Academic Health Science Network
NORTH EAST AND NORTH CUMBRIA

NHS
North East Quality Observatory Service

Population Health & Healthcare Surveillance
Impact of COVID-19
Intelligence for the North East & North Cumbria AHSN

January 2021
Healthcare utilisation
(Appendix 1 - Update to Report 2)

Report Content

This Appendix provides an update to Report 2 (November 2020), which focused on a key set of metrics relating to healthcare utilisation - hospital activity-based information from A&E, outpatient and inpatient settings - presented using the latest data available from Hospital Episode Statistics (via NHS Digital)[1].

The data provided in this Appendix is taken from Hospital Episode Statistics (HES), provided by NHS Digital. Detailed indicator definitions are available upon request.
Data was extracted from HES at Lower Layer Super Output Area (LSOA) and aggregated to CCG level for reporting purposes.

The hospital activity data relating to each indicator is presented:
1. By CCG, with NENC and England rates (**directly standardised rates**) - for 2017/18, 2018/19 and 2019/20

2. As a trend over time, for all CCGs in the NENC combined - from April 2017 to September 2020 inclusive (note that data from 2020/21 is currently classed as provisional).
All small numbers have been removed from this report and a rounding formula has been applied to the remaining data (applied to final calculated figure only and not to the constituent parts).

Geography
On 1 April 2020 there were a number of changes (mergers) relating to Clinical Commissioning Groups (CCGs) within the North East and North Cumbria (NENC) area.
Durham Dales, Easington and Sedgefield CCG and North Durham CCG merged to become NHS County Durham CCG; Darlington CCG, Hartlepool and Stockton on Tees CCG and South Tees CCG became NHS Tees Valley CCG; and Hambleton, Richmondshire and Whitby CCG became part of NHS North Yorkshire CCG.
Where the data is presented by CCG, this is reported for the current 8 CCGs that are part of the NENC area. Further disaggregation of the data by CCG (pre April 2020) and GP practice or by lower super output area / deprivation decile may be possible upon request.

The aim is to support organisations by providing them with a better understanding of the impact of COVID-19 across the NENC region. The data is presented at CCG level to provide an overview at this stage however further breakdown of this, for example to PCN level or by Trust is possible upon request.

The information in this report can be used to help support planning of services and the programme to resume routine healthcare services as the pandemic evolves. It is important that these plans to reset the system are able to address existing inequalities to avoid any further exacerbation of these issues.

1. Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. The 2020/21 HES data is classed as provisional and should therefore be treated as an estimate until the final National Statistics annual publications.
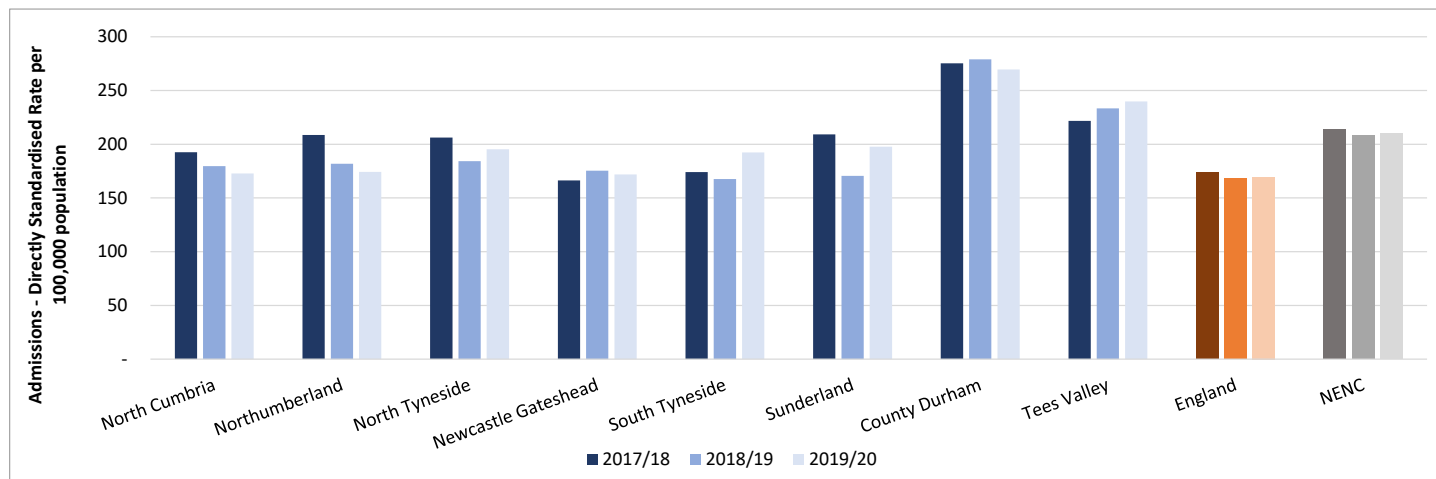
Appendix 1 - update to Report 2

2. Emergency admissions for myocardial infarction (per 100,000)
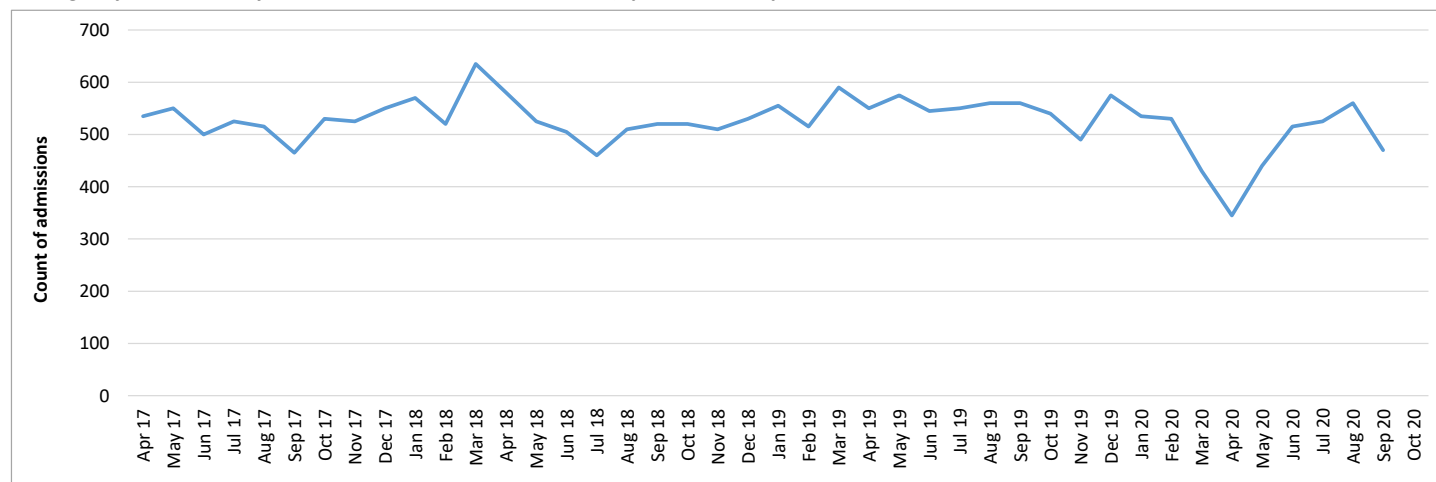
Definitions and data analysis

A heart attack (myocardial infarction or MI) is a serious medical emergency in which the supply of blood to the heart is suddenly blocked, usually by a blood clot. Coronary heart disease is the leading cause of heart attacks and behavioural risk factors play a large part in the prevention of the condition (such as smoking, obesity and a high-fat diet).

This indicator is based on emergency hospital admissions for acute myocardial infarction or subsequent myocardial infarction, where there is a relevant diagnosis (ICD10) code in any diagnosis position of the admitting episode.

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
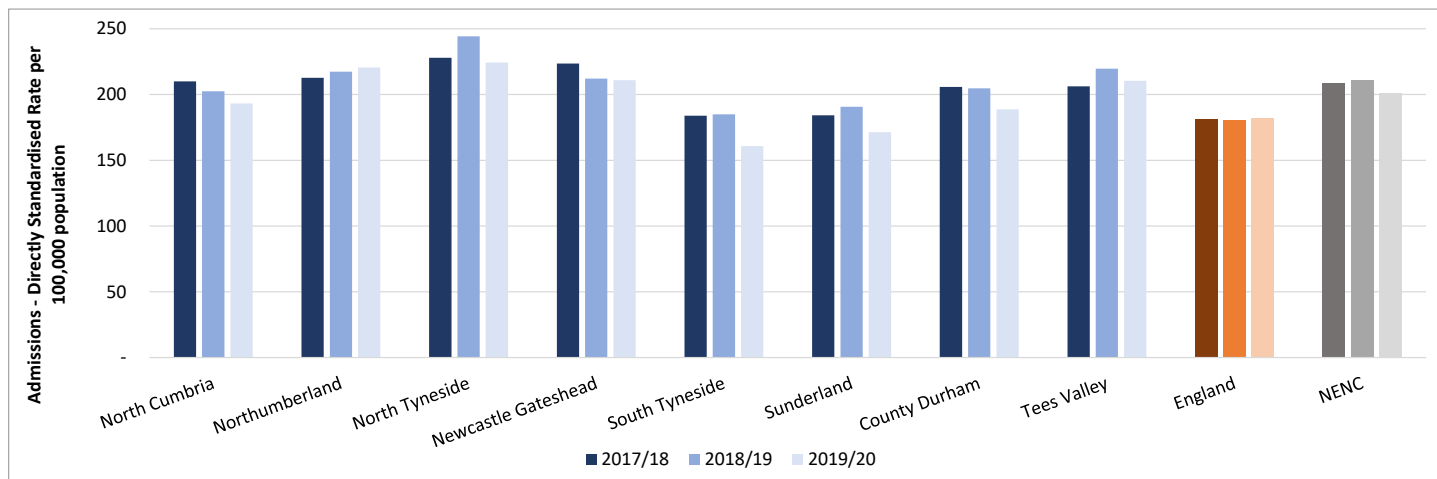
3. Emergency admissions for stroke (per 100,000)
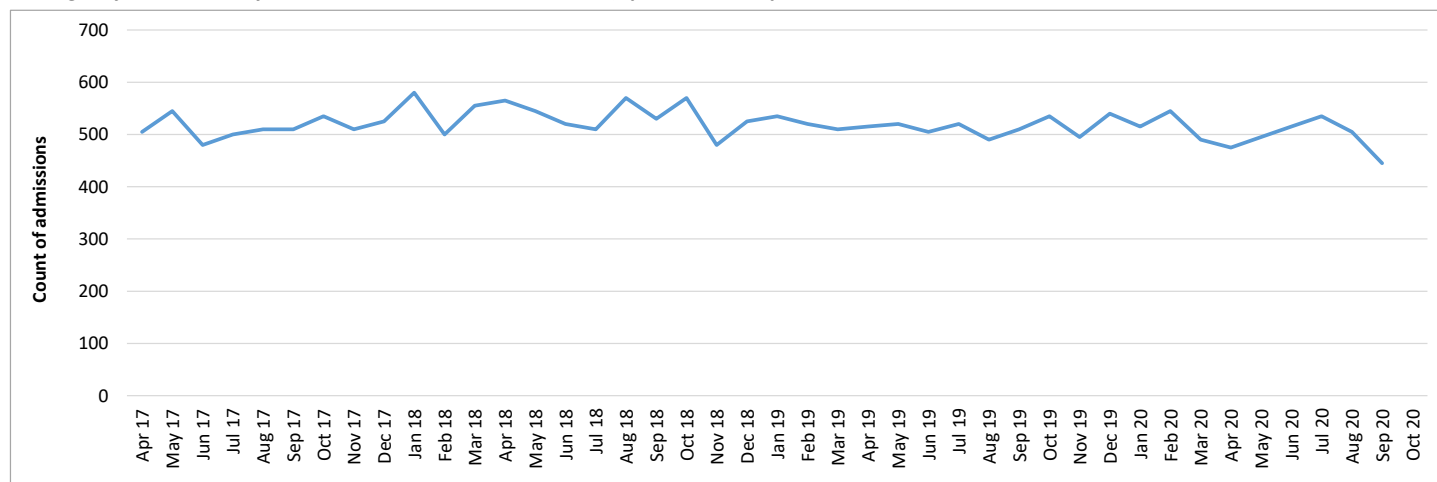
Definitions and data analysis

A stroke is a serious life-threatening medical condition that happens when the blood supply to part of the brain is cut off. Strokes are a medical emergency and urgent treatment is essential. Behavioural risk factors play a large part in the prevention of stroke, with smoking, excessive alcohol use and an unhealthy diet being major risk factors.

