AHSN Bone Health Programme
Intelligence for the North East & North Cumbria AHSN

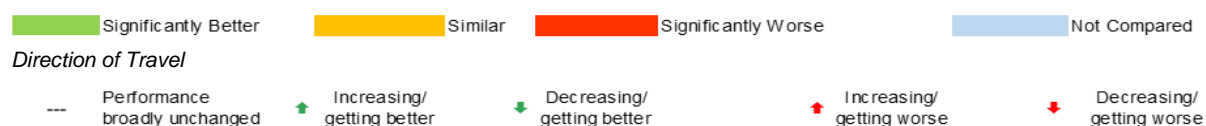## December 2019

Report Content

This report has been developed by NEQOS in order to provide intelligence in support of the AHSN's Bone Health Programme which aims to improve health outcomes for patients who have suffered a fragility fracture or are at risk of sustaining a fragility fracture. The Programme focuses on the following objective:

To promote improvements in bone health assessment and identification of people at risk.

This report highlights the demands on secondary care as a result of falls and fragility fractures and provides the AHSN with quantitative information on the current position in relation to the secondary prevention of falls and fractures in the region and against which the impact of the AHSN's programme initiatives can be measured.

Values highlighted in GREEN and RED indicate when an area is statistically significantly better or worse than the England value for that particular indicator. AMBER indicates where an area's value is not significantly different to the England value. BLUE indicates where there is no comparison.

Compared to England

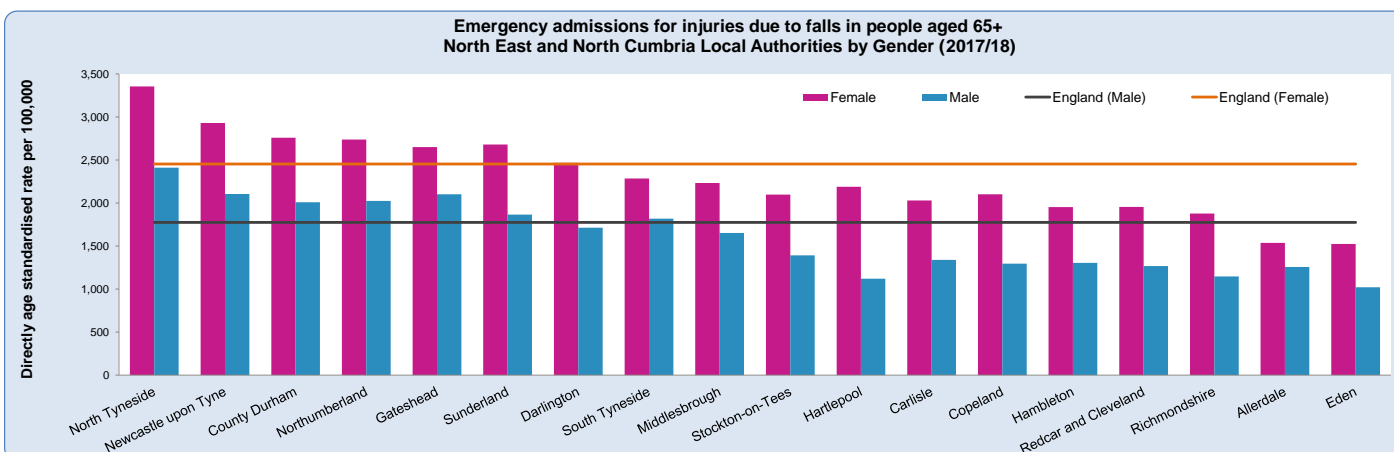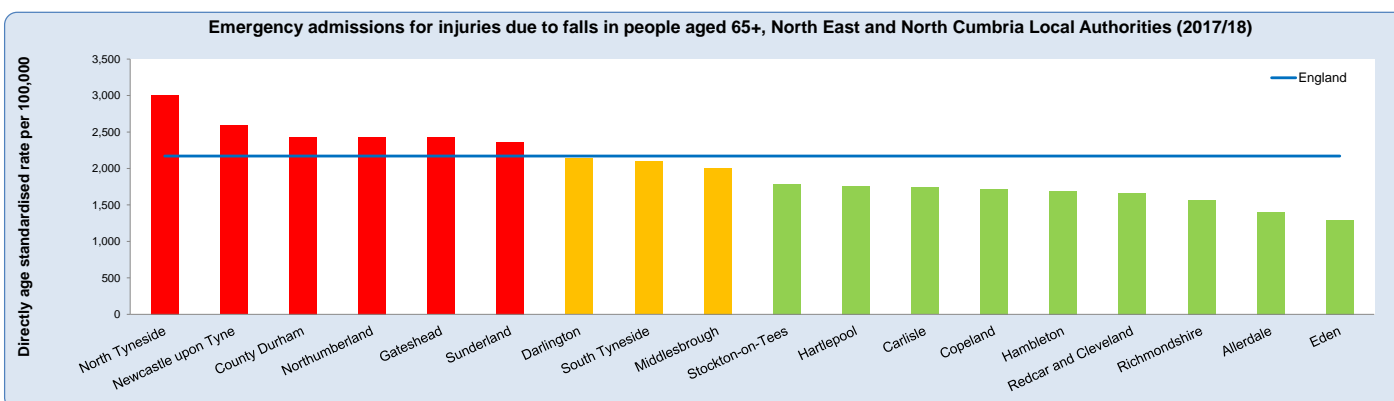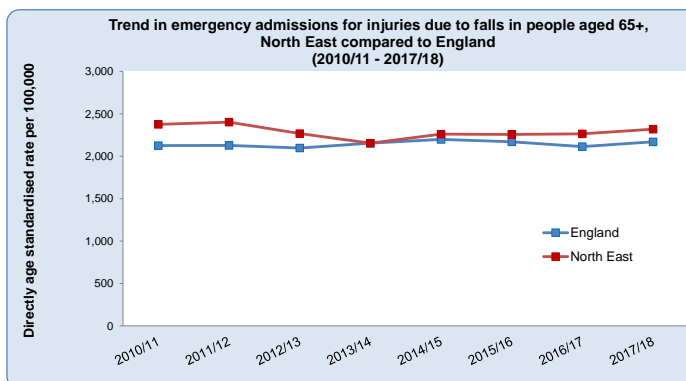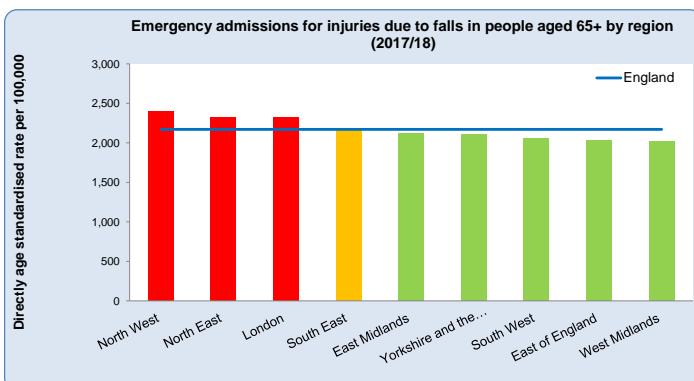| Significantly Better	Similar	Significantly Worse	Not Compared

Direction of Travel

---	Performance broadly unchanged	↑	Increasing/ getting better	↓	Decreasing/ getting better	↑	Increasing/ getting worse	↓	Decreasing/ getting worse

Report Summary

The NHS Long Term Plan, published in January 2019, commits to supporting people to age well, and refers to improving the delivery of evidence based care in relation to falls and fracture prevention, such as exercise classes and balance training, to reduce the likelihood of falls. *(https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/).*

In 2017/18 there were 13,373 emergency admissions for falls in those aged 65 years and over in NENC. The rate of falls in the region for this age group (as measured by emergency admissions due to injuries from a fall) remains significantly higher than the England average. There has been a slight increase in the North East rate reported for 2017/18 compared to previous years.

For people 65 and over, the North East has a high rate of emergency admissions for hip fracture - significantly above the England average and higher than any other region in the country. However, this picture shows signs of improvement in the latest data (2017/18), and it could be that this is the beginning of a slight downward trend.

The proportion of adults who do not undertake any physical activity is greater in the North East than the England average, and has increased in the data for the latest financial year, which raises concerns for bone health in later life.

In terms of secondary prevention, the proportion of patients aged 50 years and over who are on the primary care register for osteoporosis varies across practices in the NENC region from 0.44% to 1.43% and this is increasing over time. However, data on the prescribing of bone-sparing agents to (eligible) patients with osteoporosis is showing year on year decreases.

Information on the general prescribing of osteoporosis medicines in those aged 45 years and over also shows a decrease in the rate of prescribing for each CCG over time.

The DEXA scan activity rates for both the NENC and England have slowly increased over time, with NENC increasing at a faster rate.

Summary

Indicator	Time Period						North East Progress	Update Frequency
	North East Value	National Average	North East Value	National Average	North East Value	National Average		
Demands on secondary care								
1. Emergency admissions for falls injuries	2015/16		2016/17		2017/18			
1.1. 65 years and over (rate per 100,000)	2,257	2,169	2,264	2,114	2,320	2,170	⬆	Annual
1.2. Number of emergency admissions, ages 65 years and over (NENC)	12,615	211,928	12,891	210,553	13,373	220,160	⬆	Annual
1.3. 65-79 years (rate per 100,000)	1,105	1,012	1,119	993	1,191	1,033	⬆	Annual
1.4 80+ years (rate per 100,000)	5,599	5,526	5,584	5,363	5,595	5,469	---	Annual
2. Expected annual cost of falls	£84,973,249		Not updated		Not updated			
3. Emergency admissions for hip fractures (per 100,000)	2015/16		2016/17		2017/18			
3.1 65 and over	679	589	643	575	638	578	---	Annual
3.2 65-79	280	244	270	241	285	246	⬆	Annual
3.3 80+	1,836	1,591	1,726	1,545	1,659	1,539	⬇	Annual
Primary prevention								
4. Percentage of adults that are physically inactive	24.6%	22.3%	24.6%	22.2%	26.6%	22.2%	⬆	Annual
Secondary prevention	2016/17		2017/18		2018/19			
5. Percentage of patients on a register of being at risk of falls or fracture	0.50%	0.47%	0.72%	0.62%	0.92%	0.79%	⬆	Annual
6. Patients treated with a bone-sparing agent								
6.1 Percentage of patients aged 45-74 treated with a bone-sparing agent	78.1%	75.0%	73.0%	71.4%	69.6%	67.5%	⬇	Annual
6.2 Percentage of patients aged 75+ treated with a bone-sparing agent	64.6%	64.4%	59.3%	59.7%	55.9%	56.0%	⬇	Annual
	Jul - Sept 17		Jul - Sept 18		Jul - Sept 19			
7. Prescribing of Osteoporosis Medicines (rate per 10,000)	293,780	241,887	276,753	229,316	268,680	222,421	⬇	Annual
	2017/18 Q2		2018/19 Q2		2019/20 Q2			
8. Activity relating to DEXA scans (rate per 1,000 population)	2.19	1.76	2.31	1.86	2.49	1.99	⬆	Quarterly

1.1 Emergency admissions for injuries due to falls in people aged 65+,
Age standardised rate of emergency hospital admissions for injuries due to falls in persons aged 65+ per 100,000 population

North West	North East	London	South East	East Midlands	Yorkshire and the Humber	South West	East of England	West Midlands		England
2,399	2,320	2,319	2,189	2,126	2,102	2,056	2,026	2,021		2,170

Emergency admissions for injuries due to falls in people aged 65+ by region (2017/18)

Trend in emergency admissions for injuries due to falls in people aged 65+, North East compared to England (2010/11 - 2017/18)

Emergency admissions for injuries due to falls in people aged 65+, North East and North Cumbria Local Authorities (2017/18)

Emergency admissions for injuries due to falls in people aged 65+ North East and North Cumbria Local Authorities by Gender (2017/18)

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes
Hospital Episode Statistics, the data source used for this indicator, are generally considered to be quite robust. However, there is variation between trusts regarding the quality and completeness of the *coding of the causes of injuries*, which affects the accuracy of the data. A 2010/11 analysis, which assessed data quality in relation to the coding of the causes of injuries, reported better than average data completeness in the North East, compared with the national average. For areas with poorer data quality, the indicator values above are likely to be an underestimate of admissions for injuries due to falls.

There may be differences between areas in admission thresholds which would also affect this indicator.

What is the data telling us?
Hospital admissions are only a proportion of falls incidents, as more may present to A&E and GPs, not all of which will lead to hospital admission, so the picture presented by these data is the tip of the iceberg in relation to the health and well-being burden of falls.

The North East is ranked as the second highest region for admissions due to falls in England at 2,320 falls per 100,000 and this is statistically significantly higher than the national average of 2,170 (7% above the England rate). Both the England and North East rates have risen slightly in 2017/18. The rise in the North East has been driven by an increase in the rate of admissions for falls amongst those aged 65-79 years.

There are six local authorities that have rates of injuries which are significantly above the England average, but rates in Cumbria, Hambleton, Richmondshire and parts of Teesside are significantly better than the national average. In all Local Authorities the highest rate of falls is among females. The trend charts on the next page show how the rates have changed over the last eight years in each of the local authorities in the NENC area.

Analysis for a previous version of this report showed higher rates of admissions for falls in the more deprived areas compared to the more affluent.

