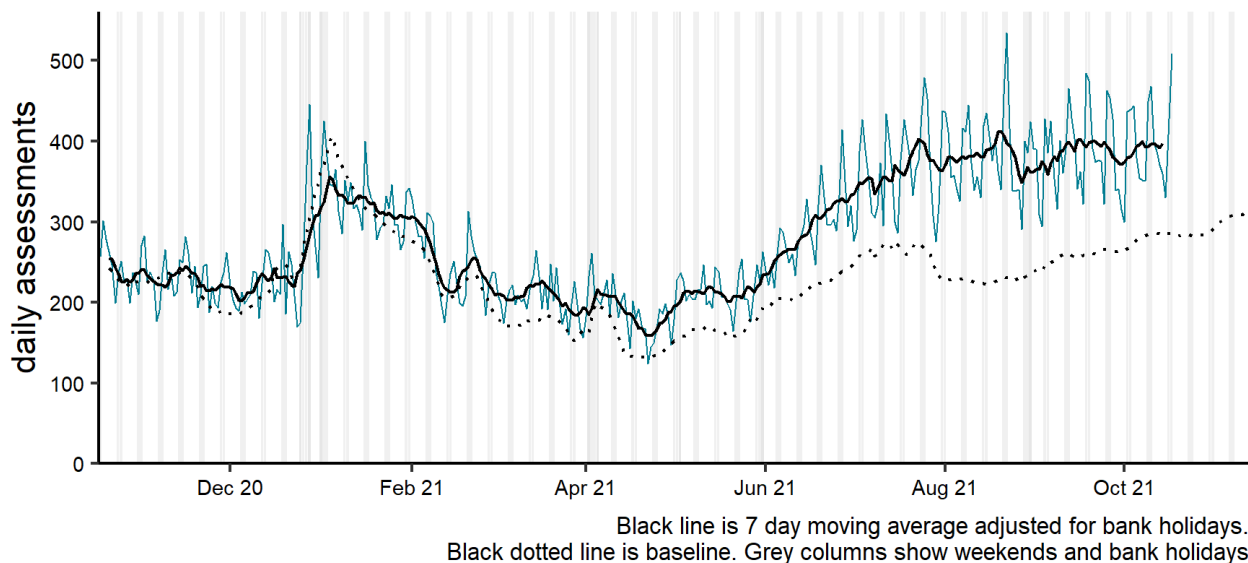


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

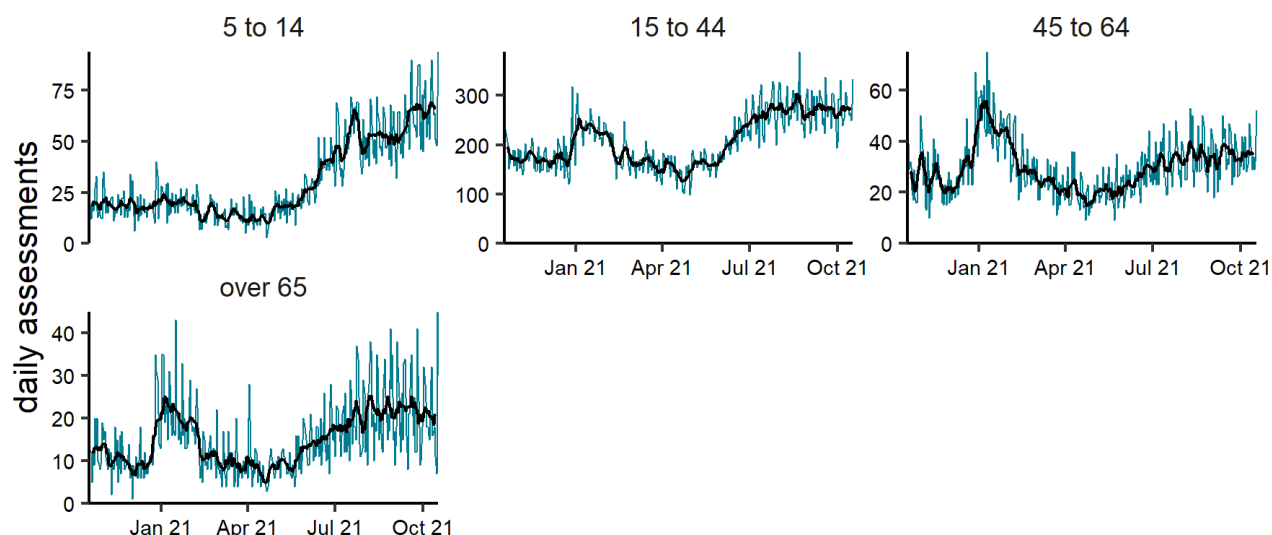
Vomiting NHS 111 online

Figure 20: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for vomiting, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Vomiting 18/10/2020 - 17/10/2021



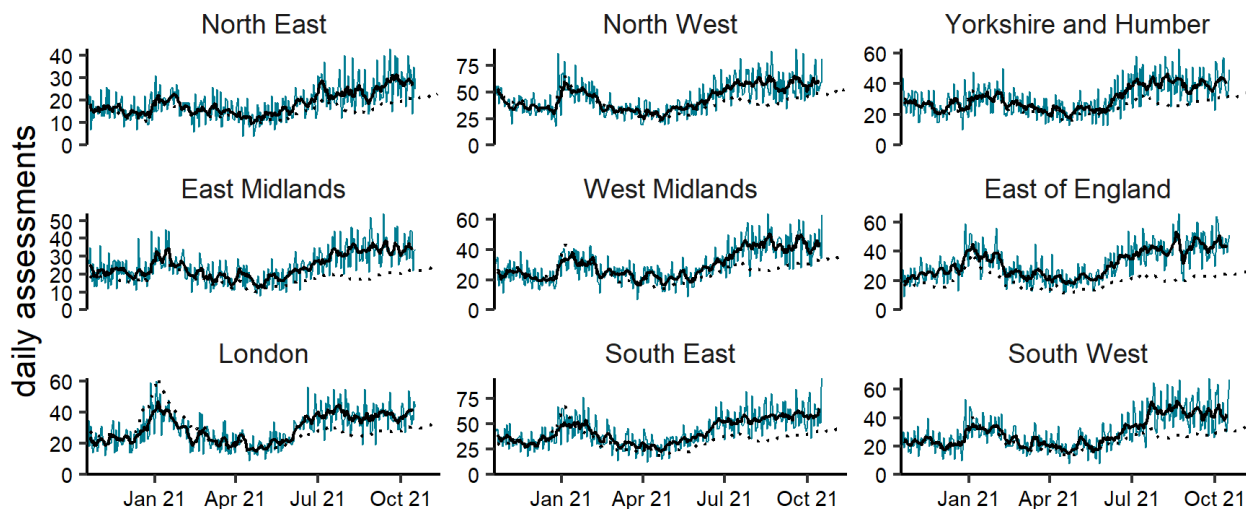
(b) Vomiting by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

Vomiting by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Seasonal environmental conditions

During set periods of the year the Met Office operates both heat and cold weather watch systems, in association with UKHSA. Syndromic indicators are used to monitor the impact of both extreme hot and cold weather in England during these periods and will be included below (where an appropriate syndromic indicator is available).