This indicator is based on emergency hospital admissions for intracerebral haemorrhage, intracranial haemorrhage, cerebral infarction or unspecified stroke, where there is a relevant diagnosis (ICD10) code in any diagnosis position of the admitting episode.

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

4. Emergency admissions for respiratory disease (per 100,000)

Definitions and data analysis

The burden of respiratory disease on hospital activity is significant. Exacerbations of COPD and asthma are significant causes of respiratory admissions, yet many episodes could be prevented by improved treatment compliance, symptom control and timely treatment of acute exacerbations.

This indicator is based on emergency hospital admissions for respiratory disease, where there is a relevant diagnosis (ICD10) code in the primary diagnosis position of the admitting episode. Note that COVID-19 specific diagnosis codes are not included within the diagnosis chapter relating to respiratory disease.

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
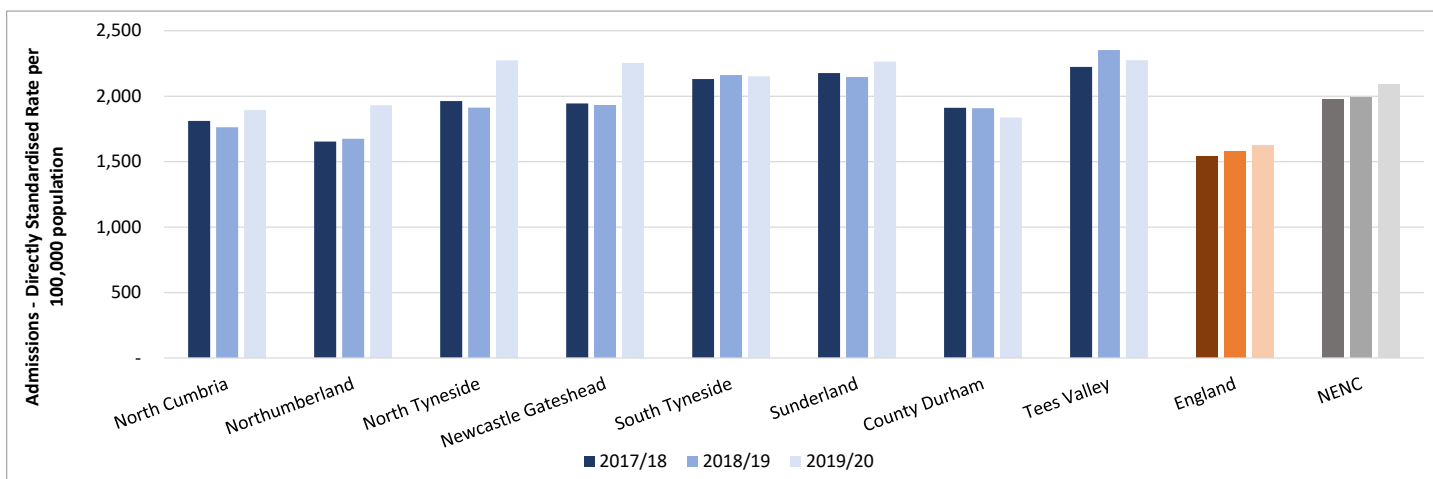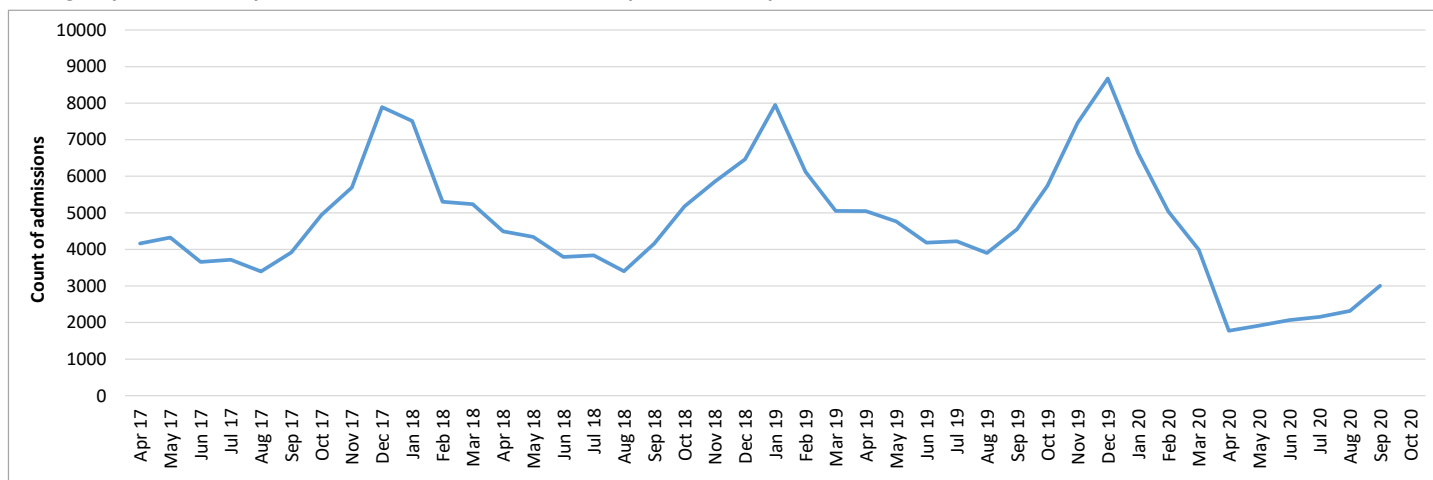
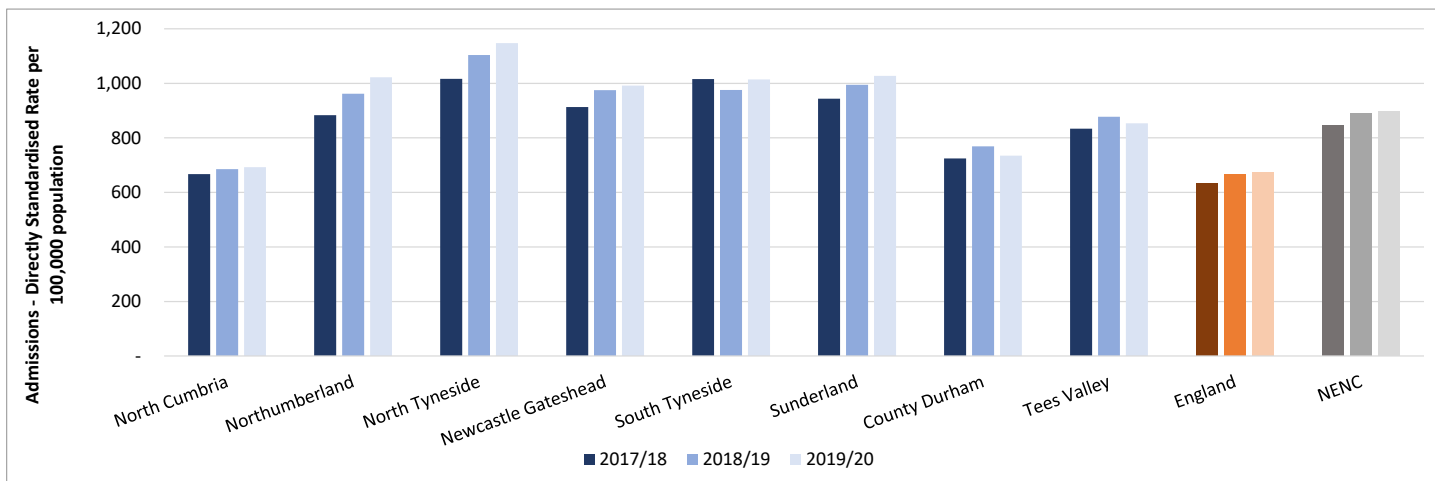# 5. Alcohol-related hospital admissions (per 100,000)

Definitions and data analysis

Alcohol consumption is a contributing factor to hospital admissions and deaths from a diverse range of conditions. Alcohol-related admissions can be reduced through local interventions to reduce alcohol misuse and harm.
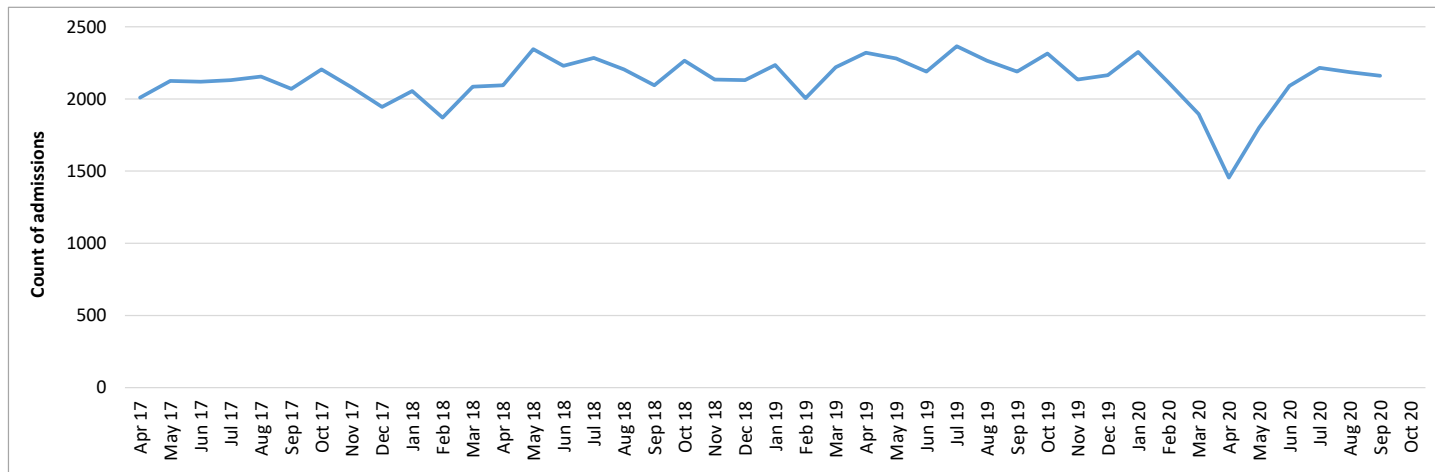
This indicator reports the admission rate to hospital where the primary diagnosis is an alcohol-attributable code or a secondary diagnosis is an alcohol-attributable external cause code. For each episode identified, an alcohol-attributable fraction is applied, which relates to the extent to which alcohol contributes to a health outcome. The total number of alcohol-related hospital admissions is therefore not a number of actual people or admissions, but an estimated number of admissions calculated as the sum of the fractions.