Emergency hospital admissions for falls injuries in persons aged 65 and over, directly age standardised rate per 100,000.

Emergency admissions for injuries due to falls in people aged 65+, 2010/11 to 2017/18, by Local Authority

Emergency admissions for injuries due to falls in people aged 65+ by age group
North East and North Cumbria Local Authorities (Persons, 2017/18)
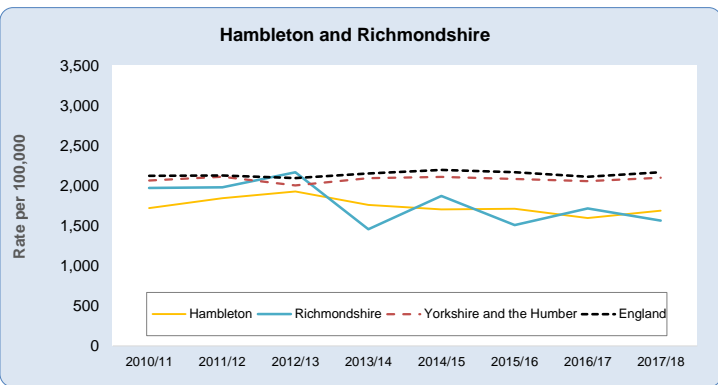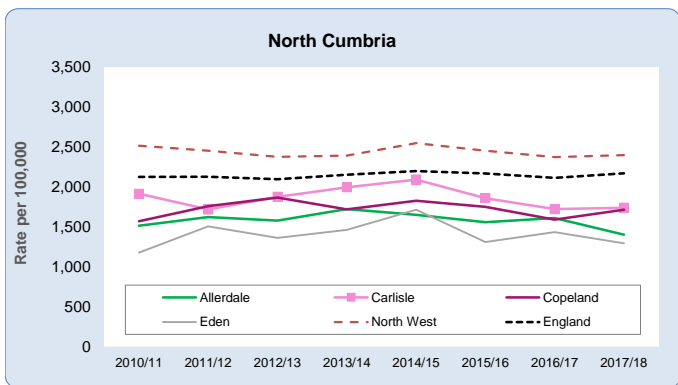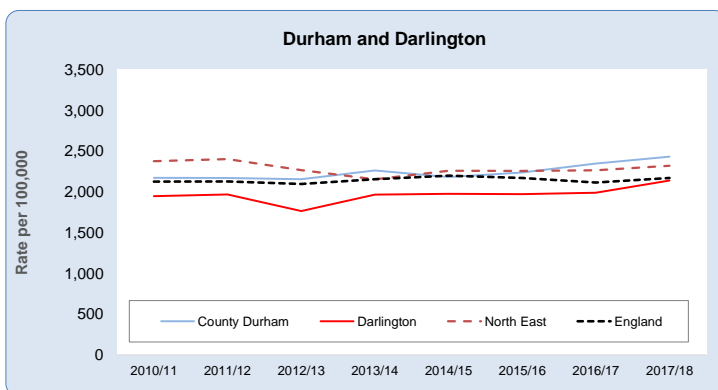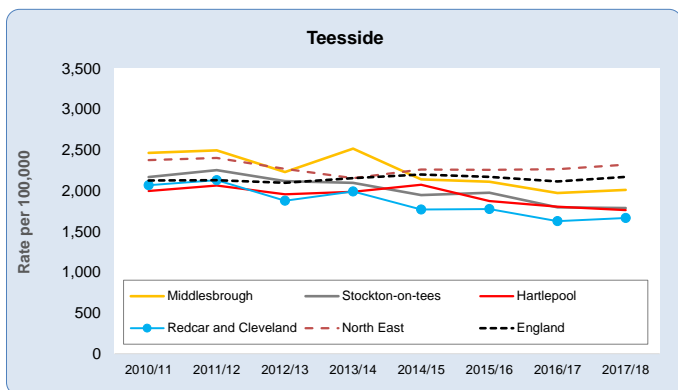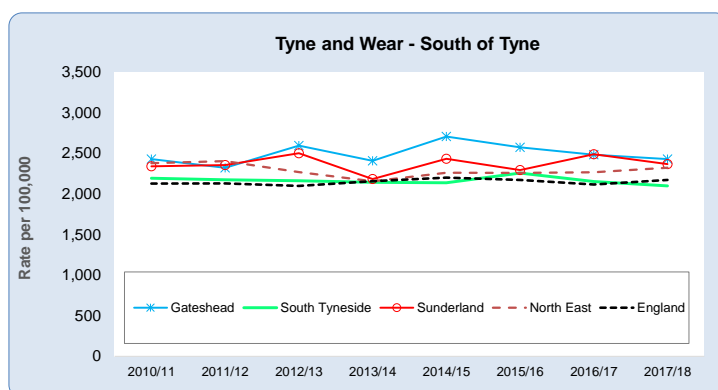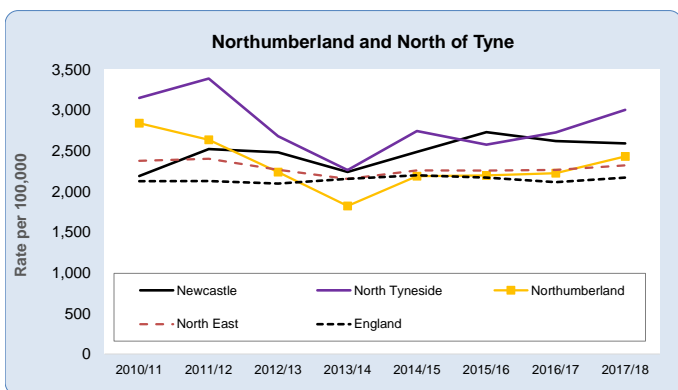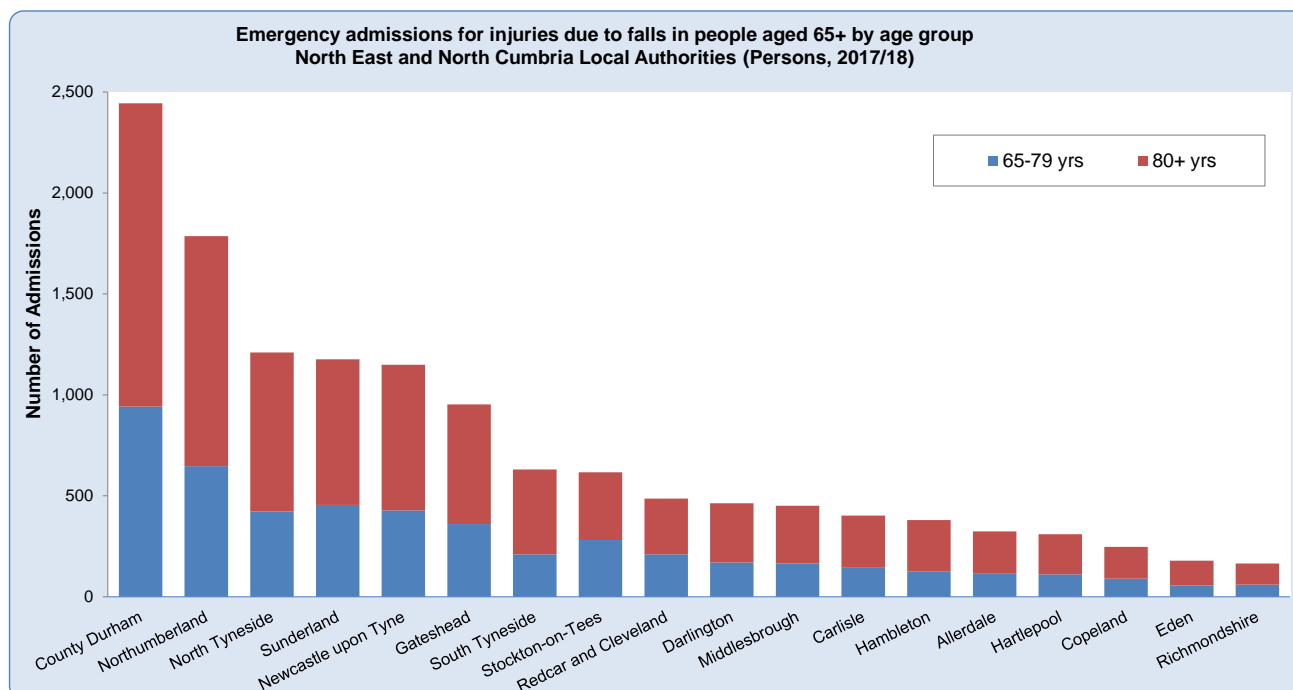
Emergency admissions for injuries due to falls in people aged 65+ by age group and gender
North East and North Cumbria Local Authorities (2017/18)

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/
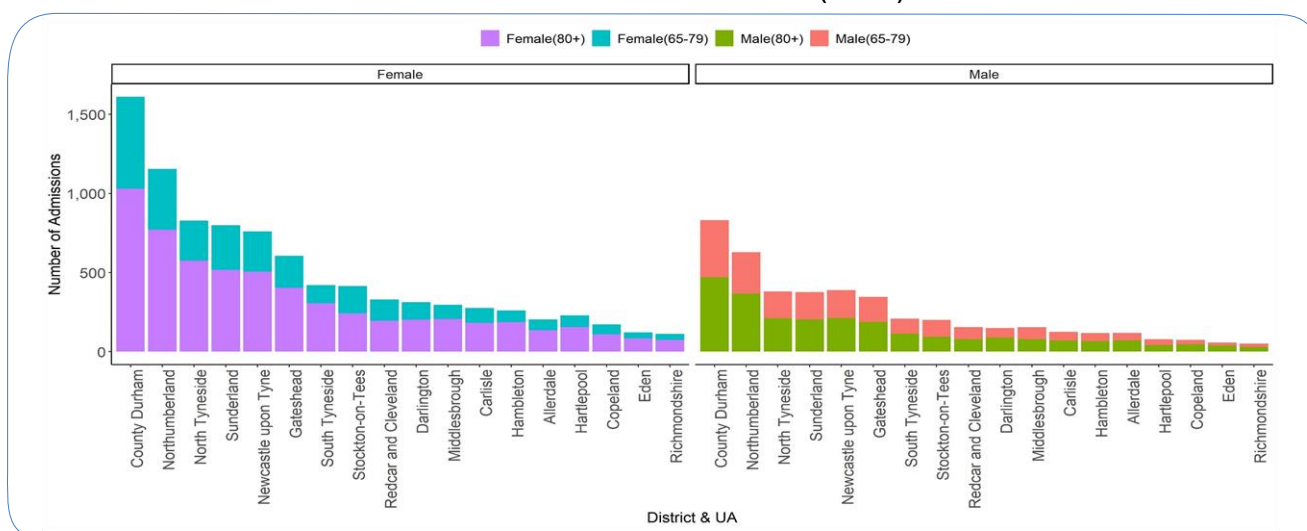
Definitions / Notes
The charts on this page show the actual number of hospital admissions, rather than the directly standardised rate. As a consequence, the Local Authorities with the largest populations tend to have the greatest number of emergency admissions.
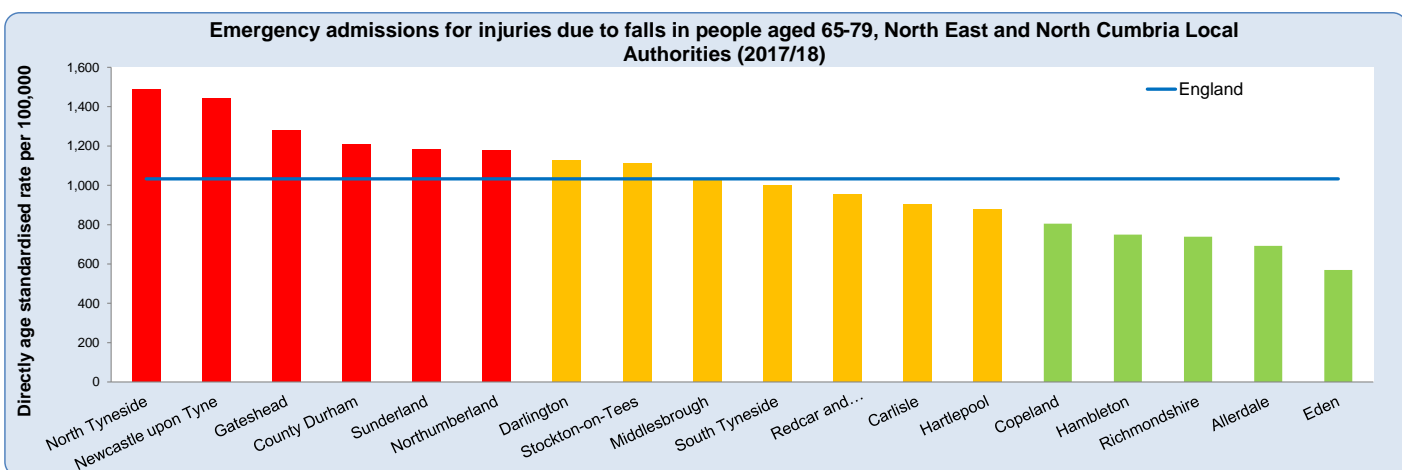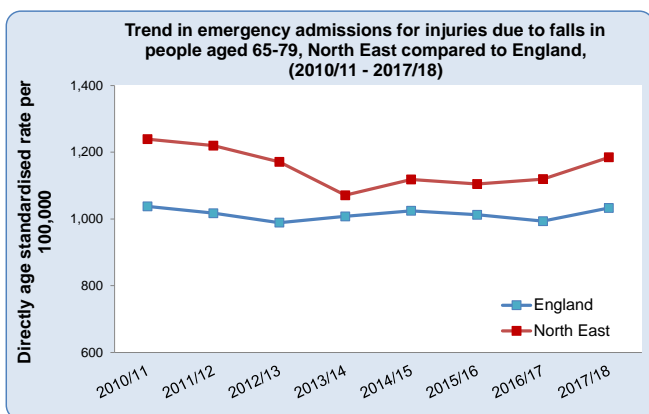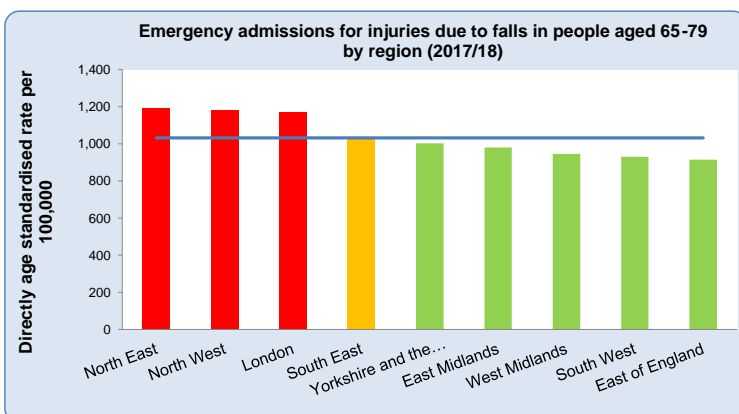
What is the data telling us?
In NENC in 2017/18 there were 13,373 emergency admissions for injuries due to falls in people aged over 65, of which 63% were aged 80 years and older. In all local authority areas women accounted for a larger proportion of admissions due to falls than men. Across the NENC area as a whole, 67% of admissions for falls in the 65+ age group were due to falls by women.