[Cold weather alert](#) period: 1 November to 31 March

[Heat-Health Alert](#) period: 1 June to 15 September

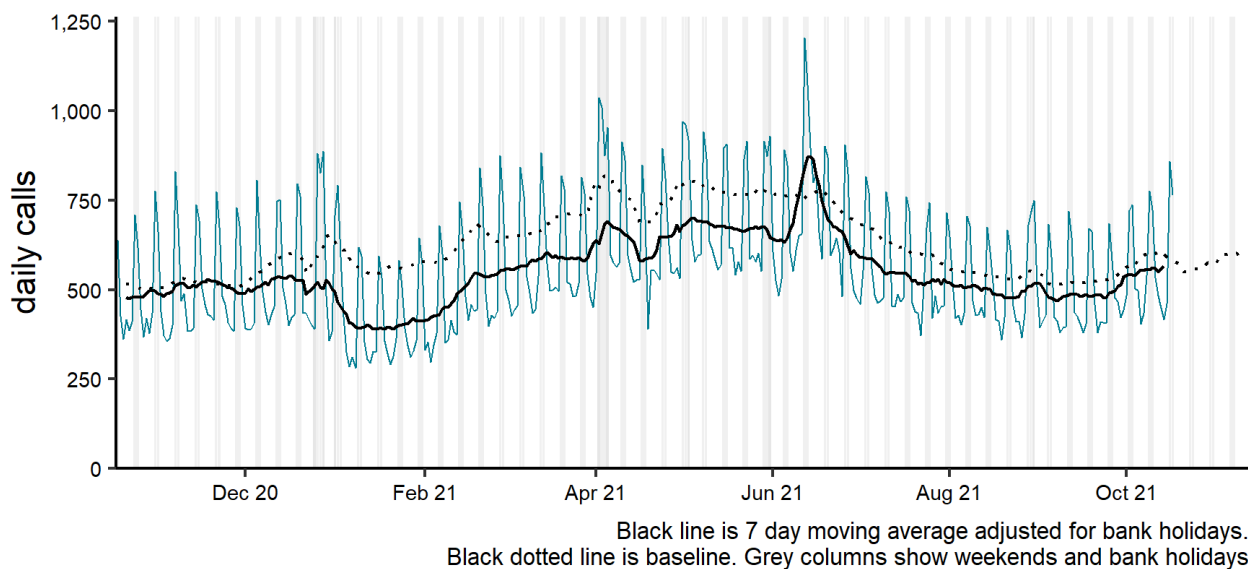
Weather alert level (current reporting week): **Level 0 - Long-term planning**

No weather watch in place

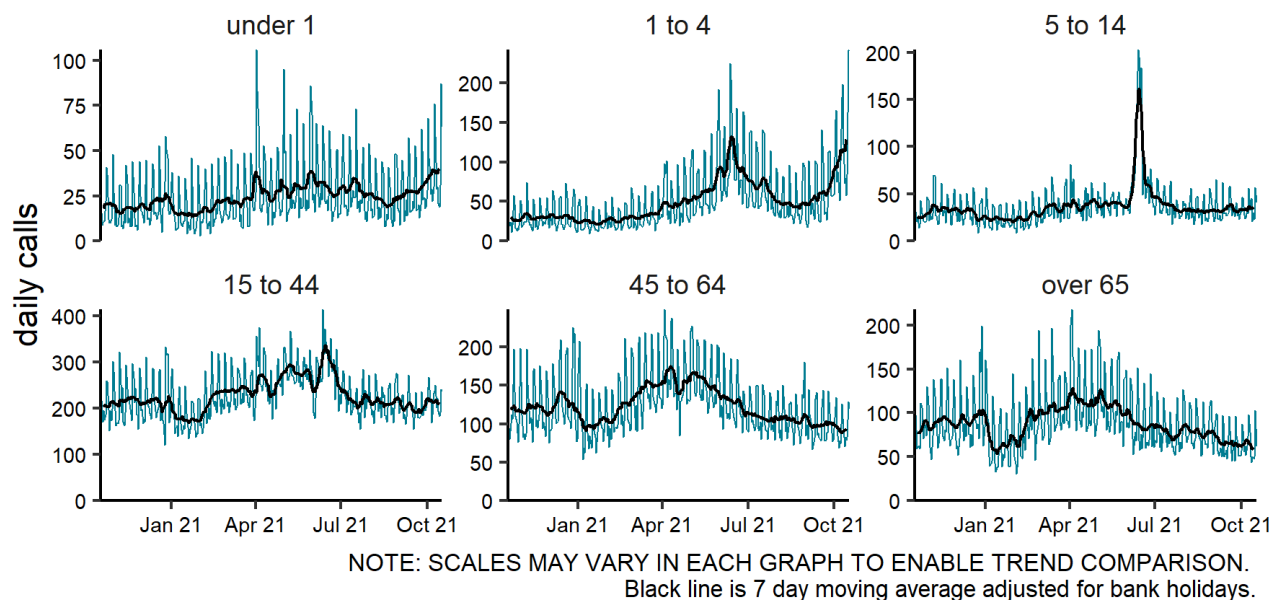
Eye problems NHS 111 calls

Figure 21: Daily number of NHS 111 calls (and 7-day moving average adjusted for bank holidays) for eye problems, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Eye problems 18/10/2020 - 17/10/2021