This indicator is available in the PHE Fingertips tool (ID 91414).

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
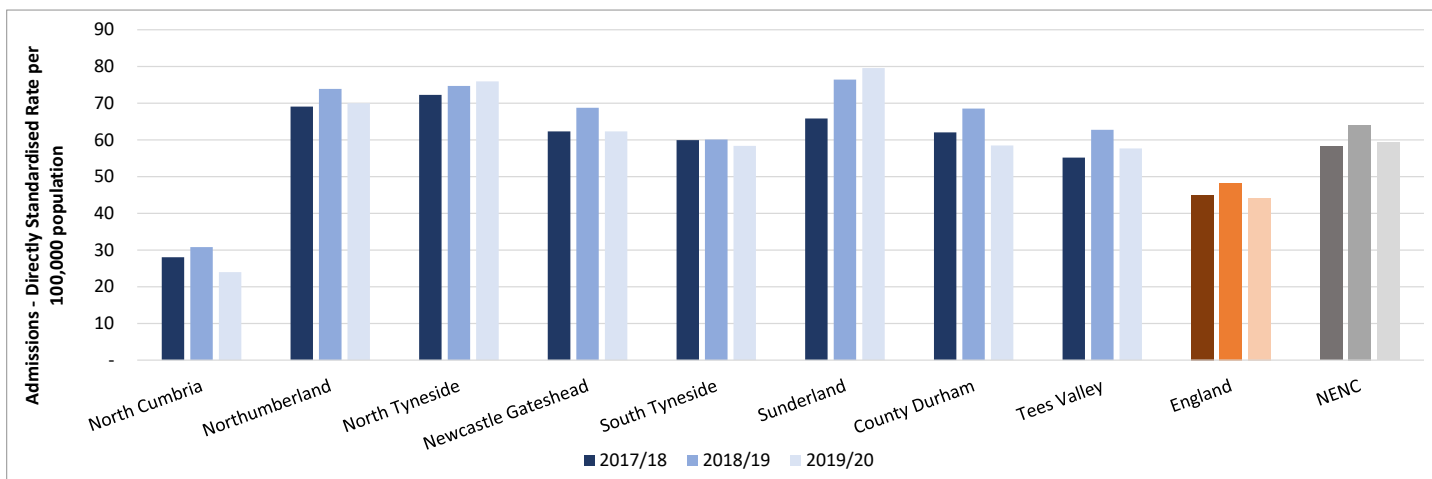
6. Emergency admissions for violence (including sexual violence), per 100,000
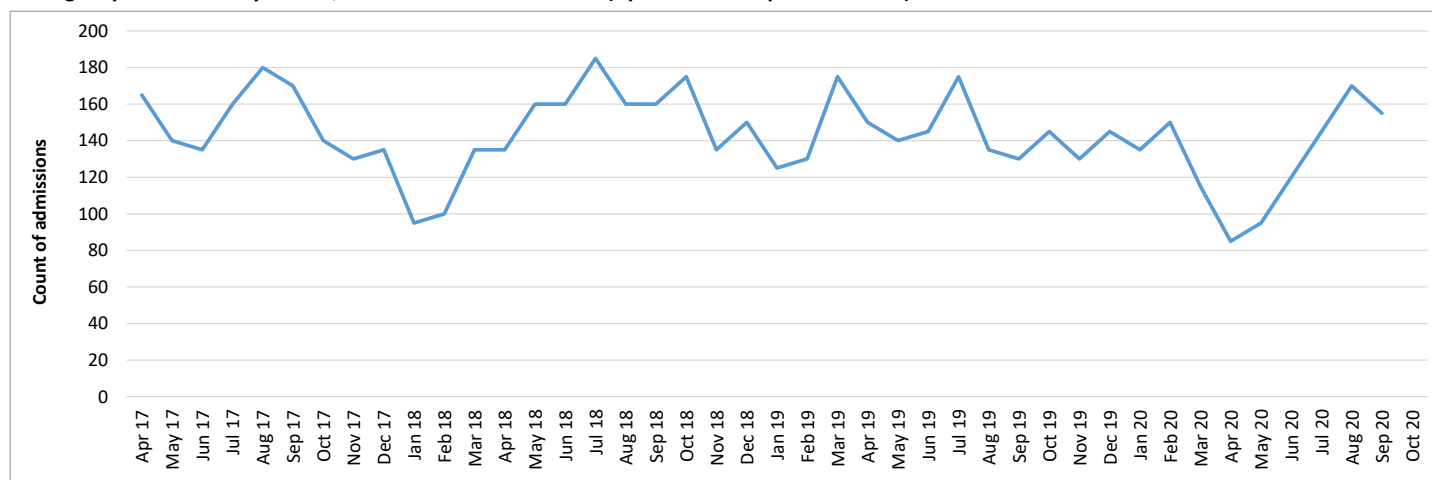
Definitions and data analysis

This indicator enables a focus on the interventions that are effective and evidence-based, including a greater focus on prevention and treatment, which need to be considered alongside criminal justice measures for a balanced response.

This indicator is available in the PHE Fingertips tool (ID 11201) and is based on activity where there is a recording of violent crime (classified by ICD10 codes X85 to Y09) in any position of the admitting episode.

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

7. Emergency admissions for injuries due to falls in people aged 65-79 years old (per 100,000)

Definitions and data analysis

Falls are the largest cause of emergency hospital admissions for older people and have a significant impact on long term outcomes, such as people moving into long-term nursing or residential care. The measure should be understood in terms of assessing health service utilisation rather than assessing need, as many injurious falls will not result in emergency admissions.

This indicator is available in the PHE Fingertips tool (ID 22402) and reports emergency admissions for falls injuries classified by primary diagnosis codes S00-T98 and external cause codes (ICD10 W00-W19).

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
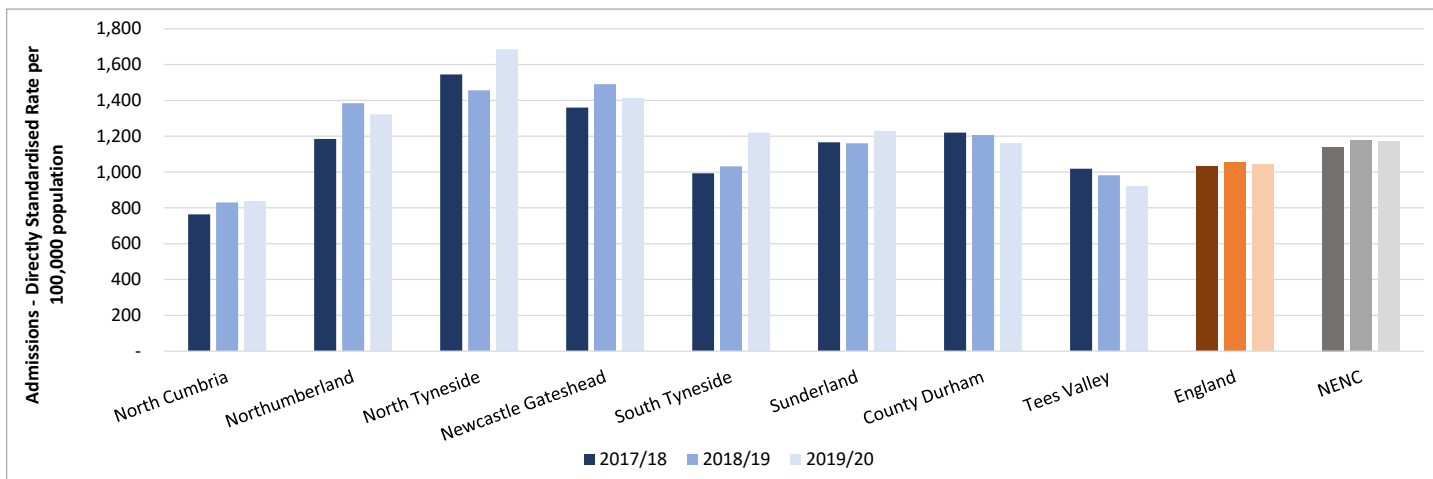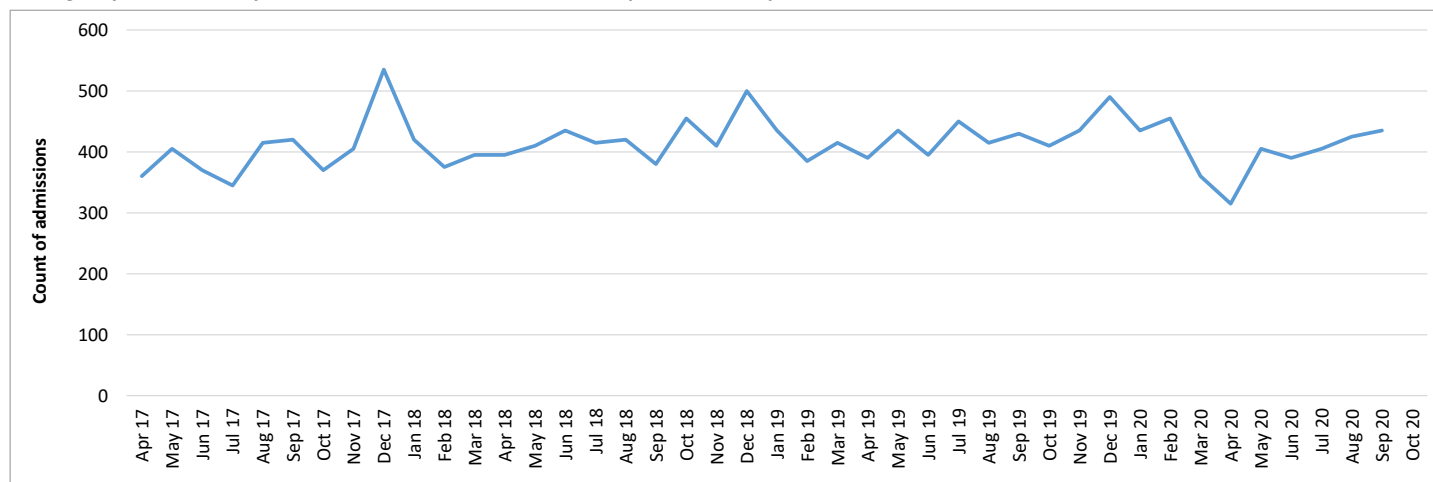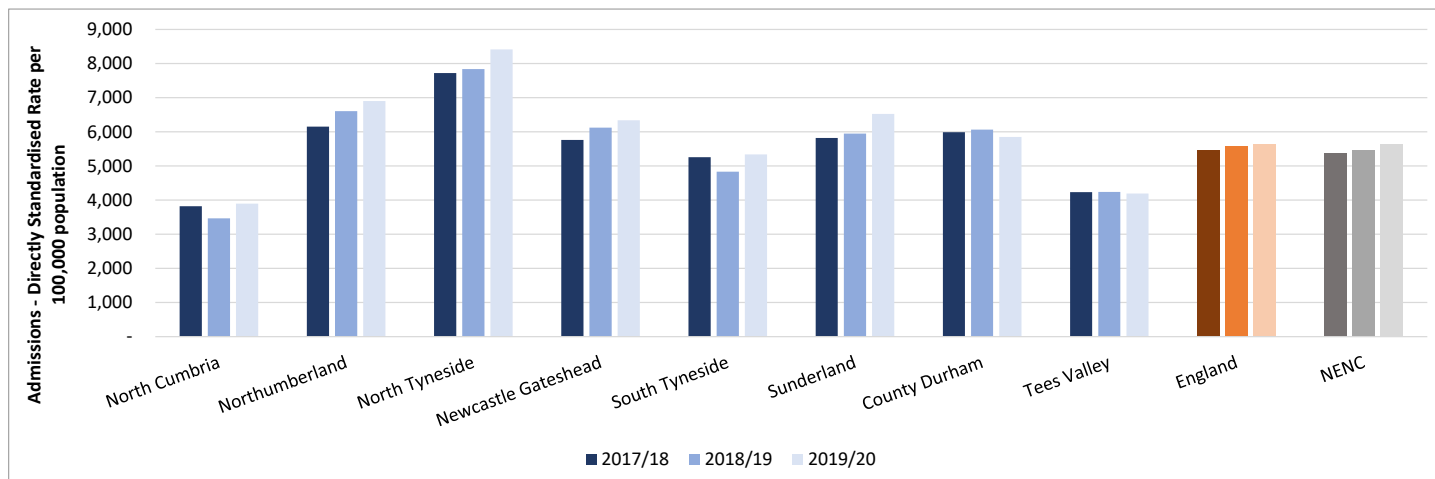
8. Emergency admissions for injuries due to falls in people aged 80+ years old (per 100,000)
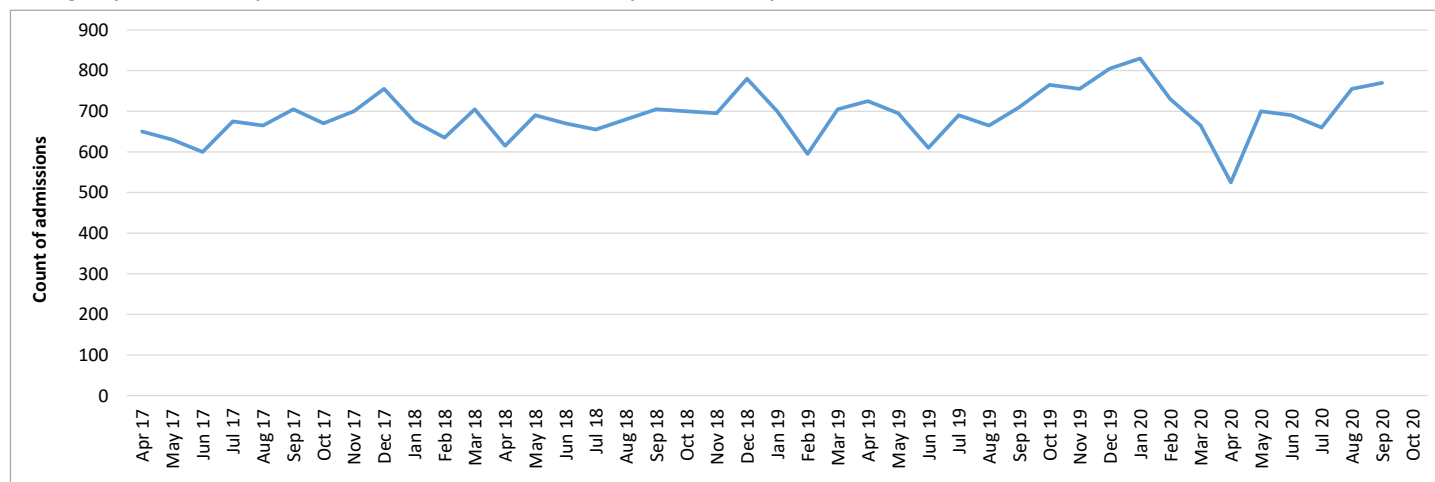
Definitions and data analysis