1.3 Emergency admissions for injuries due to falls in people aged 65-79

Age standardised rate of emergency hospital admissions for injuries due to falls in persons aged 65-79 per 100,000 population

North East	North West	London	South East	Yorkshire and the Humber	East Midlands	West Midlands	South West	East of England		England
1,191	1,185	1,174	1,030	1,004	981	946	930	916		1,033

Emergency admissions for injuries due to falls in people aged 65-79 by region (2017/18)

Trend in emergency admissions for injuries due to falls in people aged 65-79, North East compared to England, (2010/11 - 2017/18)

Emergency admissions for injuries due to falls in people aged 65-79, North East and North Cumbria Local Authorities (2017/18)

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes
Refer to Indicator 1.1

What is the data telling us?
The North East has the highest rate of admissions due to falls for people aged 65 to 79, when compared to the other regions in England. For 2017/18 the North East rate is 15% higher than the England average (1,191 per 100,000 compared to 1,033 per 100,00). Trend data indicates that it is increasing, and at a faster rate than the national rate, such that the gap between NENC and England is widening.

There are six local authorities that have rates of injury which are significantly above the England average (North Tyneside, Newcastle upon Tyne, Gateshead, County Durham, Sunderland and Northumberland). Rates in Hambleton and Richmondshire and parts of Cumbria are significantly better than the national average.

The trend charts on the next page show how the rates have changed over the last eight years in each of the local authorities in the NENC area. The largest percentage increases between 2016/17 and 2017/18 have been in Redcar and Cleveland and North Tyneside.

Emergency hospital admissions for falls injuries in persons aged 65-79, directly age standardised rate per 100,000.
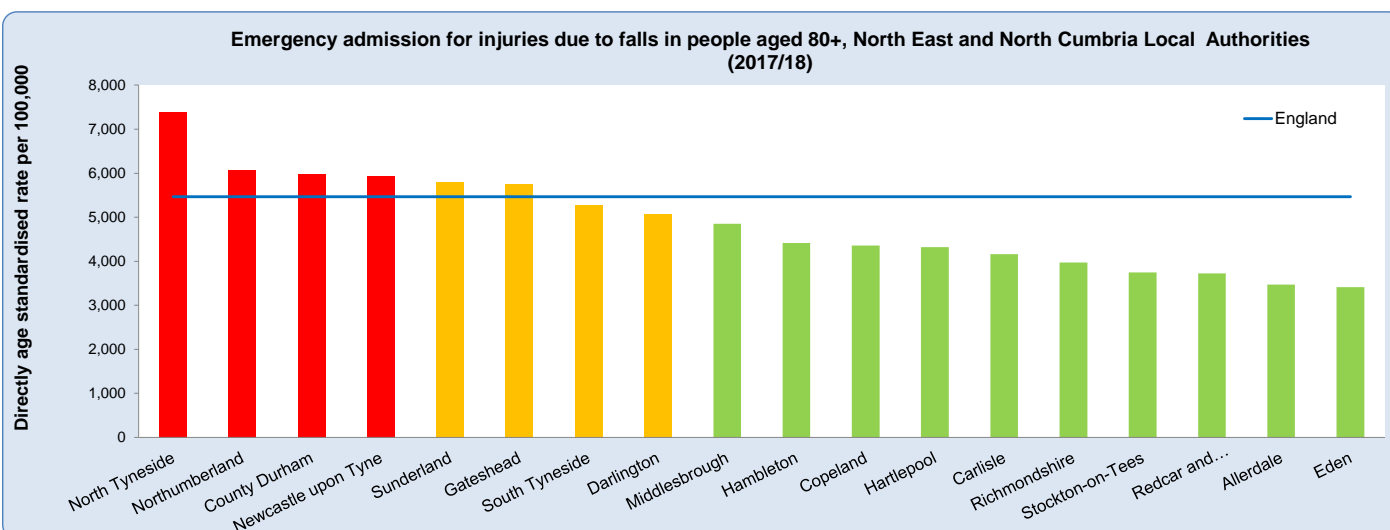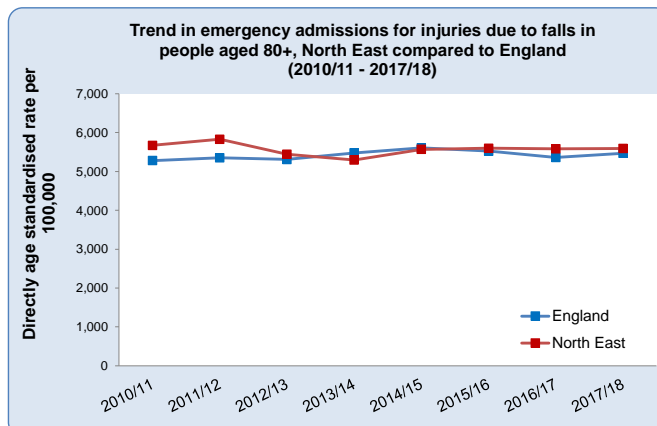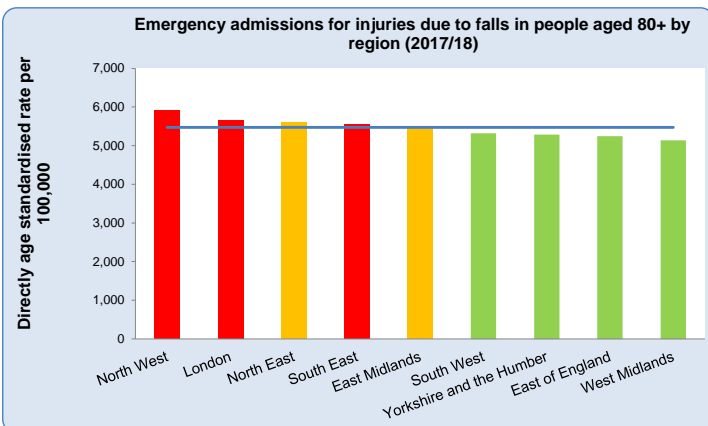
Emergency admissions for injuries due to falls in people aged 65-79, 2010/11 to 2017/18, by Local Authority
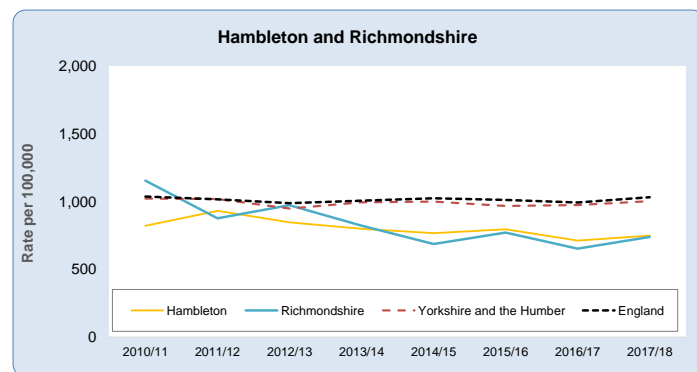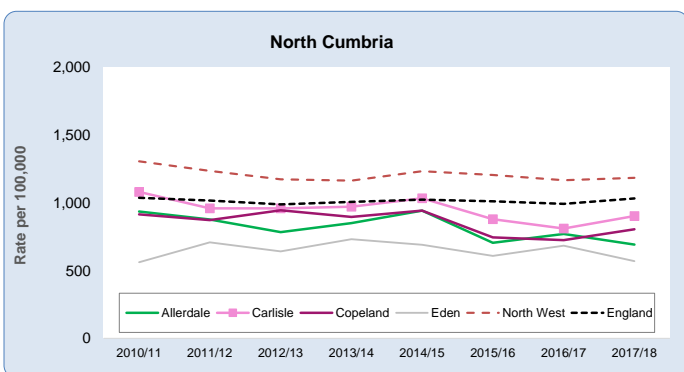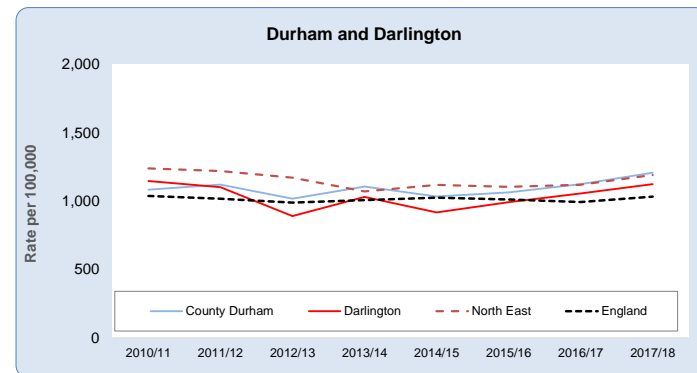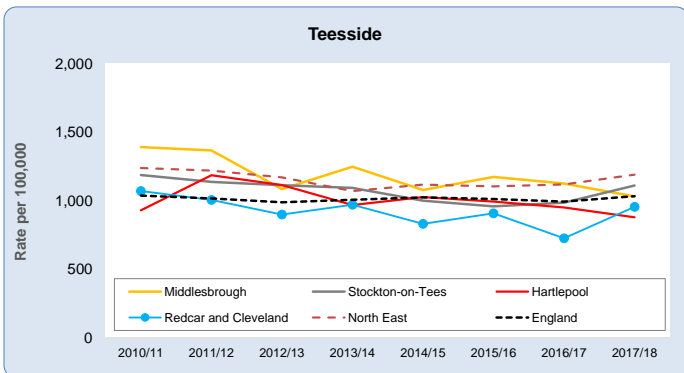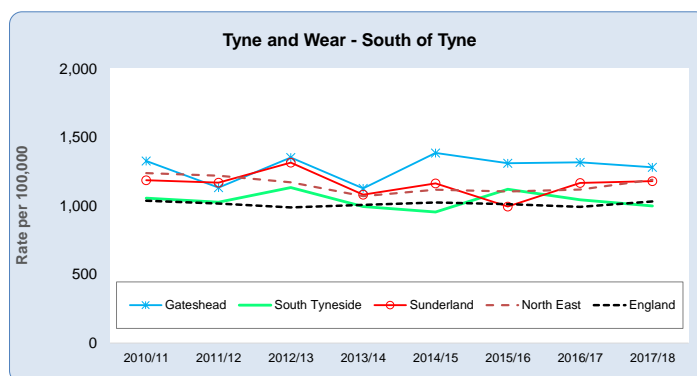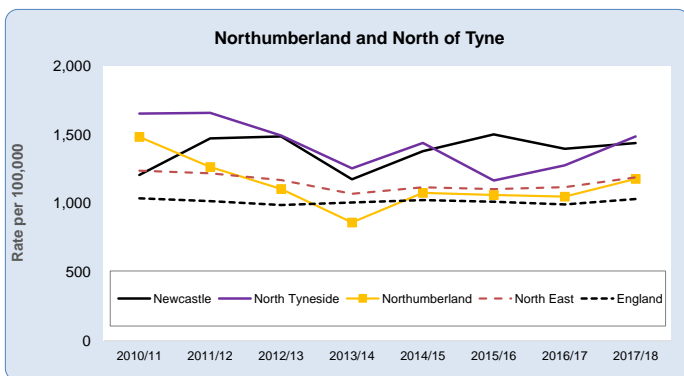
1.4 Emergency admissions for injuries due to falls in people aged 80+