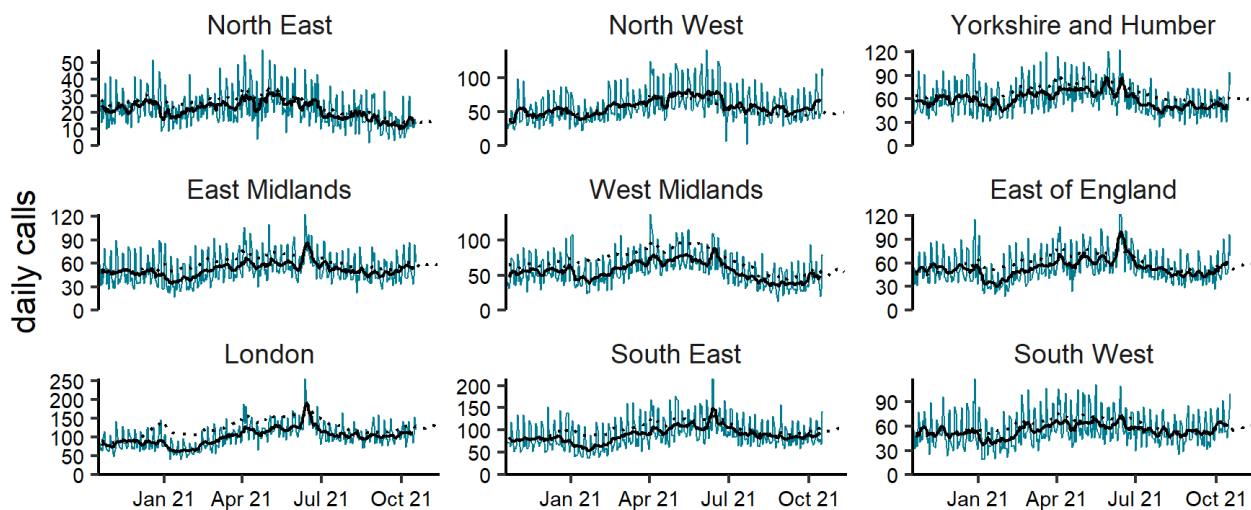


(b) Eye problems by age group (years) 18/10/2020 - 17/10/2021



(c)