Falls are the largest cause of emergency hospital admissions for older people and have a significant impact on long term outcomes, such as people moving into long-term nursing or residential care. The measure should be understood in terms of assessing health service utilisation rather than assessing need, as many injurious falls will not result in emergency admissions.

This indicator is available in the PHE Fingertips tool (ID 22403) and reports emergency admissions for falls injuries classified by primary diagnosis codes S00-T98 and external cause codes (ICD10 W00-W19).

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
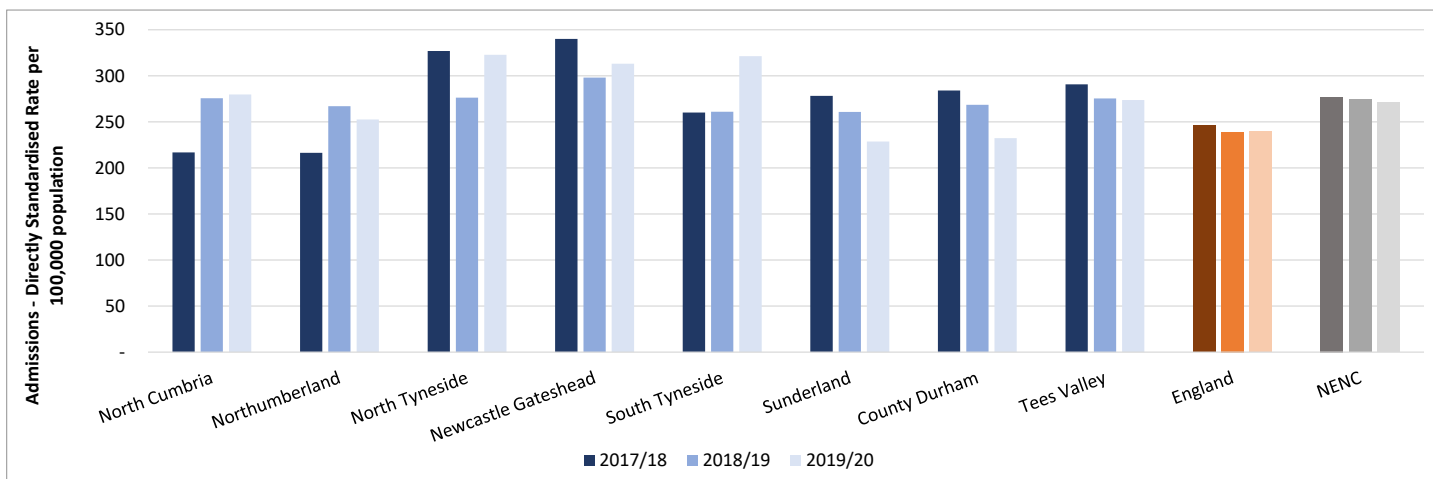
9. Emergency admissions for fractured neck of femur in people aged 65-79 years (per 100,000)
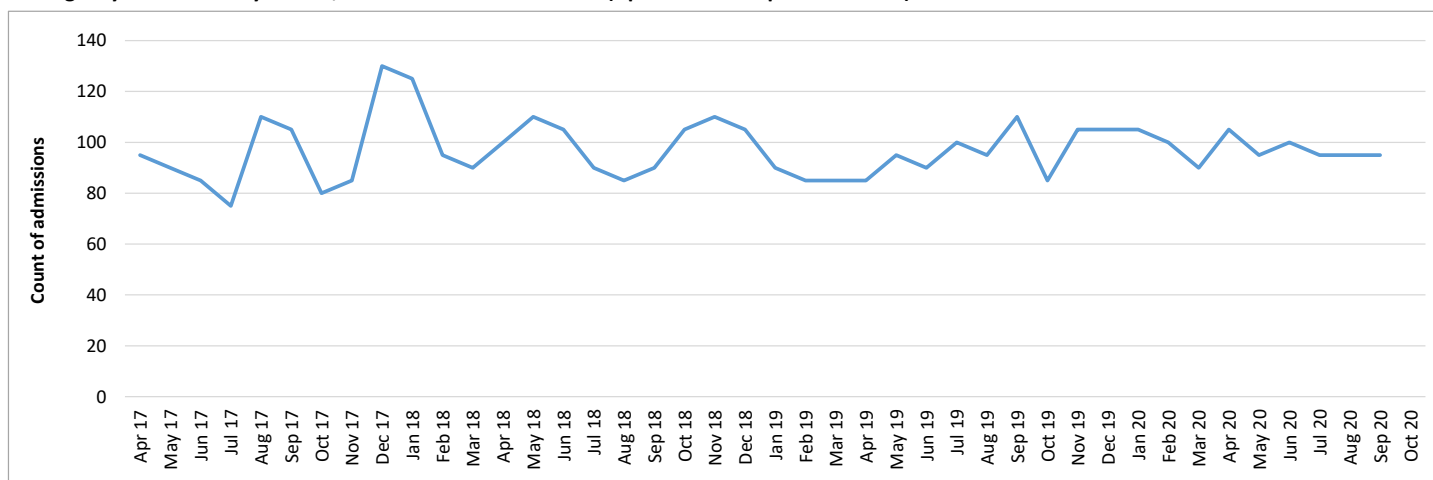
Definitions and data analysis

Hip fracture is a debilitating condition with only one in three sufferers returning to their former levels of independence. Hip fractures are almost as common and costly as strokes, and the majority of these fractures occur in women.

This indicator is available in the PHE Fingertips tool (ID 41402) and reports emergency admissions with a recording of fractured neck of femur classified by primary diagnosis code (ICD10 S72.0-S72.2).

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
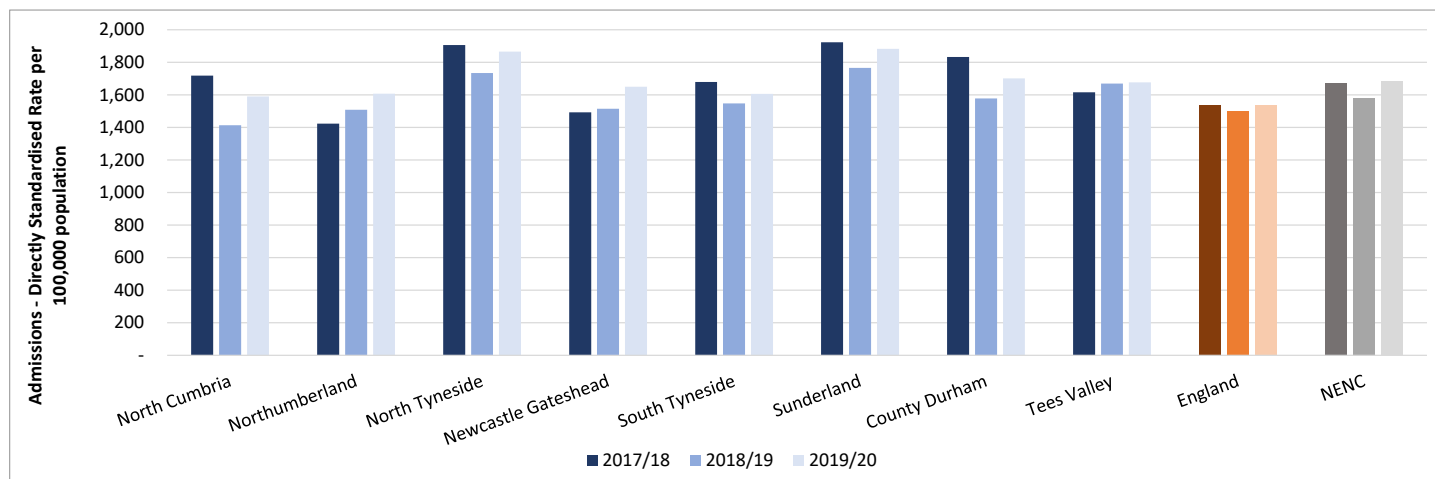
10. Emergency admissions for fractured neck of femur in people aged 80+ years (per 100,000)
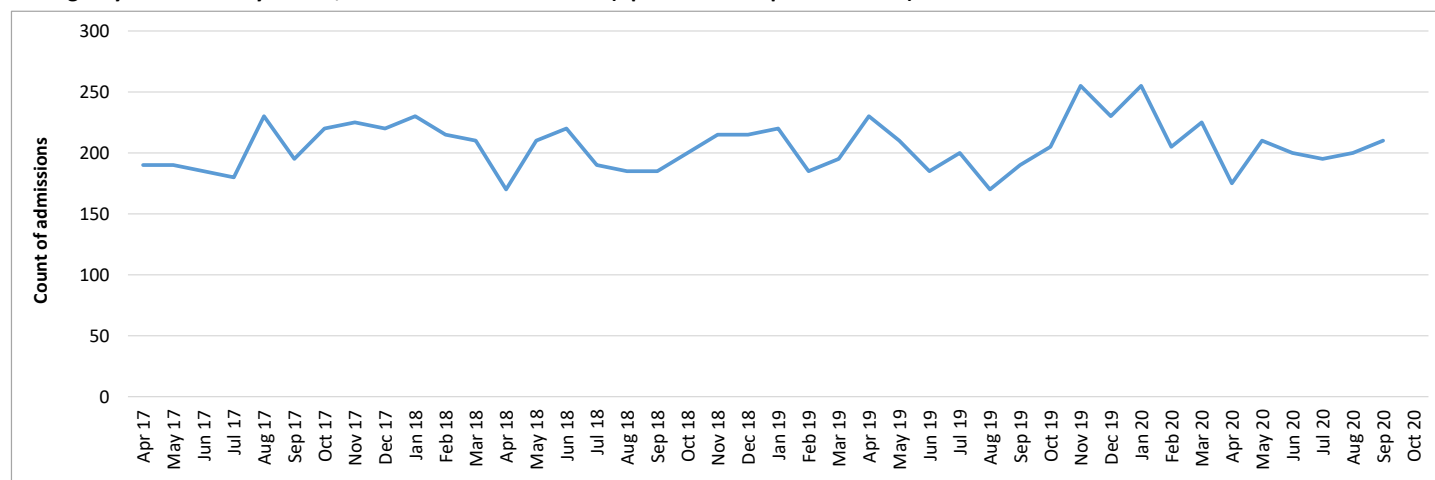
Definitions and data analysis