Age standardised rate of emergency hospital admissions for injuries due to falls in persons aged 80+ per 100,000 population

North West	London	North East	South East	East Midlands	South West	Yorkshire and the Humber	East of England	West Midlands	England
5,919	5,640	5,595	5,553	5,446	5,322	5,288	5,246	5,137	5,469

Emergency admissions for injuries due to falls in people aged 80+ by region (2017/18)

Trend in emergency admissions for injuries due to falls in people aged 80+, North East compared to England (2010/11 - 2017/18)

Emergency admission for injuries due to falls in people aged 80+, North East and North Cumbria Local Authorities (2017/18)

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes
Refer to Indicator 1.1

What is the data telling us?
In 2017/18 the North East rate of admissions due to falls for people aged 80+ is 2% higher than the England average (5,595 per 100,000 compared to 5,469 per 100,000), but this is not statistically significant. Trend data indicates that the North East's rate has been fairly static for the past four years.
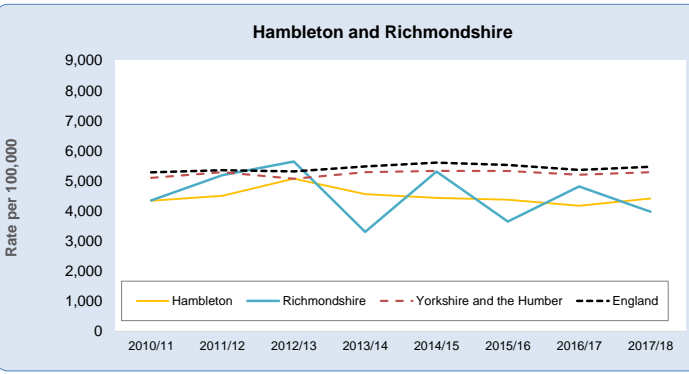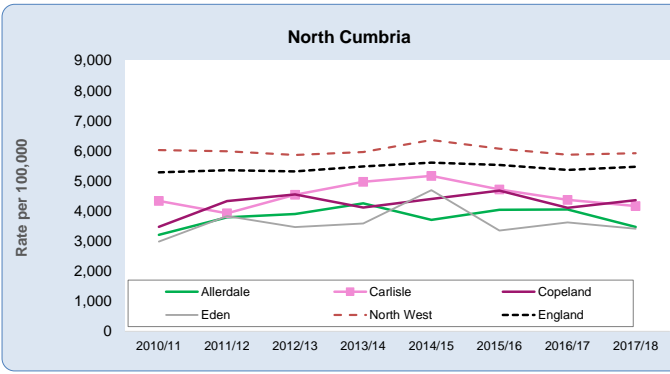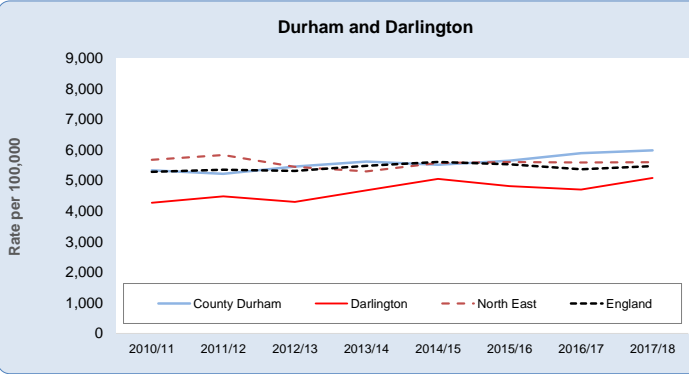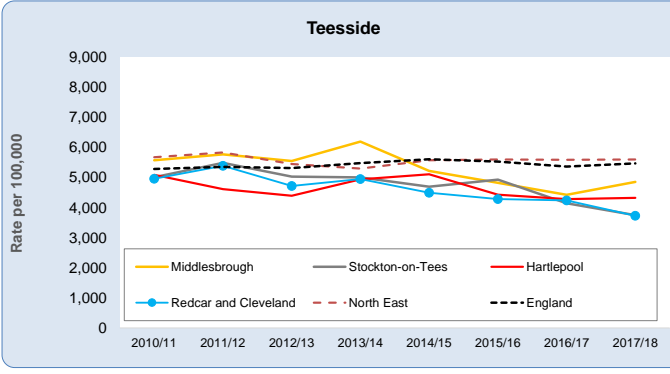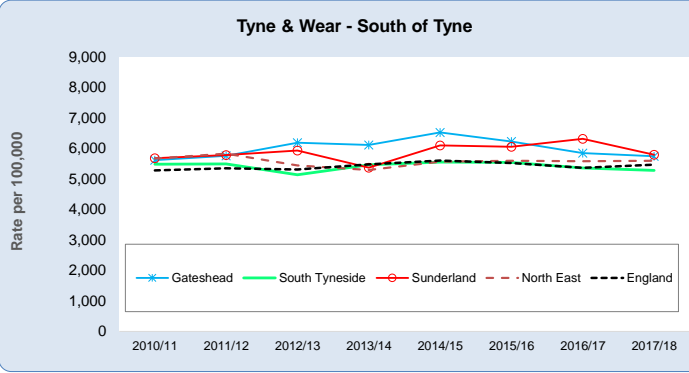
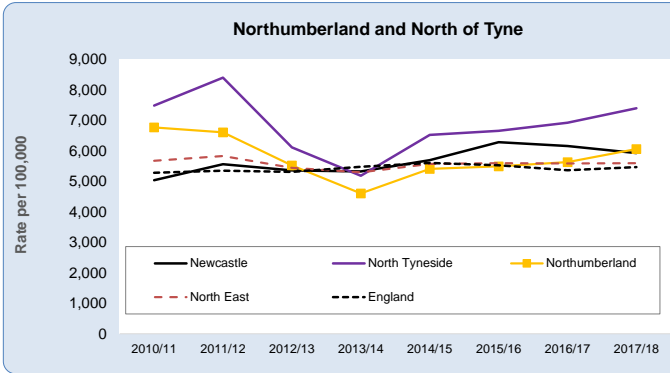There are four local authorities which have admission rates for falls which are significantly above the England average (North Tyneside, Northumberland, County Durham and Newcastle). In contrast, rates in Cumbria, Hambleton, Richmondshire and Teesside are significantly better than the England rate.

The trend charts in the next section show how the admission rates have changed over the last eight years.

Emergency admissions for injuries due to falls in people aged 80+, 2010/11 to 2017/18, by Local Authority

Northumberland and North of Tyne

Tyne & Wear - South of Tyne

Teesside

Durham and Darlington

North Cumbria

Hambleton and Richmondshire

2 Expected annual cost of falls

North East & North Cumbria
£84,973,249

Expected annual cost of falls by CCG

Expected annual spend (£)

- Cumbria — £15,253,181
- Newcastle Gateshead — £10,678,766
- Northumberland — £9,327,984
- Durham Dales, Easington &… — £7,248,936
- South Tees — £6,746,337
- Hartlepool & Stockton-On-Tees — £6,669,136
- Sunderland — £6,648,257
- North Durham — £5,982,218
- North Tyneside — £5,162,110
- Hambleton, Richmondshire & Whitby — £4,638,988
- South Tyneside — £3,879,812
- Darlington — £2,737,524
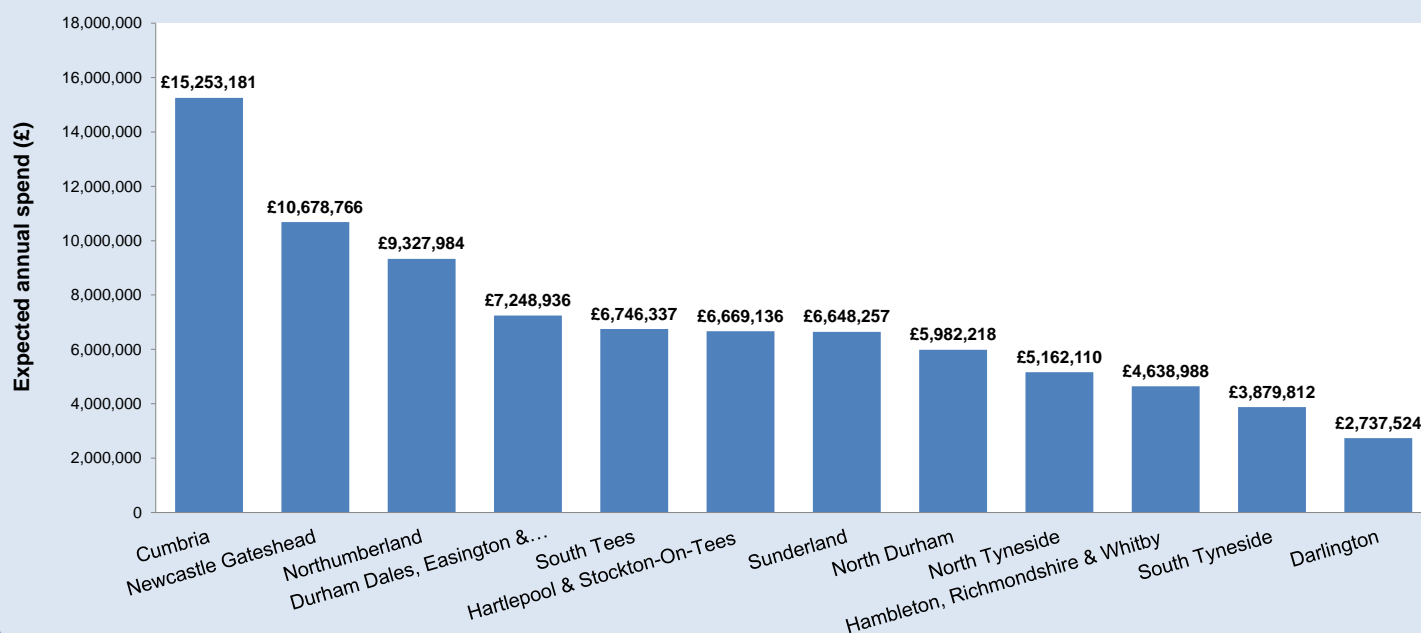
CCG	Expected annual spend (£)	Estimated Annual Savings (£)
Cumbria	£15,253,181	£2,435,593
Newcastle Gateshead	£10,678,766	£1,735,951
Northumberland	£9,327,984	£1,458,393
Durham Dales, Easington & Sedgefield	£7,248,936	£1,139,639
South Tees	£6,746,337	£1,081,776
Hartlepool & Stockton-On-Tees	£6,669,136	£1,062,736
Sunderland	£6,648,257	£1,041,855
North Durham	£5,982,218	£924,742
North Tyneside	£5,162,110	£823,081
Hambleton, Richmondshire & Whitby	£4,638,988	£735,941
South Tyneside	£3,879,812	£625,006
Darlington	£2,737,524	£444,843
NENC Total	**£84,973,249**	**£13,509,556**

Data source: Falls Prevention Economic Model (FPEM) - August 2016 - https://www.csp.org.uk/documents/falls-prevention-economic-model