Eye problems by region 18/10/2020 - 17/10/2021

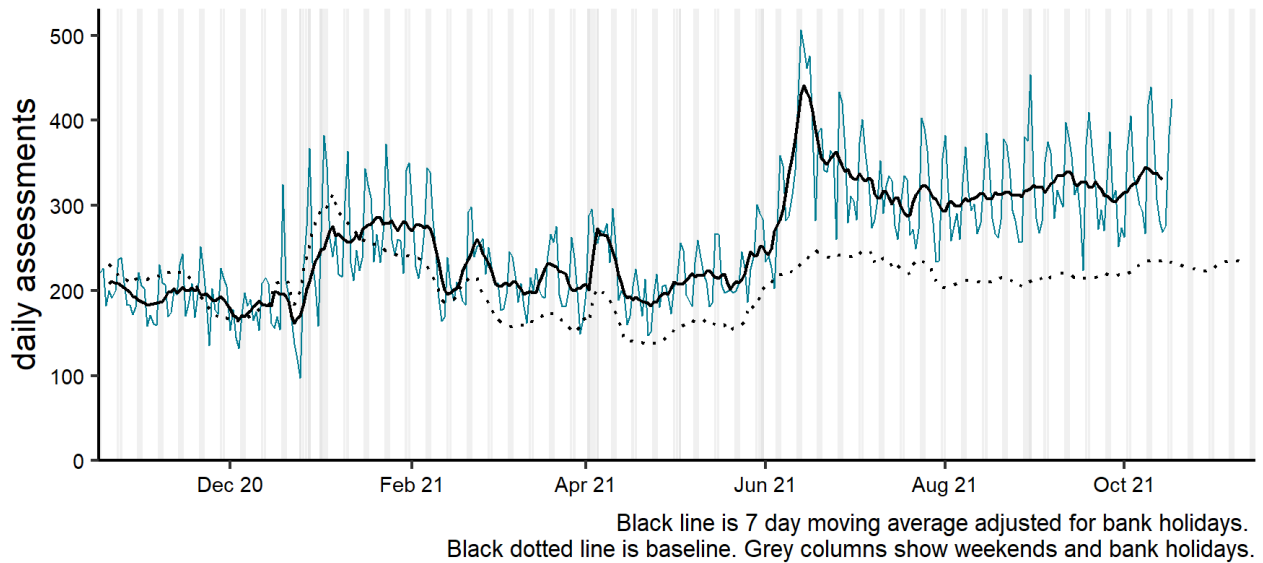


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

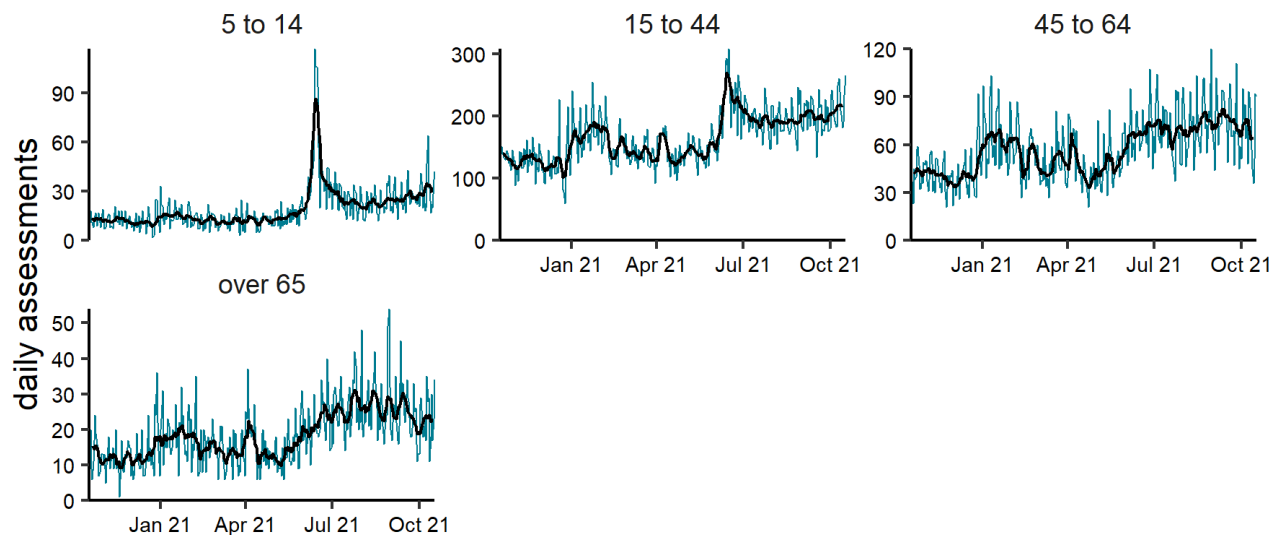
Eye problems NHS 111 online

Figure 22: Daily number of completed NHS 111 online assessments (and 7-day moving average adjusted for bank holidays) for eye problems, England (a) nationally, (b) by age and (c) by UKHSA Region.