Hip fracture is a debilitating condition with only one in three sufferers returning to their former levels of independence. Hip fractures are almost as common and costly as strokes, and the majority of these fractures occur in women.

This indicator is available in the PHE Fingertips tool (ID 41403) and reports emergency admissions with a recording of fractured neck of femur classified by primary diagnosis code (ICD10 S72.0-S72.2).

Emergency admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Emergency admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)

11. A&E attendances (per 1,000)
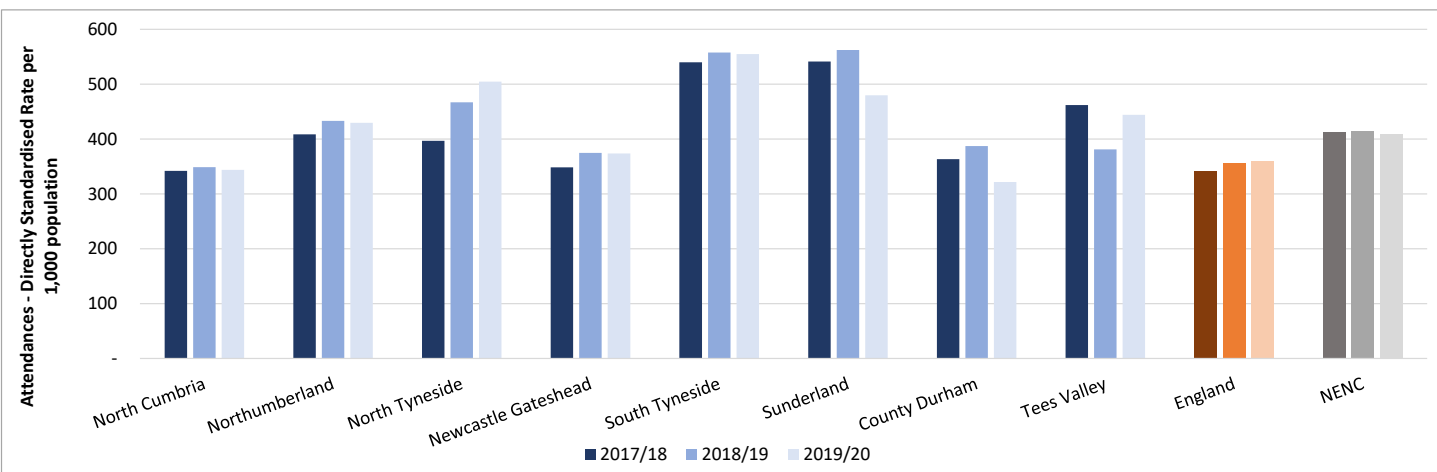
Definitions and data analysis

This indicator reports on the number of A&E attendances that have taken place at either:

- Emergency departments with a consultant led 24 hour service (type 01 departments)
- Other type of A&E/minor injury departments for the reception of A&E patients, nurse or doctor led (type 03 departments).
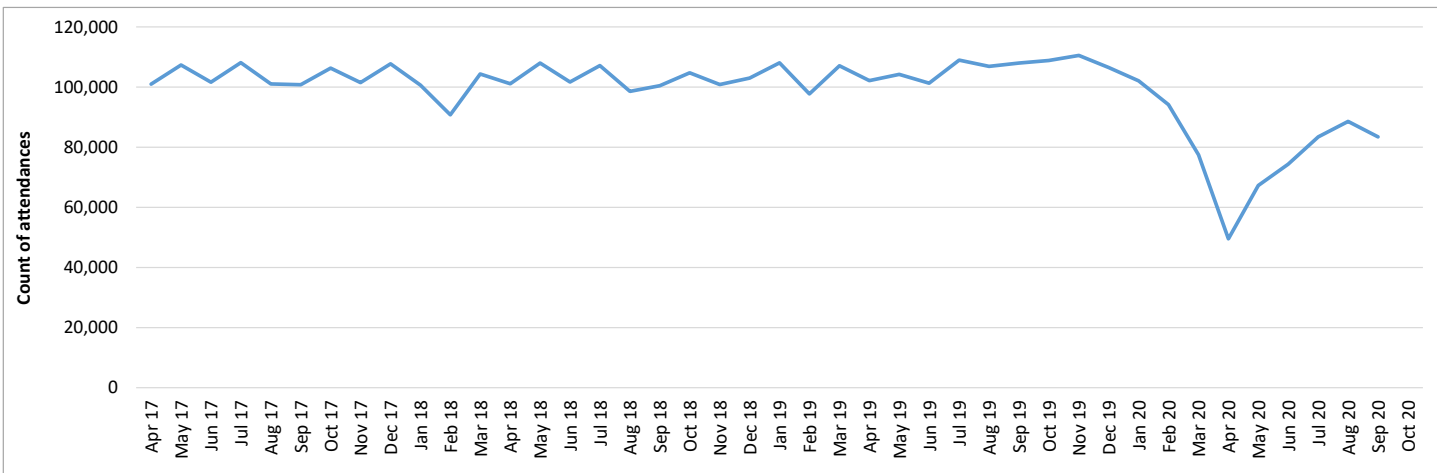
A&E attendances are expressed as a rate per 1,000 population.

In September 2020 NHS Digital published a series of summary reports relating to Hospital Accident and Emergency Activity for 2019-20, which showed that people residing in the 'most deprived 10%' areas in England have the largest number of A&E attendances, and the 'least deprived 10%' have the lowest number of attendances [*https://digital.nhs.uk/data-and-information/publications/statistical/hospital-accident--emergency-activity/2019-20*]. These findings are supported by the A&E activity relating to the North East and North Cumbria CCGs, shown below.

A&E attendances by CCG - Directly Standardised Rate per 1,000 population (2017/18, 2018/19 and 2019/20)

A&E attendances by month, all 8 NENC CCGs combined (April 2017 to September 2020)
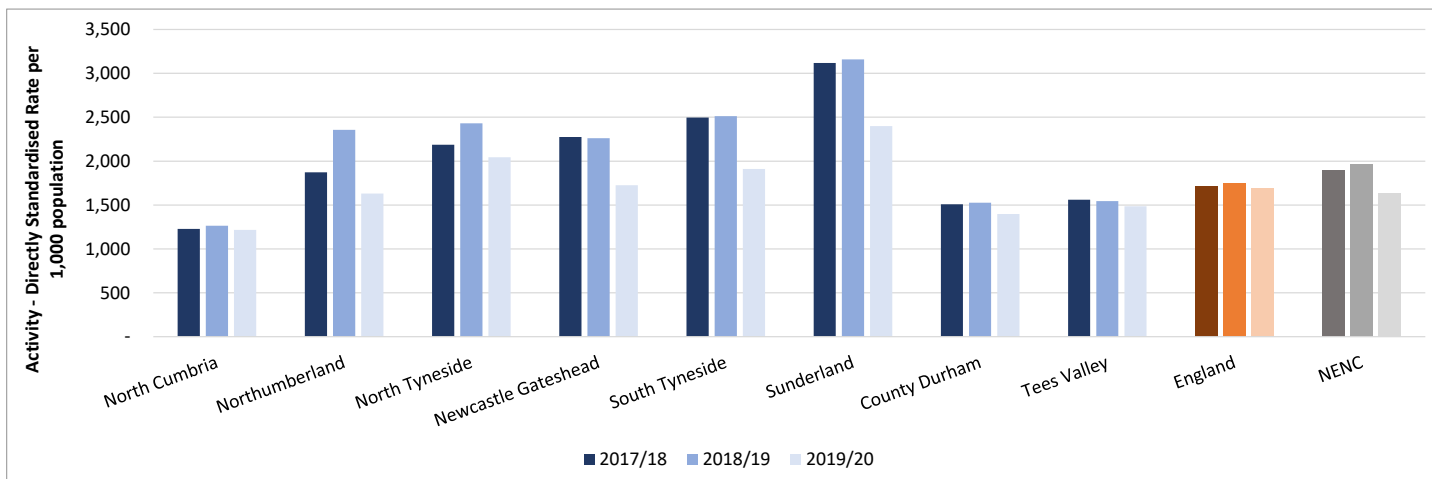
12. Outpatient attendances (per 1,000)

Definitions and data analysis

The information shown reflects the number of patients seen in outpatient clinics over time and by CCG. As it is not mandated for Mental Health Trusts to submit activity to SUS, it is possible that there is some variation across the region with regard to recording of mental health outpatient appointments in this data source.
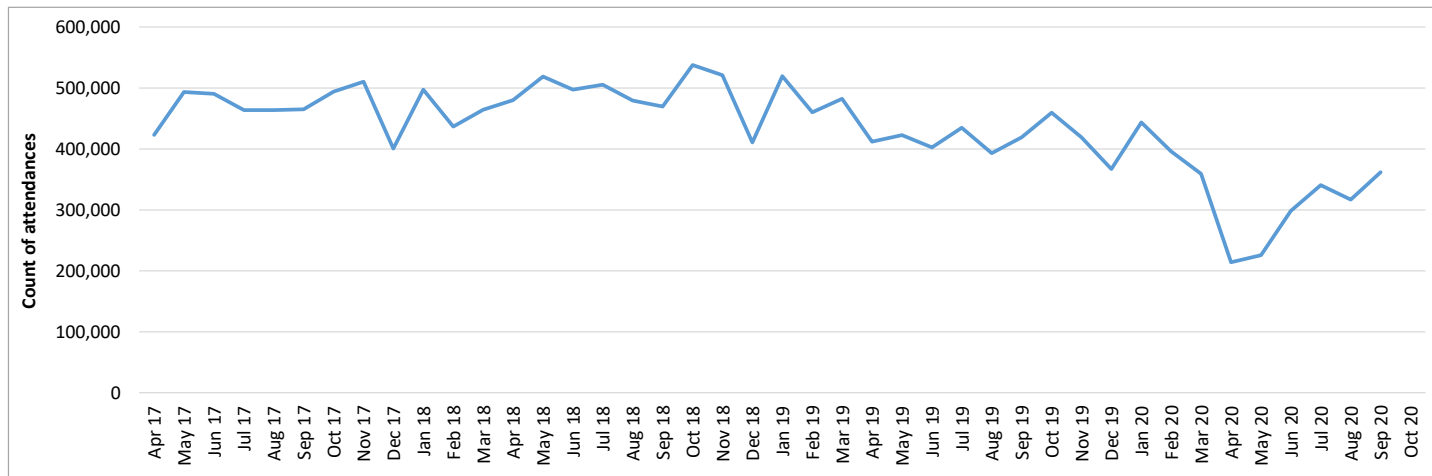
Data is available at treatment specialty level (i.e. the specialty in which the consultant was working during the period of care) and also whether the attendance was the first attendance for the patient or a follow-up attendance (and if the consultation was face-to-face or via telephone / telemedicine consultation).