Definitions / Notes
The falls prevention economic model has been developed by the Chartered Society of Physiotherapy to identify the cost benefit of investing in physiotherapy. It shows how much money could be saved and falls prevented if everyone 65+ identified as at risk of falling was referred to physiotherapy. The latest version of the model has been refreshed with 2015 data, and it is intended that local areas will input their own data as the model currently uses national assumptions which may not accurately reflect local pathways. The data in this report are based solely on the figures as published in the model with no local data used.
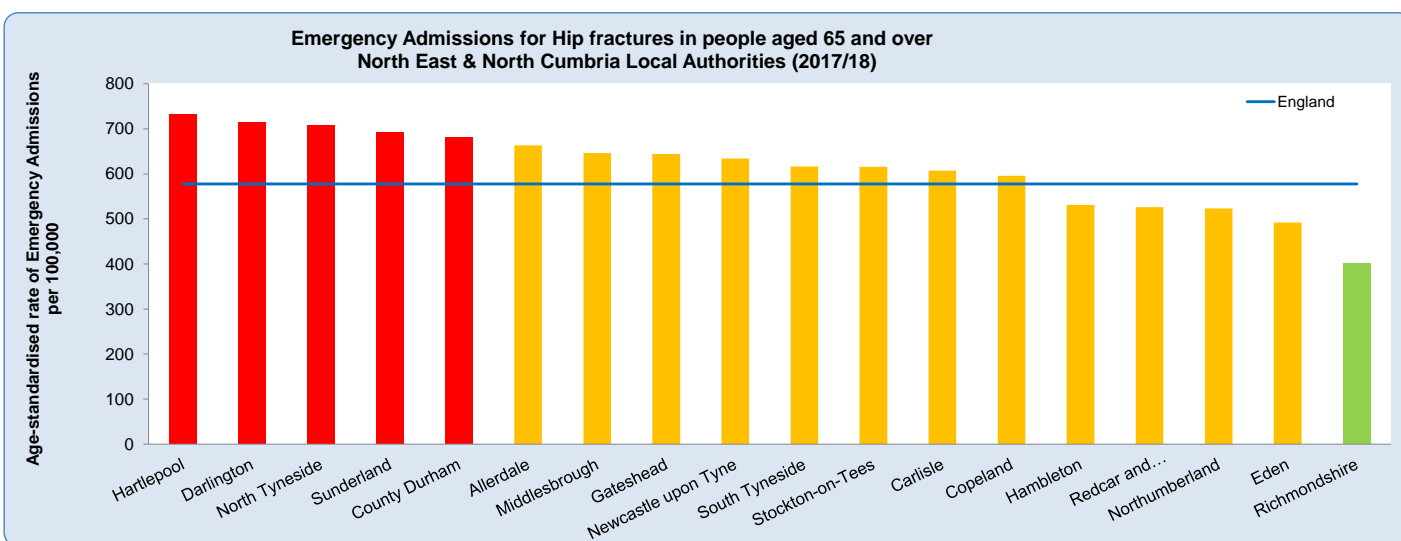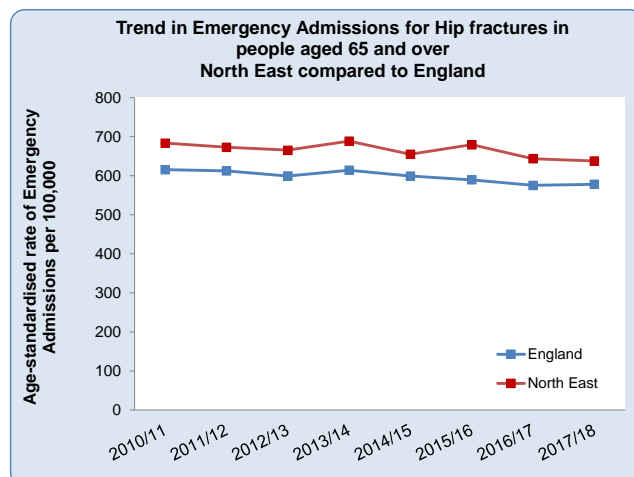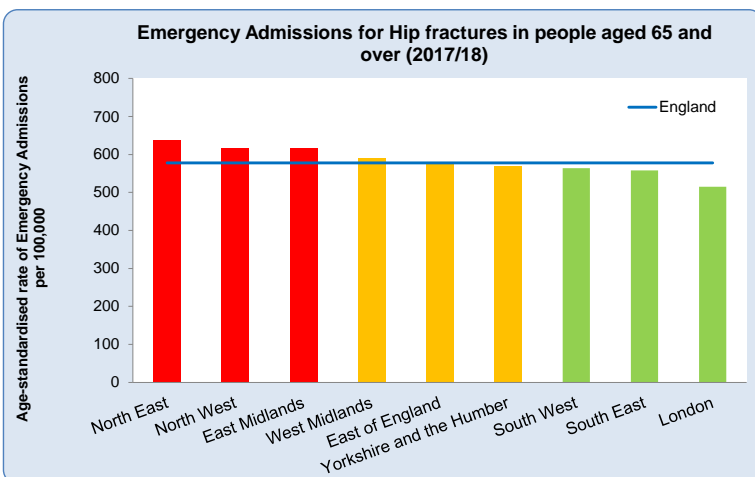
What is the data telling us?
The model shows the expected annual cost of falls, by CCG for the North East and North Cumbria (NENC). The region is estimated to spend almost £85 million per year on falls. This ranges from over £15 million in Cumbria CCG to £2.7 million in Darlington CCG. Public Health England have set an ambition to reduce the number of injuries due to falls in people aged 65+by 10%, by 2020/21[1]. If this was achieved across NENC, estimates suggest it could save in excess of £8 million per year. However, the Falls Prevention Model provides estimates suggesting a saving of around £13.5 million through the use of preventative physiotherapy for older people, although it acknowledges that these reflect a "best case scenario" that is unlikely to be achieved.

1. https://www.gov.uk/government/publications/local-health-and-care-planning-menu-of-preventative-interventions

3.1 Emergency Admissions for Hip fractures in people aged 65 and over

Age standardised rate of emergency admissions for fractured neck of femur in those aged 65+ per 100,000 population

North East	North West	East Midlands	West Midlands	East of England	Yorkshire and the Humber	South West	South East	London	England
638	617	615	590	577	569	564	558	515	578

Emergency Admissions for Hip fractures in people aged 65 and over (2017/18)

Trend in Emergency Admissions for Hip fractures in people aged 65 and over North East compared to England

Emergency Admissions for Hip fractures in people aged 65 and over North East & North Cumbria Local Authorities (2017/18)

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes
Refer to Indicator 1.1
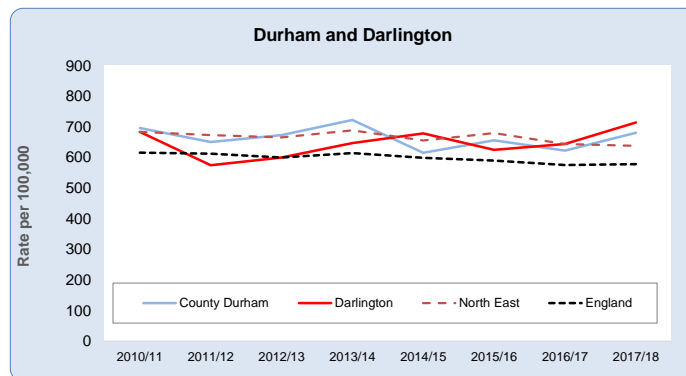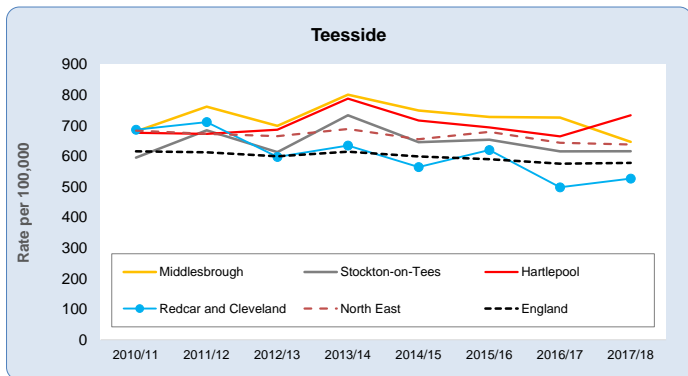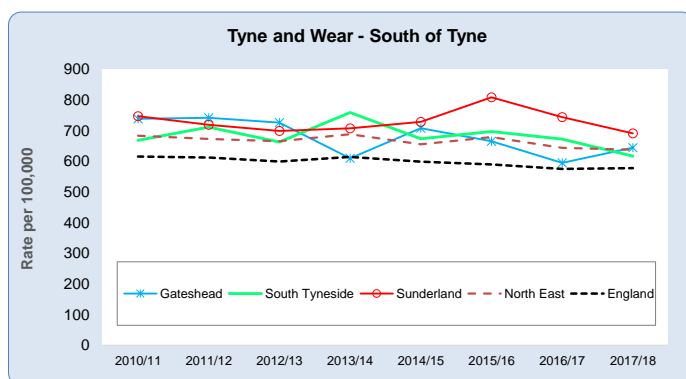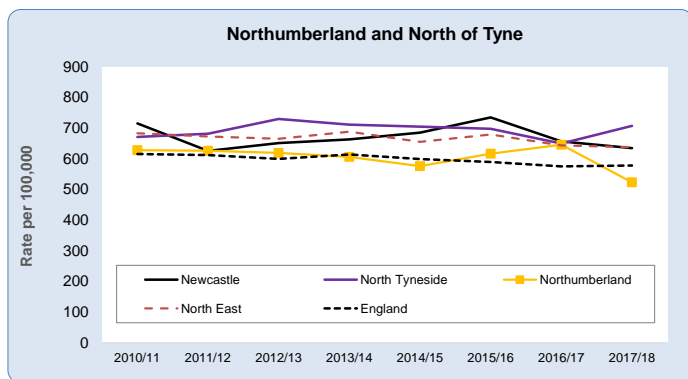
What is the data telling us?
Although the rate of emergency admissions for hip fracture in the North East fell slightly in the latest time period for which data is available (2017/18), the region still has the highest rate of all the regions in England and is significantly above (10%) the national average (638 compared to 578).

There are five local authorities with hip fracture rates that are significantly higher than the England rate (Hartlepool, Darlington, North Tyneside, Sunderland and County Durham). The trend charts on the next page show how the admission rates have changed over the last eight years. The largest percentage decrease between 2016/17 and 2017/18 has been in Richmondshire.

Emergency Hospital Admission for fractured neck of femur in persons aged 65 and over, directly age standardised rate per 100,000.

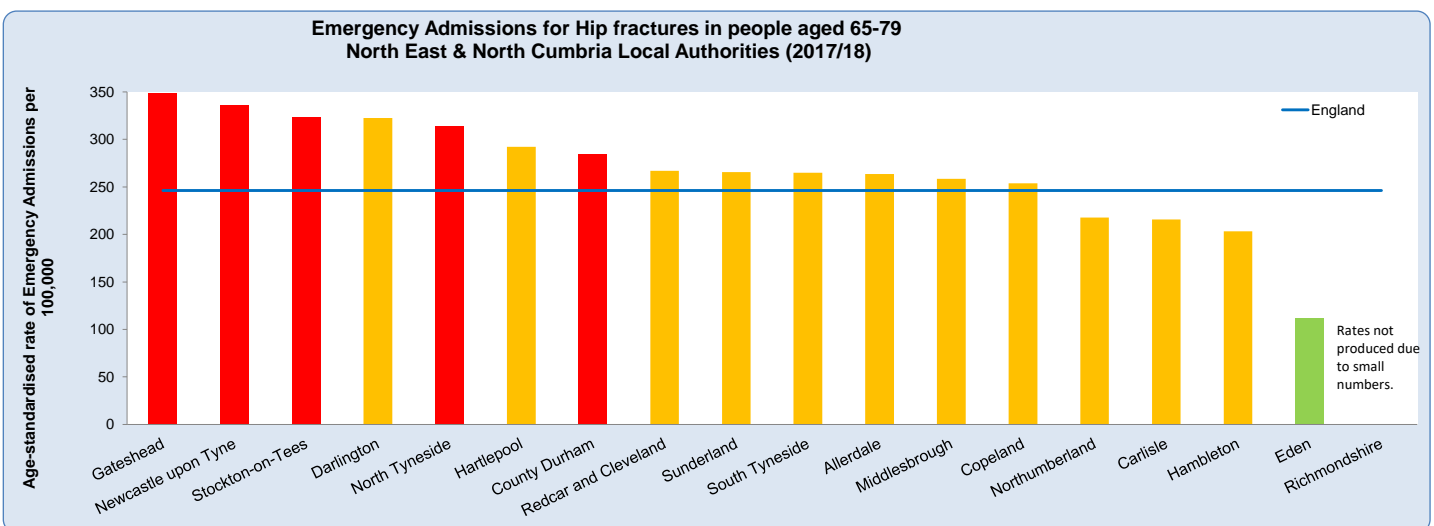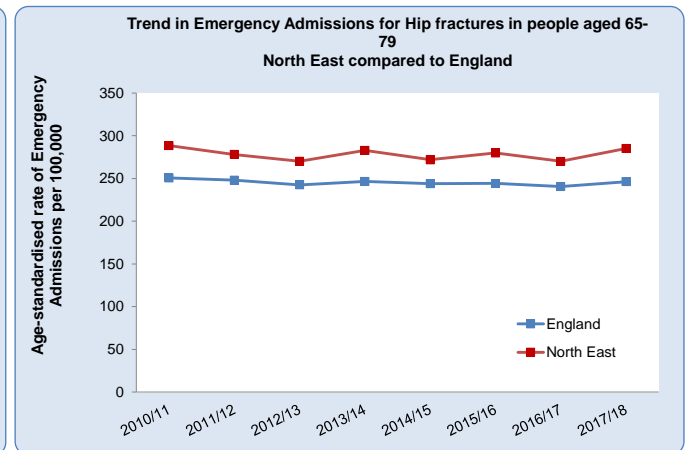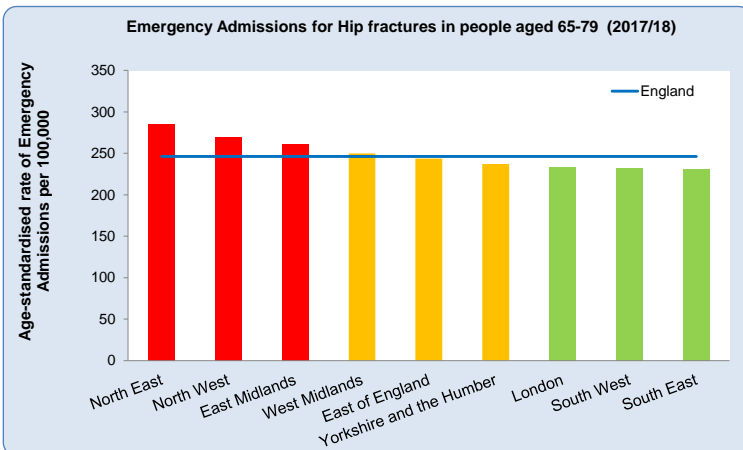## Emergency admissions for Hip fractures in people aged 65+, 2010/11 to 2017/18, by Local Authority