(a) Eye problems 18/10/2020 - 17/10/2021



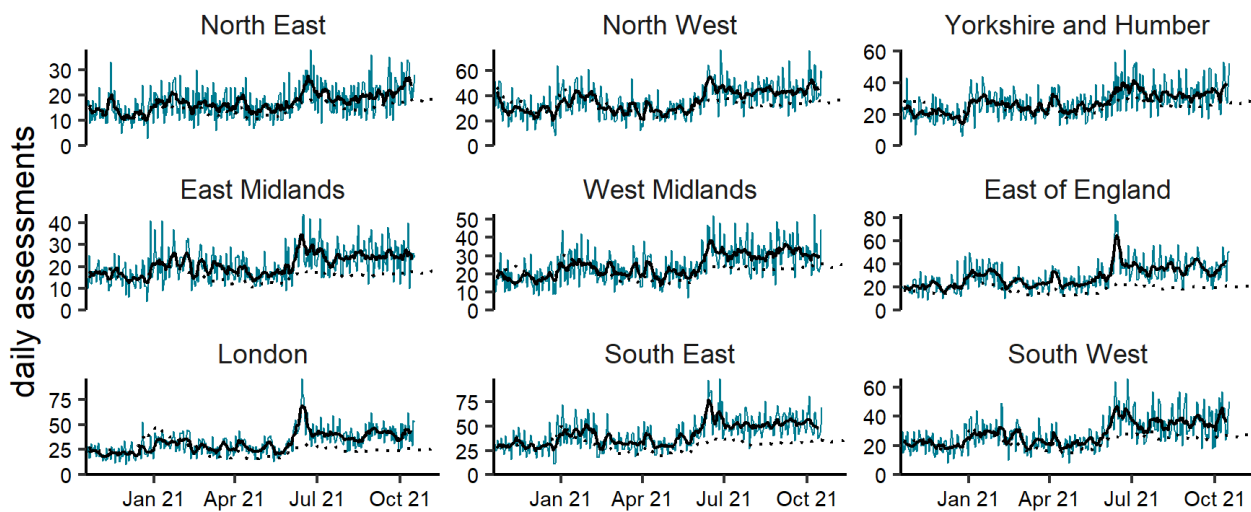
(b) Eye problems by age group (years) 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

Eye problems by region 18/10/2020 - 17/10/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Notes and caveats

The following additional caveats apply to the UKHSA remote health advice syndromic surveillance system:

- all NHS 111 syndromic trends should be interpreted with caution due to changes in national advice and guidance regarding access to health care services as well as updates and changes to service provision during the COVID-19 pandemic
- data presented should be used to monitor trends rather than numbers of ‘cases’:
 - NHS 111 calls data may not include the most urgent calls which are rapidly redirected to ambulance services
 - any user that launches an online assessment may access the service multiple times and can change their answers and follow multiple journeys through the online system: only complete assessments are included here
 - an individual may use both the NHS 111 online and NHS 111 telephony services; counts from the two services cannot be considered as distinct counts of individuals
 - NHS 111 online assessment data does not include children under 5 years of age
- baselines:
 - were last remodelled May 2021
 - are constructed from historical data since January 2018
 - represent seasonally expected levels of activity
 - take account of any known substantial changes in data collection, population coverage or reporting practices
 - the COVID-19 pandemic period is excluded, to show seasonally expected levels if COVID-19 had not occurred
 - may be remodelled to include the impacts seen during periods of the COVID-19 pandemic if/when appropriate due to introduction of large scale public health interventions which affect NHS 111 usage
- as NHS 111 systems evolve to meet service needs, we continue to work with NHS 111 and NHS England to ensure that:
 - changes impacting on syndromic indicators reported in this bulletin are identified and accounted for as far as possible
 - changes are described in: **Data quality issues of note this week**
- further information about NHS 111 can be found [here](#)

COVID-19 syndromic surveillance

The ‘potential COVID-19’ syndromic indicator reported here for all NHS 111 data is based on the outcome of each call or online assessment (known as the disposition), not the symptom (Pathway) selected:

- potential COVID-19 is the only syndromic indicator which is based on disposition

- potential COVID-19 calls and online assessments may therefore also appear in other syndromic indicators based on the Pathway of each call or online assessment
- these data are based on potential COVID-19 symptoms reported and are not based on outcomes of tests for coronavirus

Acknowledgements

We are grateful to NHS 111 and to NHS Digital for their assistance and support in providing the anonymised data that underpin this system.

About the UK Health Security Agency

The UK Health Security Agency is an executive agency, sponsored by the [Department of Health and Social Care](#).

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