The treatment specialties have been grouped for this analysis, using the groupings described in the NHS Data Dictionary (*www.datadictionary.nhs.uk*).

Outpatient activity by CCG - Directly Standardised Rate per 1,000 population (2017/18, 2018/19 and 2019/20)

Activity by month, all 8 NENC CCGs combined (April 2017 to September 2020)

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.

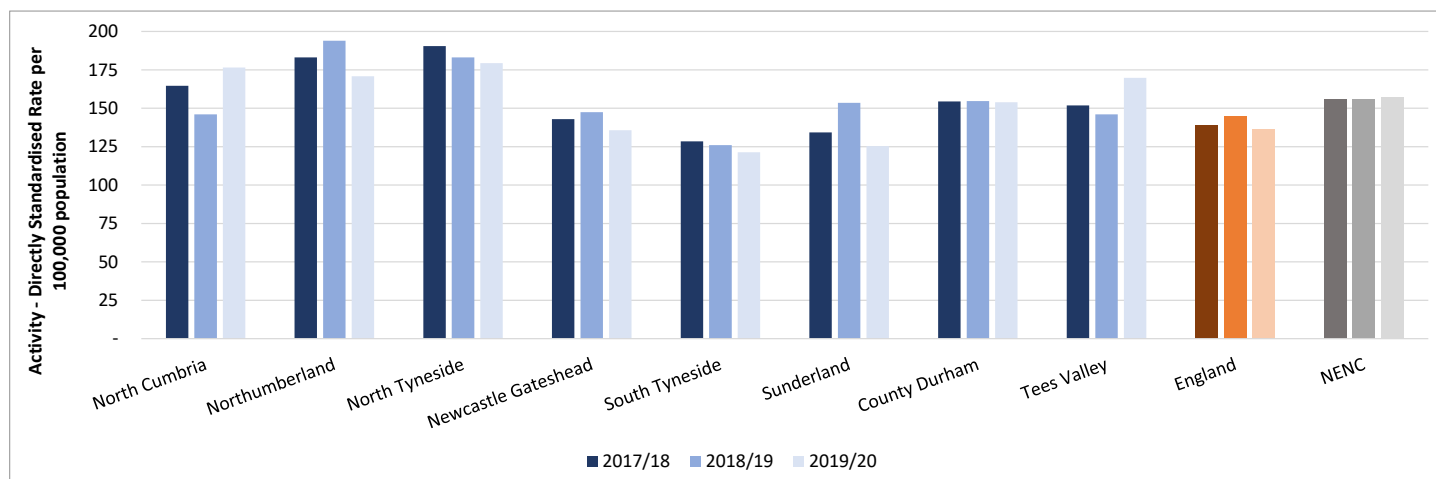**13. Elective activity - primary hip replacements (per 100,000)**

Definitions and data analysis

A hip replacement is a common type of surgery and is usually necessary when the hip joint is worn or damaged. The most common reason for hip replacement surgery is osteoarthritis.
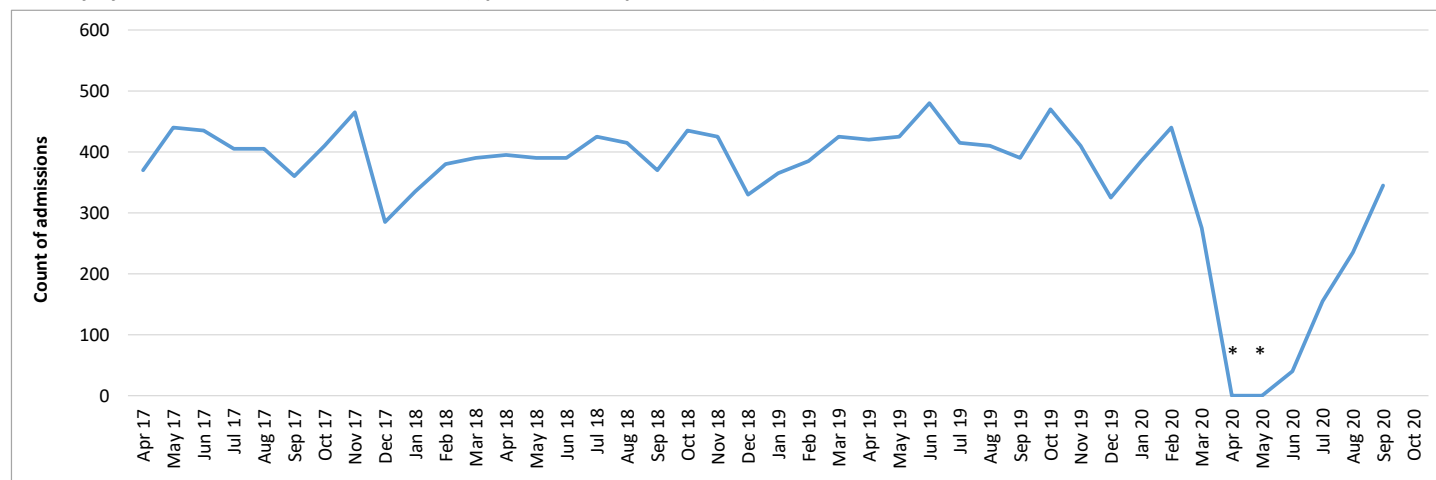
This indicator is based on elective hospital admissions for hip replacement surgery, where there is a procedure code relating to primary hip replacement or primary joint replacement and hip joint in the first procedure position (and no diagnosis code relating to fractured neck of femur).

The activity relates predominantly to NHS-funded patients although a small amount (< 0.4%) of activity was identified as privately funded.

Activity by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Activity by month, all 8 NENC CCGs combined (April 2017 to September 2020)

* Numbers are too small to disclose.

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
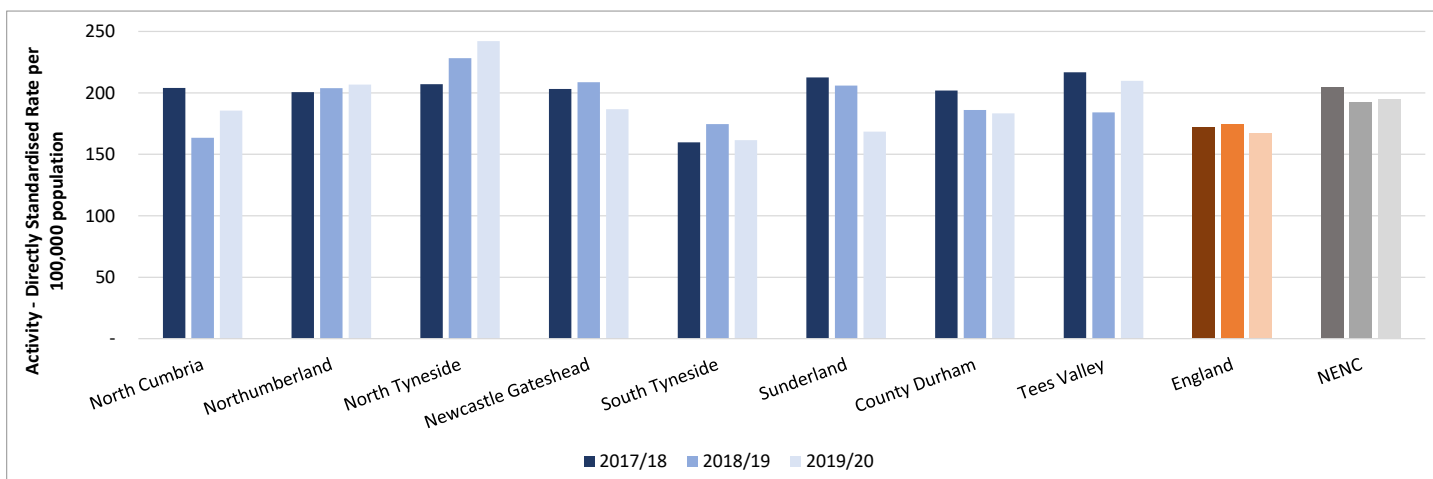
14. Elective activity - primary knee replacements (per 100,000)
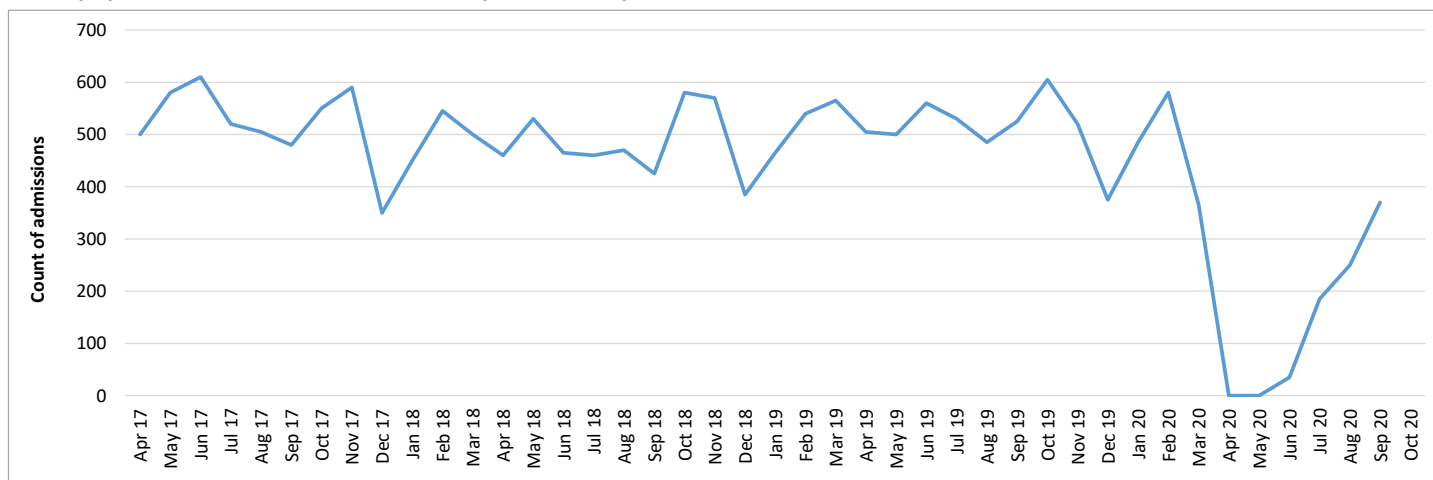
Definitions and data analysis

Knee replacement surgery (arthroplasty) is a common type of surgery that involves replacing a damaged, worn or diseased knee with an artificial joint.