Northumberland and North of Tyne

Tyne and Wear - South of Tyne

Teesside

Durham and Darlington

North Cumbria

Hambleton and Richmondshire
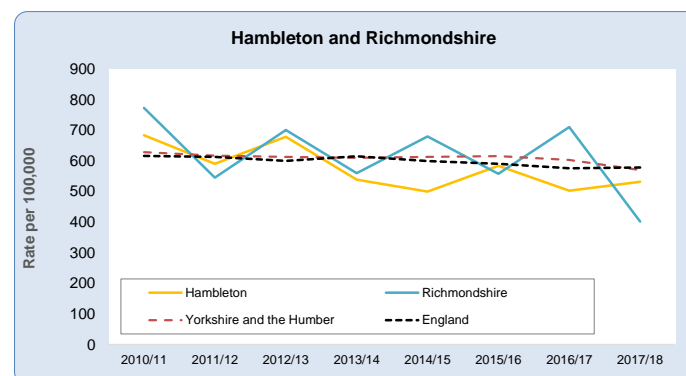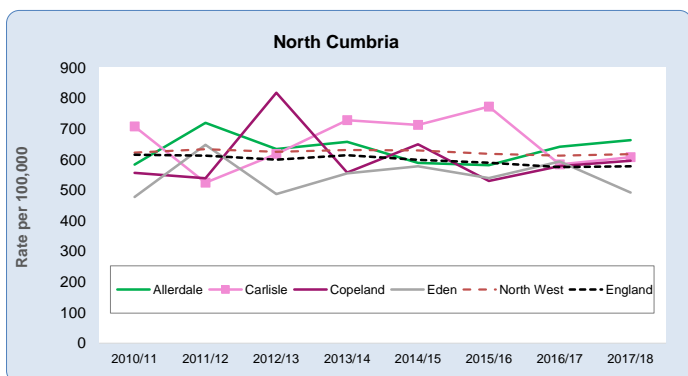
3.2 Emergency Admissions for Hip fractures in people aged 65-79

Age standardised rate of emergency admissions for fractured neck of femur in those aged 65-79 per 100,000 population

North East	North West	East Midlands	West Midlands	East of England	Yorkshire and the Humber	London	South West	South East	England
285	269	262	250	244	237	234	232	230	246

Emergency Admissions for Hip fractures in people aged 65-79 (2017/18)

Trend in Emergency Admissions for Hip fractures in people aged 65-79 North East compared to England

Emergency Admissions for Hip fractures in people aged 65-79 North East & North Cumbria Local Authorities (2017/18)

Rates not produced due to small numbers.

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes
Refer to Indicator 1.1

What is the data telling us?
The North East has the highest rate of emergency admissions, with a rate that is 16% above the national average (285 compared to 246). Amongst the 65-79 age group the rate in the North East increased by 6% between 2016/17 and 2017/18, compared to a 2% increase nationally.

Five local authorities have admission rates significantly higher than the national average (Gateshead, Newcastle upon Tyne, Stockton-on-Tees, North Tyneside and County Durham). The trend charts on the next page show how the admission rates have changed over the last eight years. The rate in Darlington increased by over 50% in the latest period for which data are available. There have also been substantial increases in Newcastle, Gateshead and North Tyneside, although rates in Tyne and Wear tend to fluctuate considerably from year to year. In contrast, the rate for Middlesbrough has reduced by around 30% in 2017/18.

Emergency Hospital Admission for fractured neck of femur in persons aged 65-79, directly age standardised rate per 100,000.

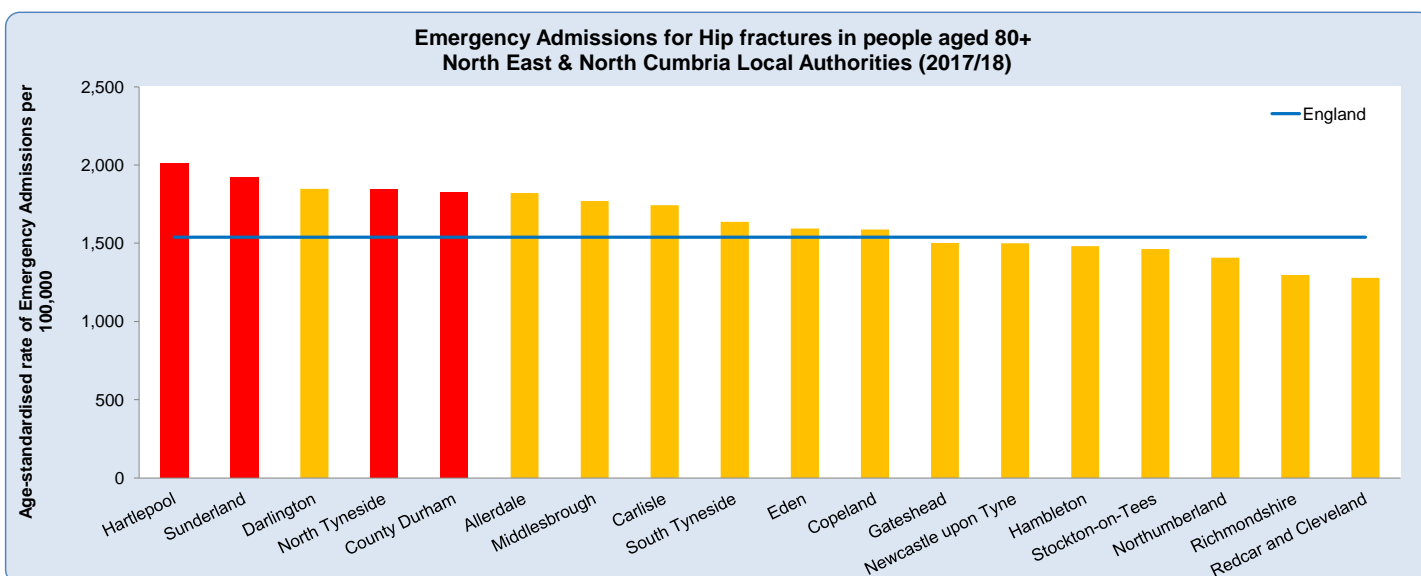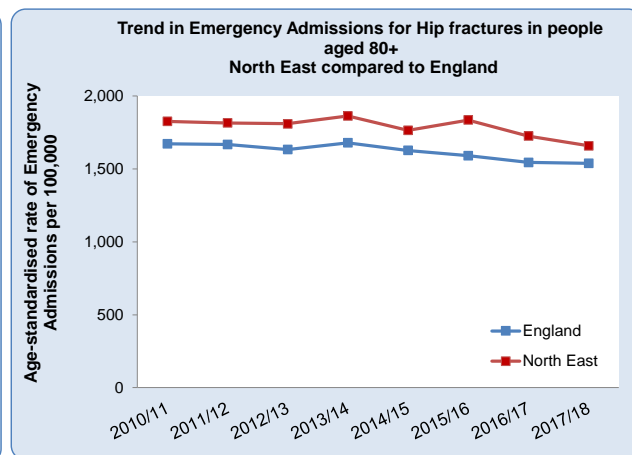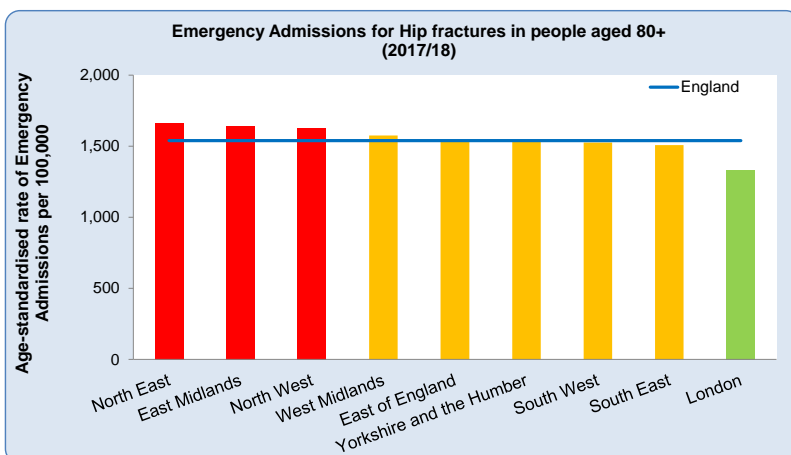**Emergency admissions for Hip fractures in people aged 65-79, 2010/11 to 2017/18, by Local Authority**
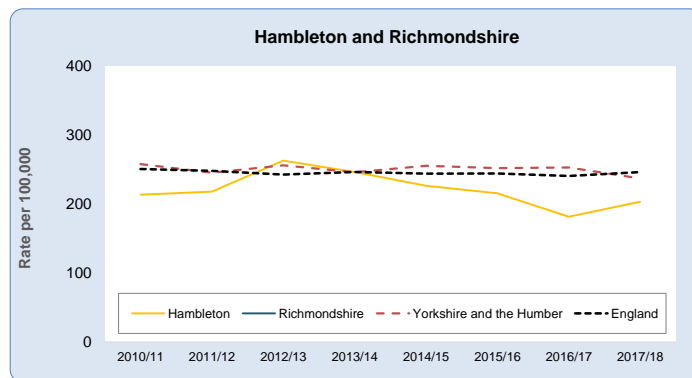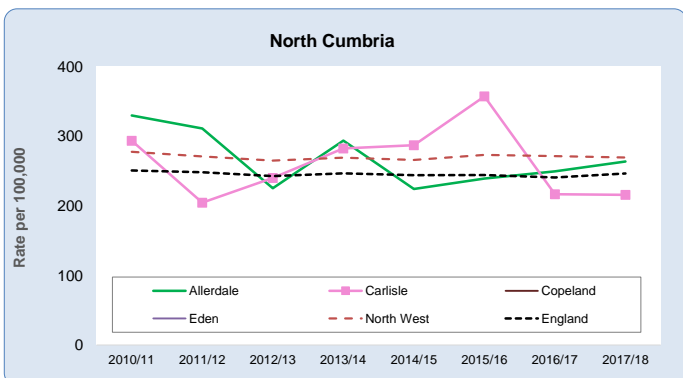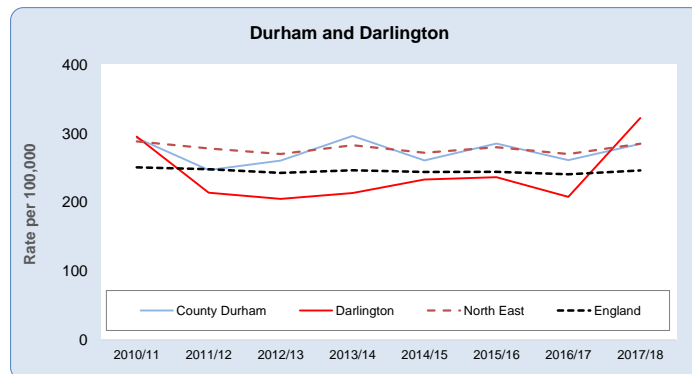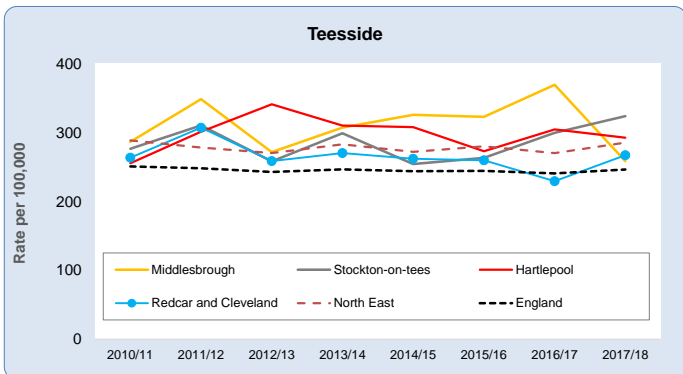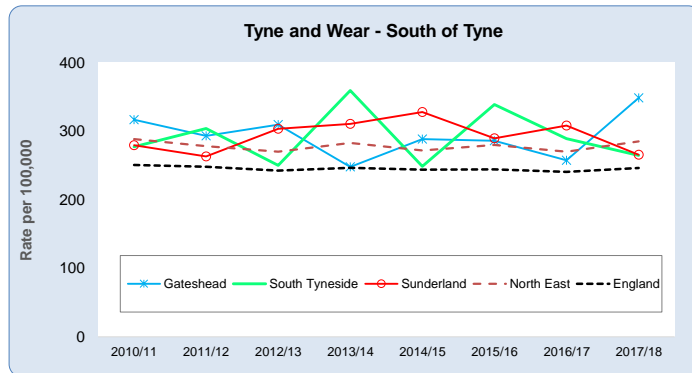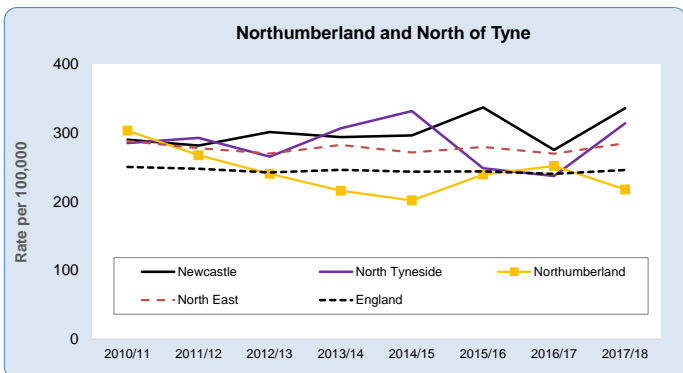
Richmondshire, Copeland and Eden do not appear on these charts as the data contains small numbers which have been suppressed.

3.3 Emergency Admissions for Hip fractures in people aged 80+

Age standardised rate of emergency admissions for fractured neck of femur in those aged 80+ per 100,000 population

North East	East Midlands	North West	West Midlands	East of England	Yorkshire and the Humber	South West	South East	London		England
1659	1639	1626	1576	1543	1533	1525	1507	1331		1539

Emergency Admissions for Hip fractures in people aged 80+ (2017/18)

Trend in Emergency Admissions for Hip fractures in people aged 80+ North East compared to England

Emergency Admissions for Hip fractures in people aged 80+ North East & North Cumbria Local Authorities (2017/18)

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes
Refer to Indicator 1.1

What is the data telling us?
In contrast to the trend for the 65-79 age group, data for the 80+ age group shows that the rate of admission for hip fracture in the North East has fallen for the second year in a row. Nevertheless, the North East, with a rate 8% above the national average (1,659 per 100,000 compared to 1,539 per 100,000), has the highest rate of emergency admissions for hip fracture of any region in England.

There are four areas with hip fracture admission rates that are significantly above the national average (Hartlepool, Sunderland, North Tyneside and County Durham). The trend charts on the next page show how the admission rates have changed over the last eight years.

Emergency Hospital Admission for fractured neck of femur in persons aged 65 and over, directly age standardised rate per 100,000.

Emergency Admissions for Hip fractures in people aged 80+, 2010/11 to 2017/18, by Local Authority
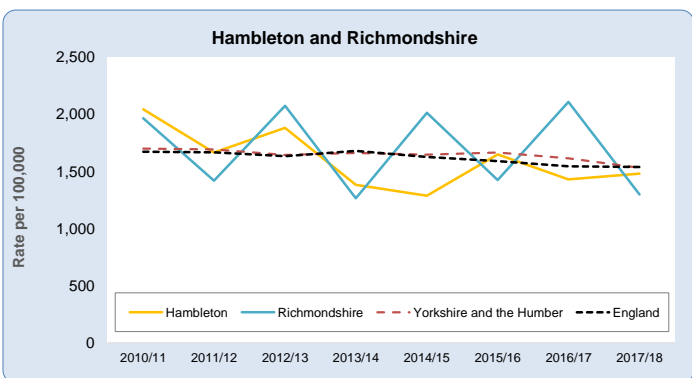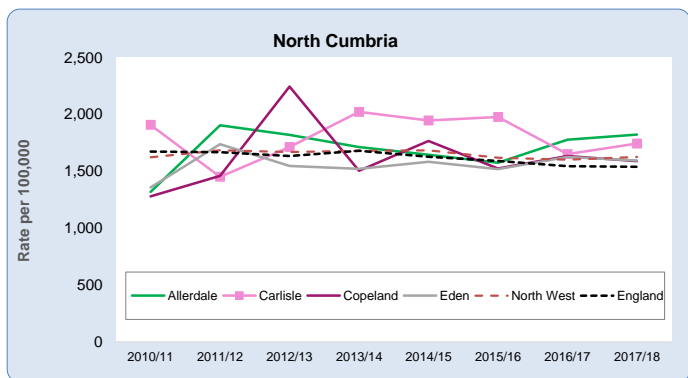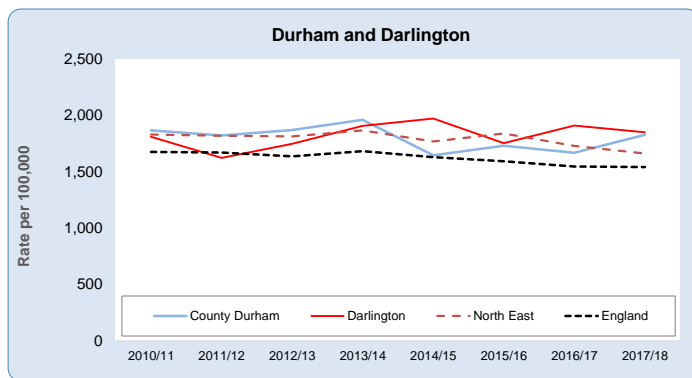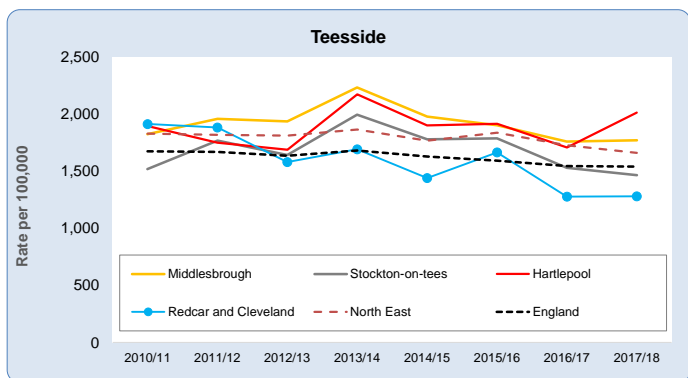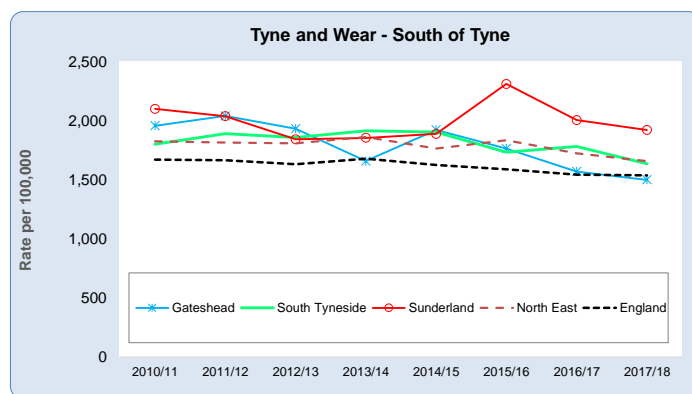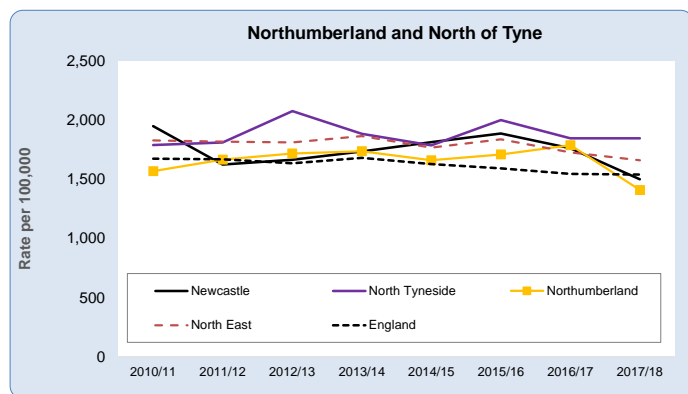
4 Percentage of adults that are physically inactive, 2017/18

North East	West Midlands	Yorkshire and the Humber	North West	East Midlands	East of England	London	South East	South West		England
26.6	25.5	24.1	23.4	22.7	22.2	22.0	19.0	18.7		22.2

% of adults that are physically inactive, by region, 2017/18

Trend in % of adults that are physically inactive, North East compared to England, 2015/16 - 2017/18

% of adults that are physically inactive, North East & North Cumbria Local Authorities, 2017/18
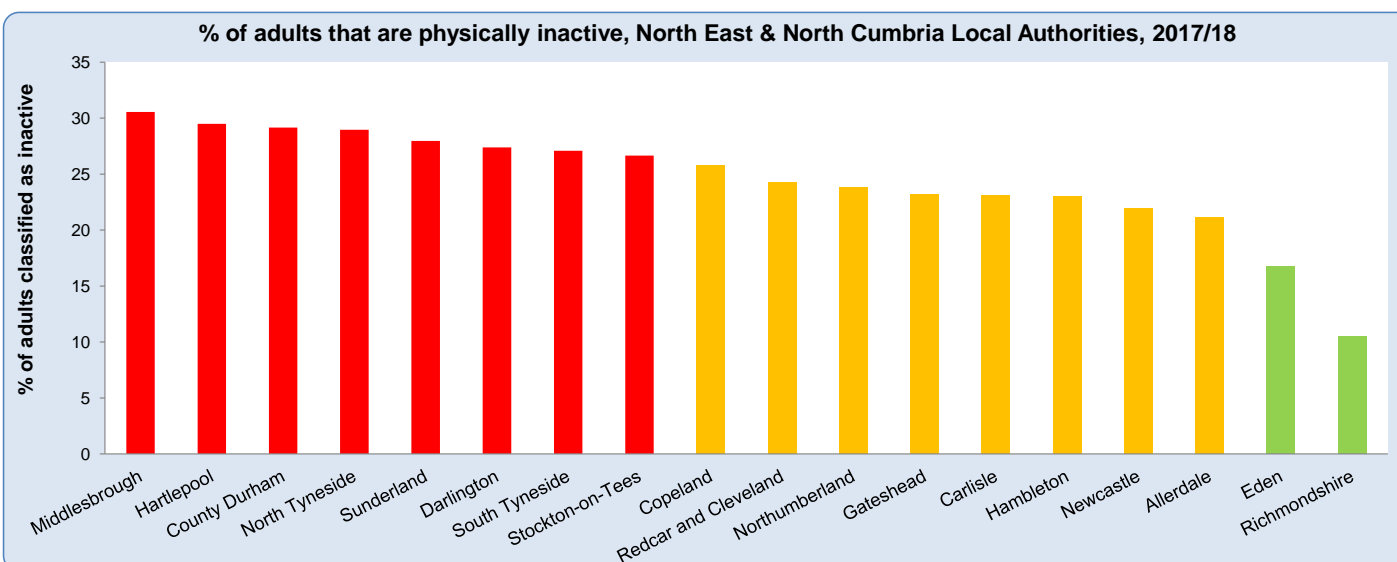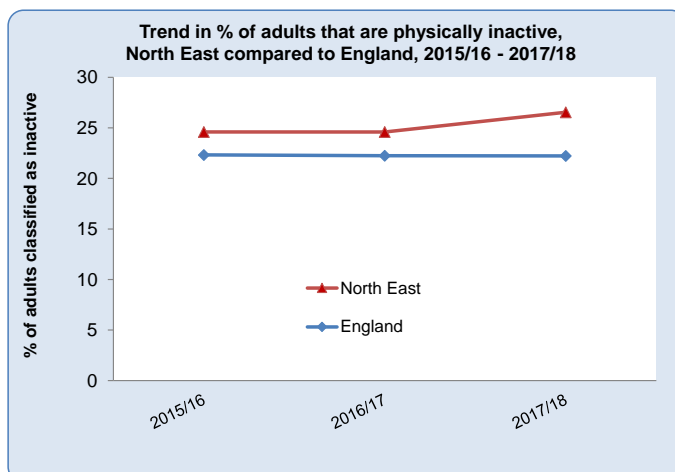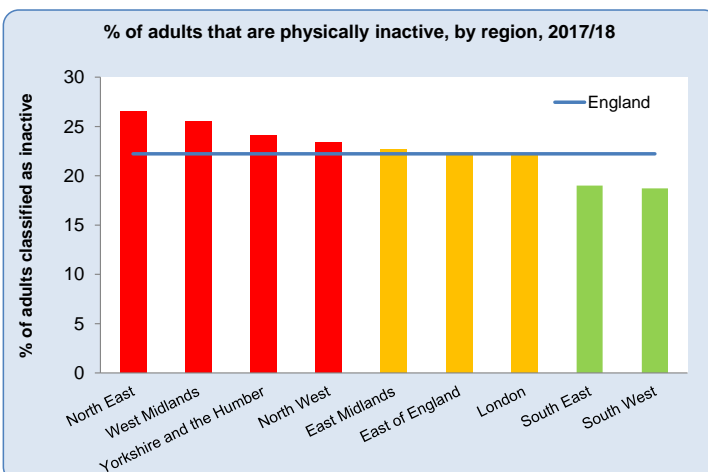

Data sources: Public Health England Fingertips tool. https://fingertips.phe.org.uk/

Definitions / Notes

The Chief Medical Officer currently recommends that, in order to build strength and improve bone health, adults undertake a minimum of 150 minutes (2.5 hours) of moderate physical activity per week, or 75 minutes of vigorous physical activity per week or an equivalent combination of the two (MVPA), in bouts of 10 minutes or more. However, there is no national data available to assess compliance with this recommendation. As an alternative measure, we have looked at the percentage of adults who are classified as "inactive". This data is taken from the Sport England Active Lives Adult Survey covering the period from mid-November 2016 to mid-November 2017. It shows the number of respondents aged 19 and over who reported doing less than 30 minutes of moderate intensity equivalent minutes physical activity per week, in bouts of 10 minutes or more in the previous 28 days, as a percentage of the total number of respondents.

What is the data telling us?

The charts above show that in the North East 26.6% of people reported being inactive, a higher proportion than in 2016/17. This figure is the highest percentage of any region in England and significantly above the England average. Eight of the Local Authorities in NENC are significantly above (worse than) the England average and two are significantly below (better than) this rate.

The charts on the next page show the 2017/18 data compared to the date for the two previous years for each of the NENC local authorities.