This indicator is based on elective hospital admissions for knee replacement surgery, where there is a procedure code relating to primary knee replacement or primary joint replacement and knee joint in the first procedure position).

The activity relates predominantly to NHS-funded patients although a small amount (< 0.2%) of activity was identified as privately funded.

Activity by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Activity by month, all 8 NENC CCGs combined (April 2017 to September 2020)

There was no reported activity in April and May 2020.

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.

15. Elective activity - cataract surgery (per 100,000)

Definitions and data analysis

Cataract surgery involves replacing the cloudy lens in the eye with an artifical lens. It is the most common operation performed in the UK and has a high success rate in improving eyesight.

This indicator is based on elective hospital admissions for cataract surgery, where there is a procedure code relating to lens extraction/excision or lens insertion in any procedure position.

Activity by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Activity by month, all 8 NENC CCGs combined (April 2017 to September 2020)

* Numbers are too small to disclose.

Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2020, NHS Digital. All rights reserved. The 2020/21 HES data is classed as provisional.
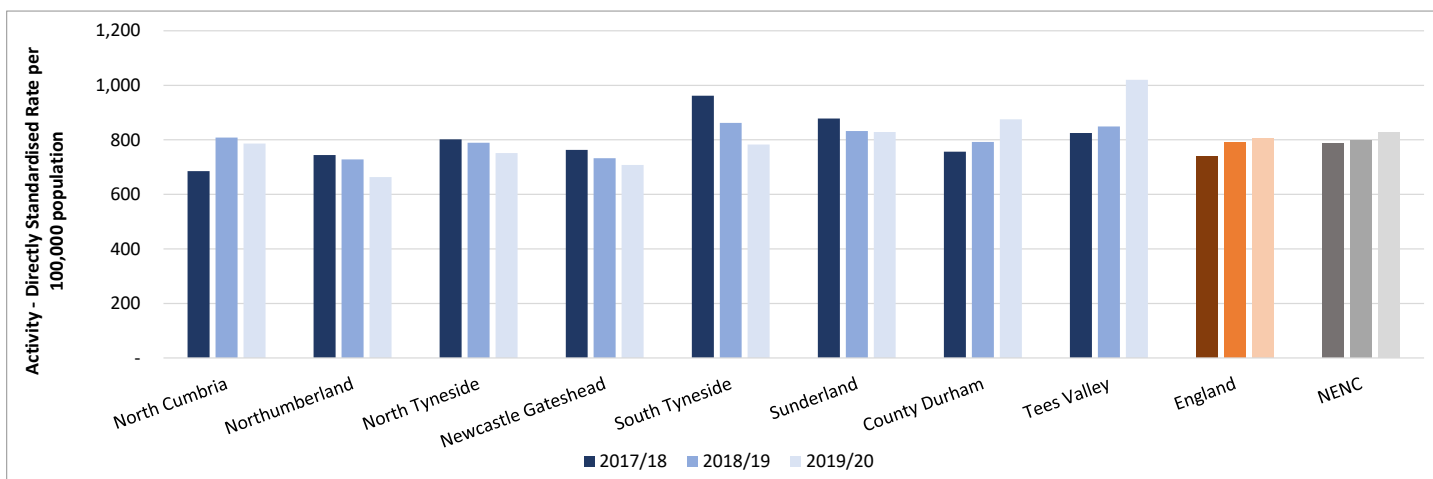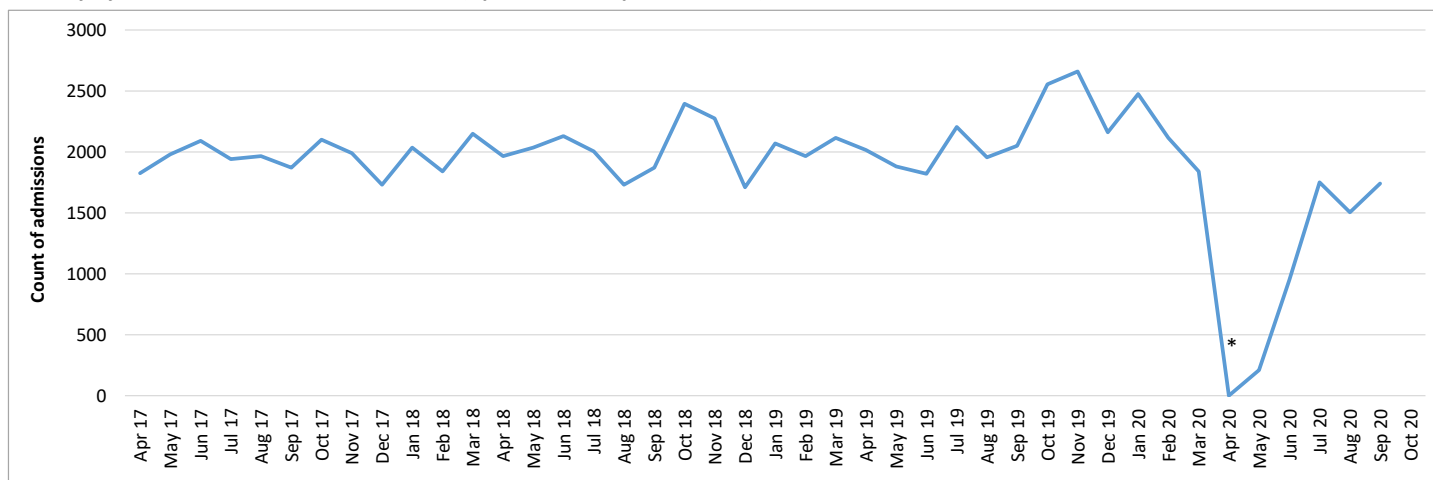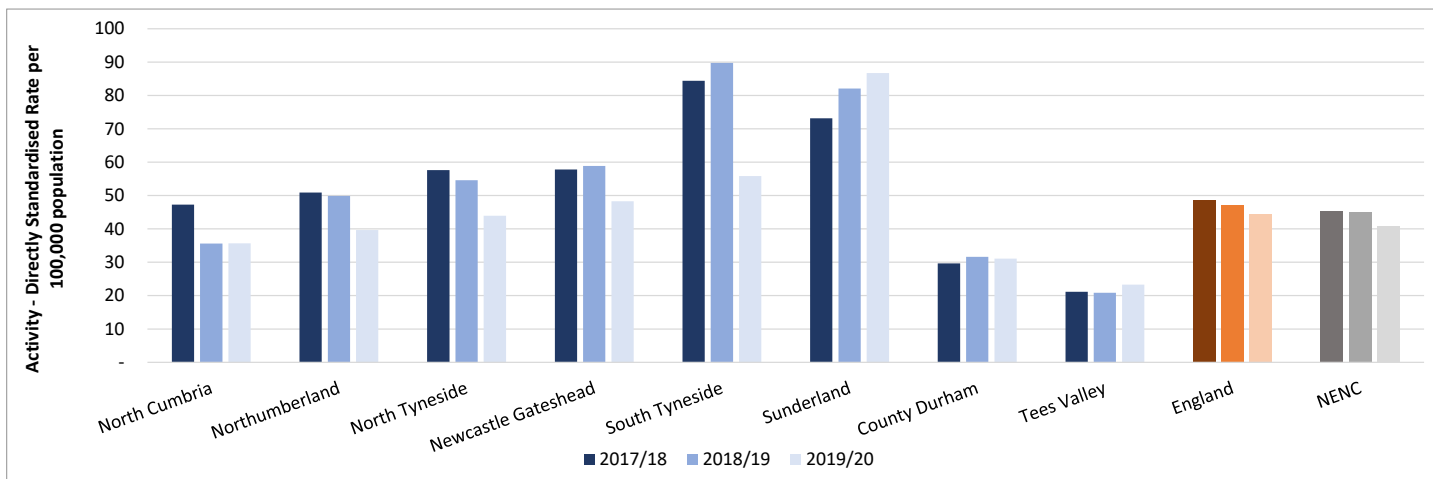
16. Elective activity - coronary angioplasty procedures (per 100,000)
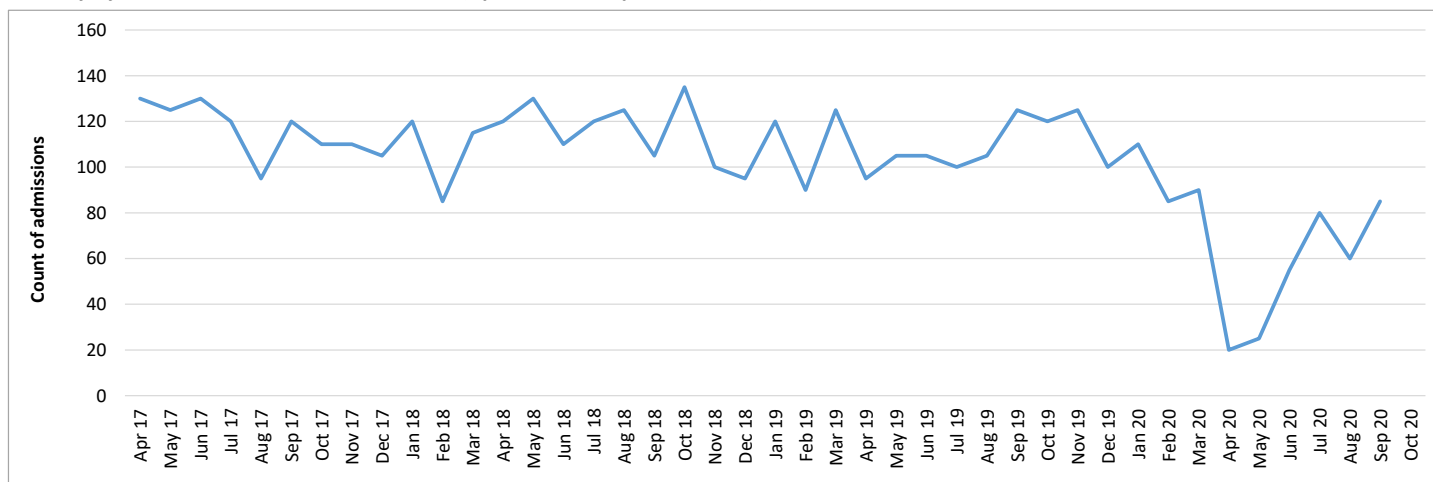
Definitions and data analysis

A coronary angioplasty is a procedure used to widen blocked or narrowed coronary arteries.

This indicator is based on elective hospital admissions for coronary angioplasty procedures, where there is a procedure code relating to transluminal balloon angioplasty, other therapeutic transluminal operations on coronary artery or percutaneous transluminal balloon angioplasty and insertion of stent in any procedure position.

Activity by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

Activity by month, all 8 NENC CCGs combined (April 2017 to September 2020)
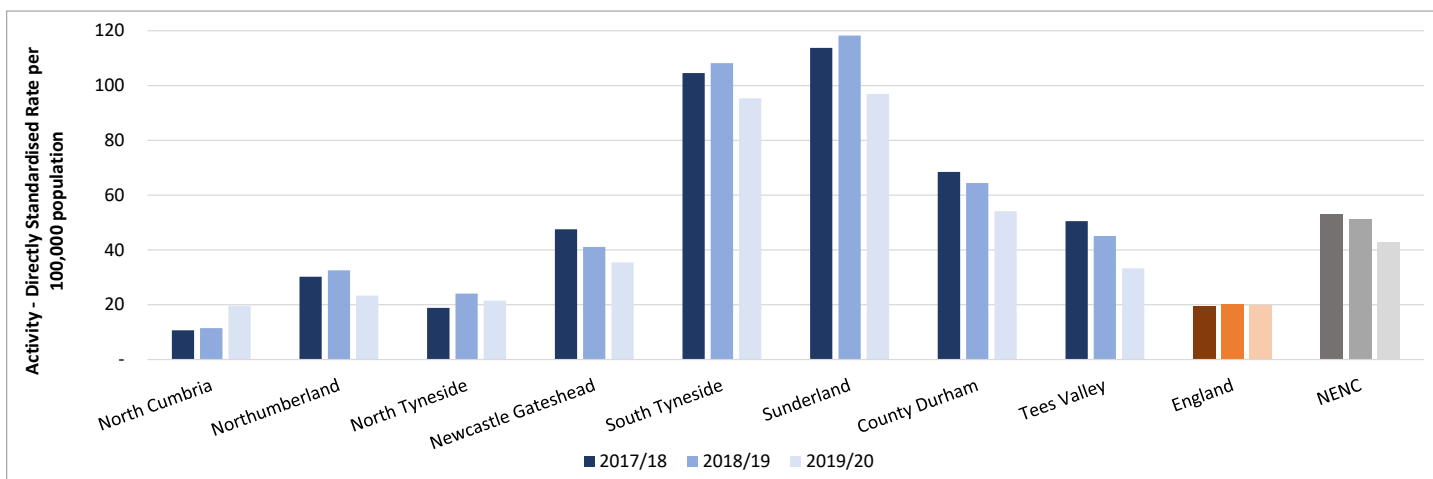
17. Hospital admissions directly attributable to obesity (per 100,000)
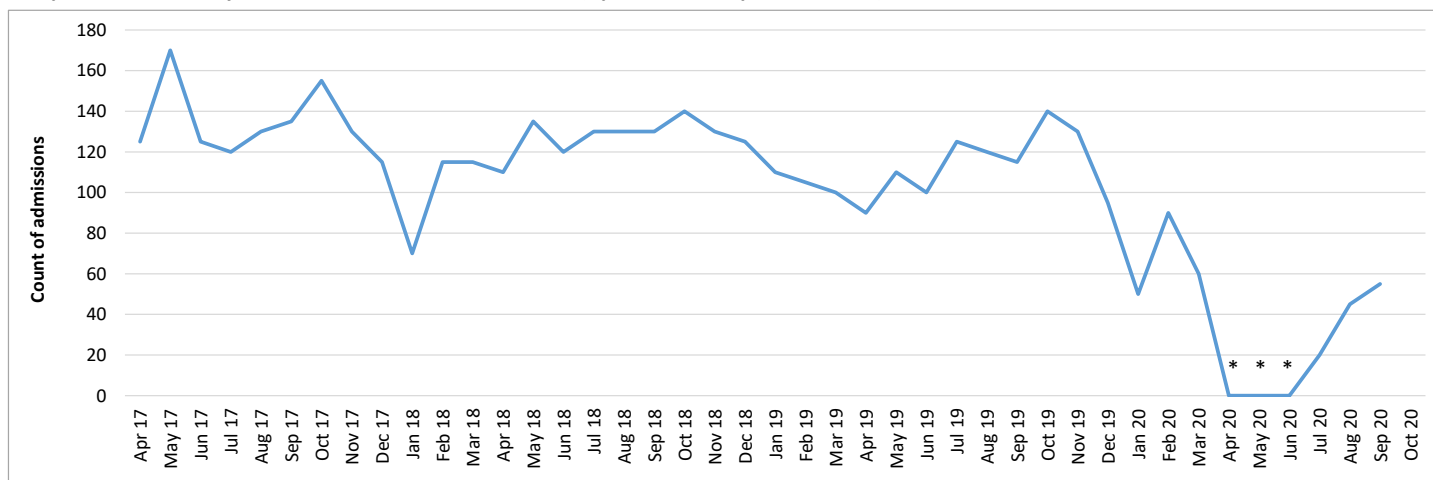
Definitions and data analysis

This indicator is based on all hospital admission methods (including elective and emergency) and those classed as directly attributable to obesity have an ICD10 code relating to obesity in the primary diagnosis position of the admitting episode. A large proportion of these admissions involve a bariatric surgery procedure. Note that any changes in activity over time may in part reflect changes in uptake of these procedures.

Further details are available from NHS Digital (*https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2020*).

All hospital admissions by CCG - Directly Standardised Rate per 100,000 population (2017/18, 2018/19 and 2019/20)

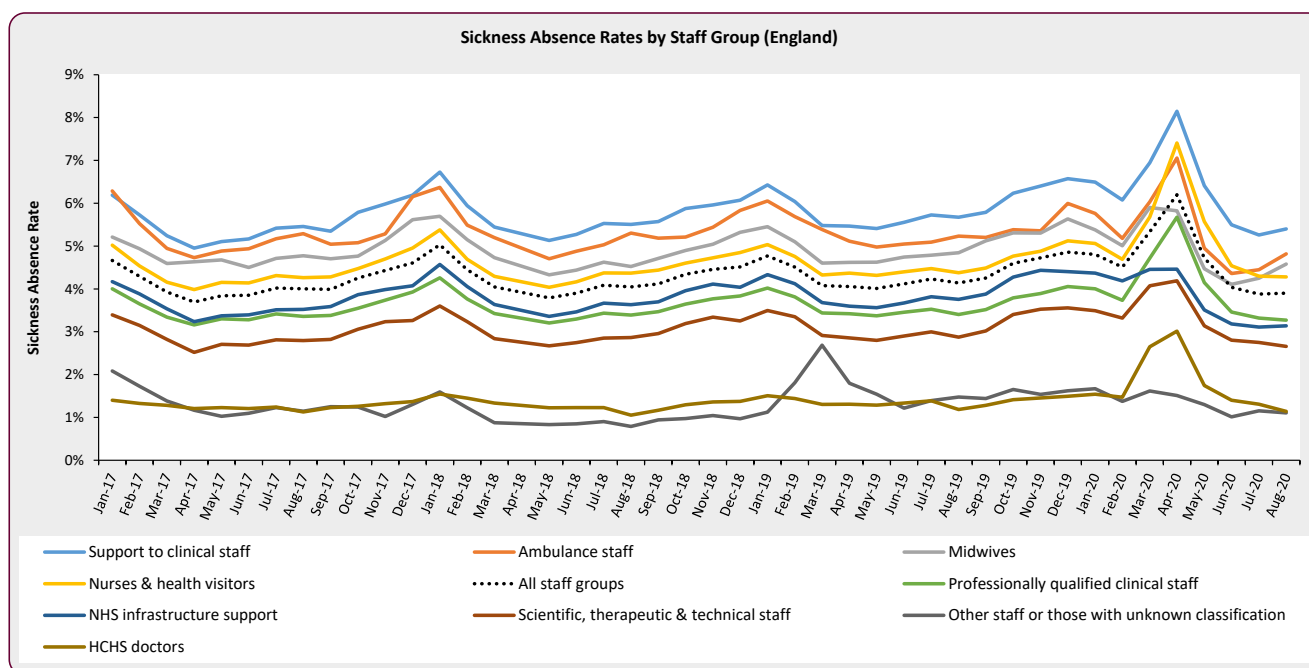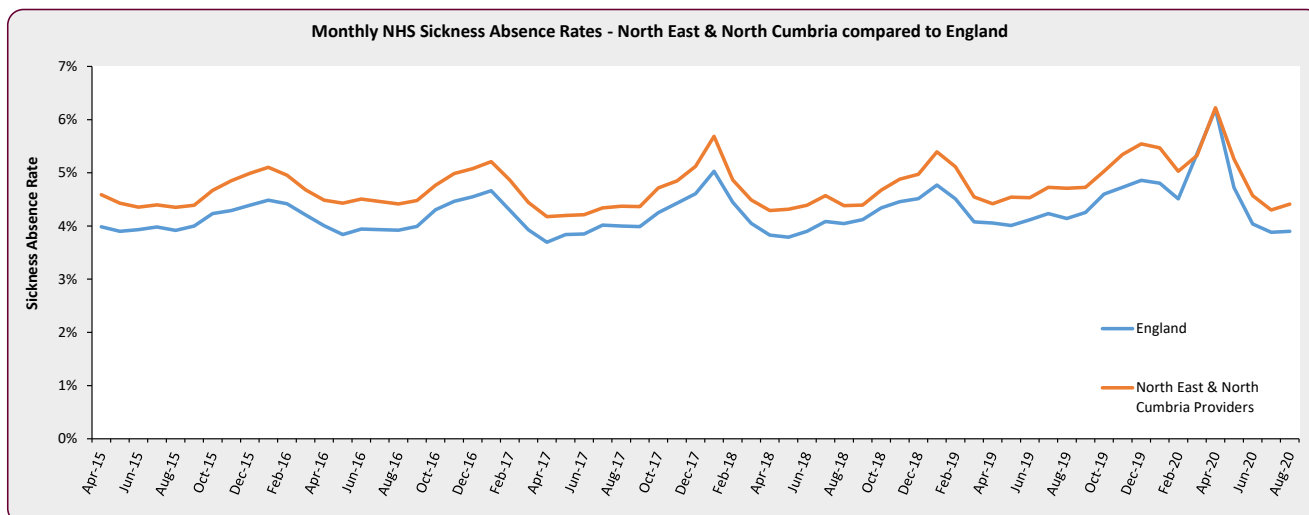**Hospital admissions by month, all 8 NENC CCGs combined (April 2017 to September 2020)**

* Numbers are too small to disclose.

18. NHS staff sickness absence rates

Sickness absence rates for NHS staff, calculated from the Electronic Staff Record (ESR)

Monthly NHS Sickness Absence Rates - North East & North Cumbria compared to England

Sickness Absence Rates by Staff Group (England)

Data source: NHS Digital (*https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates*). This data is classed as provisional.

Definitions / Notes

NHS sickness absence statistics are compiled from data recorded on the Electronic Staff Record (ESR) system as part of the day to day activities in running NHS organisations. They provide details by staff group, type of organisation and sickness absence reason. Sickness absence rates for English NHS staff are calculated by dividing the 'Full Time Equivalent number of days sick' by the 'FTE number of days available' for each month.

What is the data telling us?

The North East and North Cumbria providers line in the first chart above contains data relating to staff employed at the NENC hospital Trusts (including two mental health Trusts) in the region, and also includes NEAS staff. This information can be produced at separate organisational level on request.

Monthly sickness absence rates for England overall and the Trusts in the region show seasonal variation, with higher absence rates in winter than summer. From March 2020 there was a marked increase in the absence rate, most likely due to COVID-19, and the regional and England rates for August 2020 are 4.4% and 3.9% respectively which are similar to the usual levels.

Sickness absence rates by Staff Group are also available, but only at England level, as shown in the second chart. Staff groups with the highest absence rates since March 2020 are those classed as 'support to clinical staff', 'ambulance staff' , 'midwives' and 'nurses and health visitors'. Other staff groups with relatively lower absence levels have also shown substantial increases in March to April 2020, such as HCHS doctors (Hospital and Community Health Services) and 'professionally qualified clinical staff'.

Additional data is available, at England level, which shows the reasons for sickness absence by staff group (25 reasons available). The main reason for absence is currently due to anxiety/stress/depression/other psychiatric illnesses (31.8%) however it is anticipated that a change in the main reasons for absence will be reported in the coming months due to the pandemic. COVID-19 related absence is now being reported separately by NHS Digital.

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