Percentage of adults (aged 19+) that are physically inactive (<30 moderate intensity equivalent minutes per week)

% of adults that are physically inactive, 2015/16, 2016/17 and 2017/18, by local authority

Northumberland and North of Tyne

Tyne and Wear - South of Tyne

Teesside

Durham and Darlington

North Cumbria

Hambleton and Richmondshire
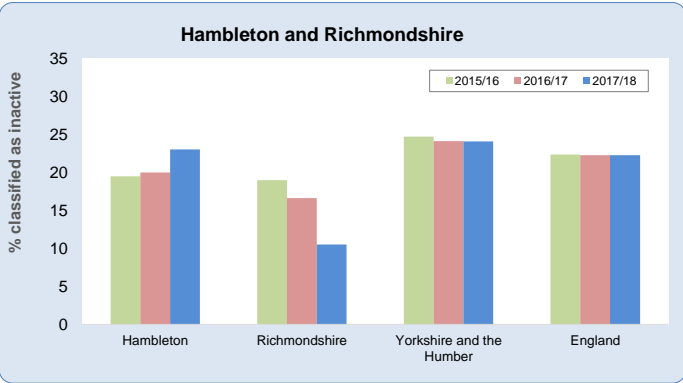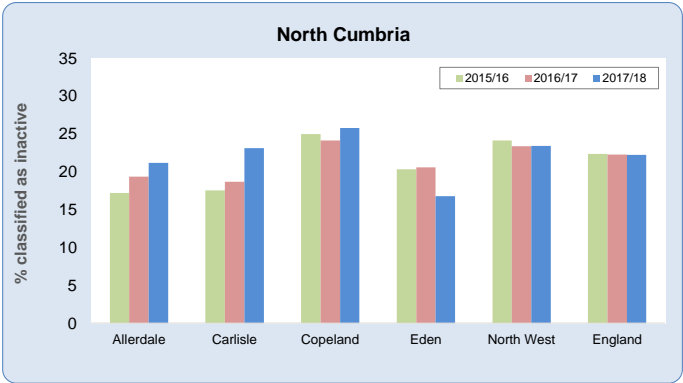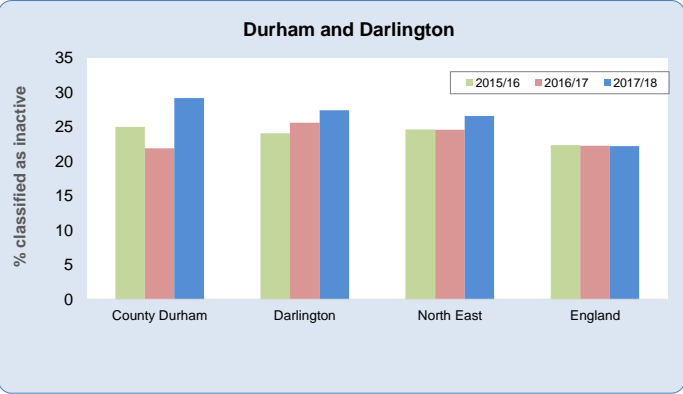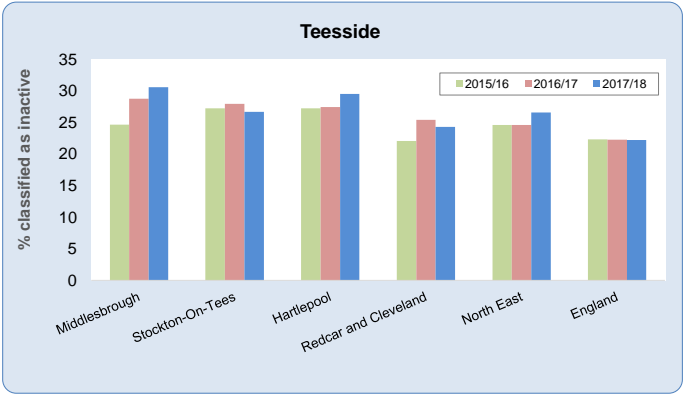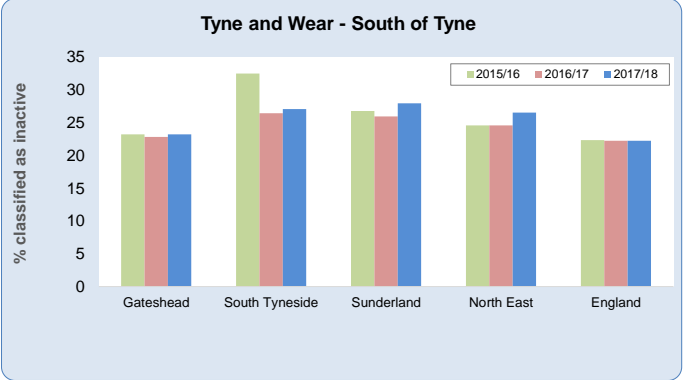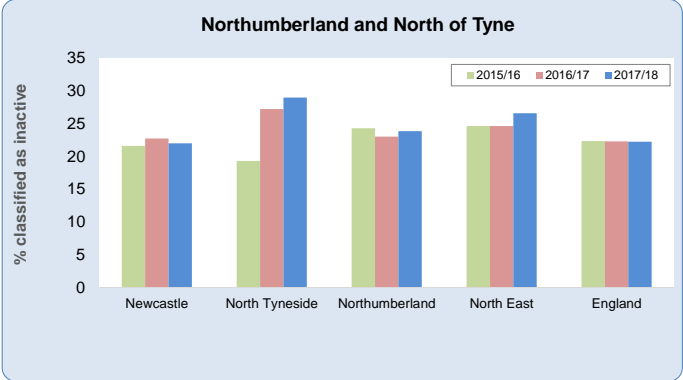
5 Osteoporosis recorded prevalence

Percentage of patients aged 50-74 years with a record of a fragility fracture on or after 01/04/2012 and a diagnosis of osteoporosis confirmed on DXA scan, and patients aged 75 years and over with a record of a fragility fracture on or after 01/04/2014 and a diagnosis of osteoporosis
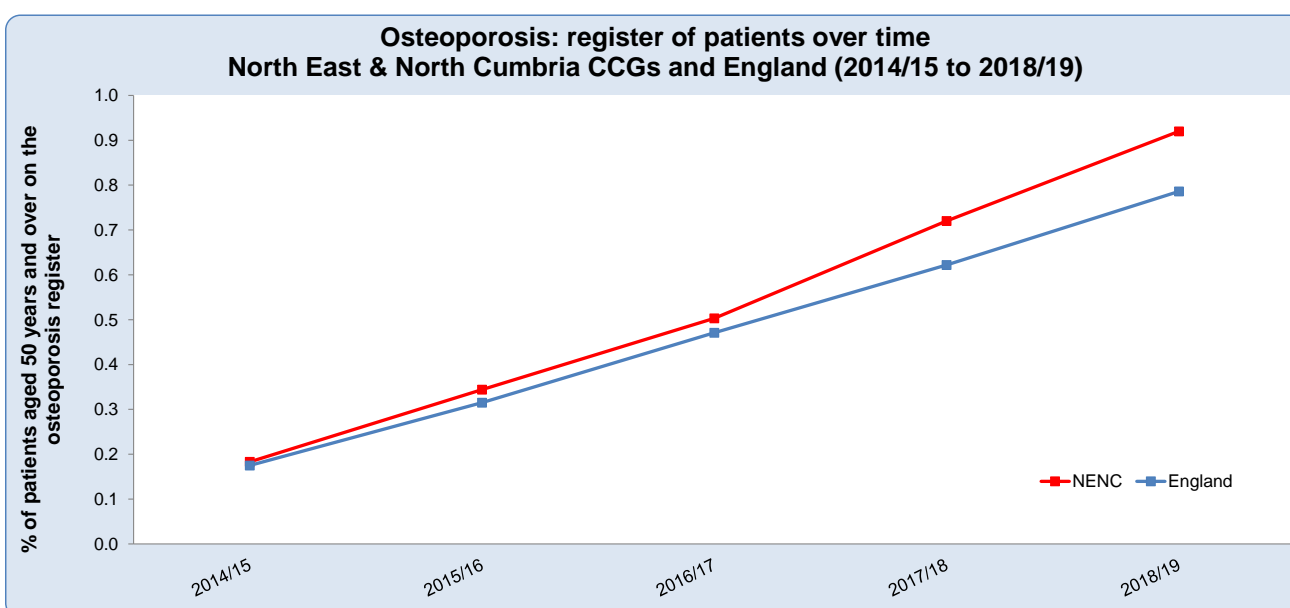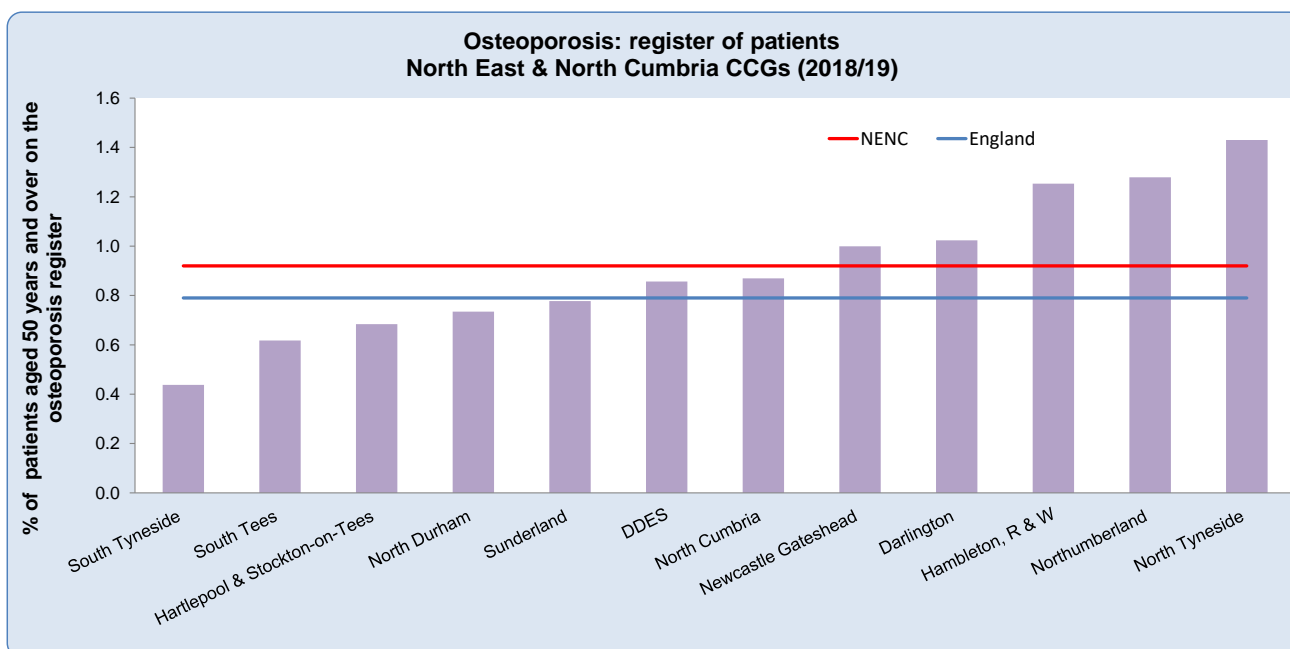
Osteoporosis: register of patients
North East & North Cumbria CCGs (2018/19)

Osteoporosis: register of patients over time
North East & North Cumbria CCGs and England (2014/15 to 2018/19)

Data source: Quality and Outcome Framework (QOF), NHS Digital https://qof.digital.nhs.uk/

Definitions / Notes
This data is taken from the Quality and Outcomes Framework (QOF), indicator OST004.
Practices are required to establish and maintain a register of patients:
1. Aged 50 or over and who have not attained the age of 75 with a record of a fragility fracture on or after 1 April 2012 and a diagnosis of osteoporosis confirmed on DXA scan, and
2. Aged 75 or over with a record of a fragility fracture on or after 1 April 2014 and a diagnosis of osteoporosis.

What is the data telling us?
The top chart shows that there is substantial variation in the size of the osteoporosis register in 2018/19 across CCGs in the North East and North Cumbria area. The NENC average is 0.92% of patients aged 50 years and over, compared to the England rate of 0.79%.
There has been a steady increase over time in the proportion of patients on the osteoporosis register for both the NENC region and for England overall. The increase is more marked in the NENC, especially for the latest 2 financial years.
This indicator (osteoporosis register) will remain in QOF for 2019/20 however the ongoing management indicators OST002 and OST005 which relate to this register will no longer be in QOF from 2019/20.

6.1 Percentage of patients aged 50 - 74 treated with a bone-sparing agent

Percentage of patients aged 50-74 with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent.

Trend in % of patients aged 50-74 with a fragility fracture on or after 01/04/2012, in whom osteoporosis is confirmed, who are currently treated with an appropriate bone-sparing agent
North East & North Cumbria compared to England (2014/15 - 2018/19)

% of patients aged 50-74 with a fragility fracture on or after 01/04/2012, in whom osteoporosis is confirmed, who are currently treated with an appropriate bone-sparing agent
North East & North Cumbria CCGs (2018/19)

% of patients aged 50-74 with a fragility fracture on or after 01/04/12, in whom osteoporosis is confirmed, who are currently treated with an appropriate bone-sparing agent by CCG in England (2018/19)
(NENC Region CCGs in yellow are presented in the same

Data source: Quality and Outcome Framework (QOF), NHS Digital https://qof.digital.nhs.uk/
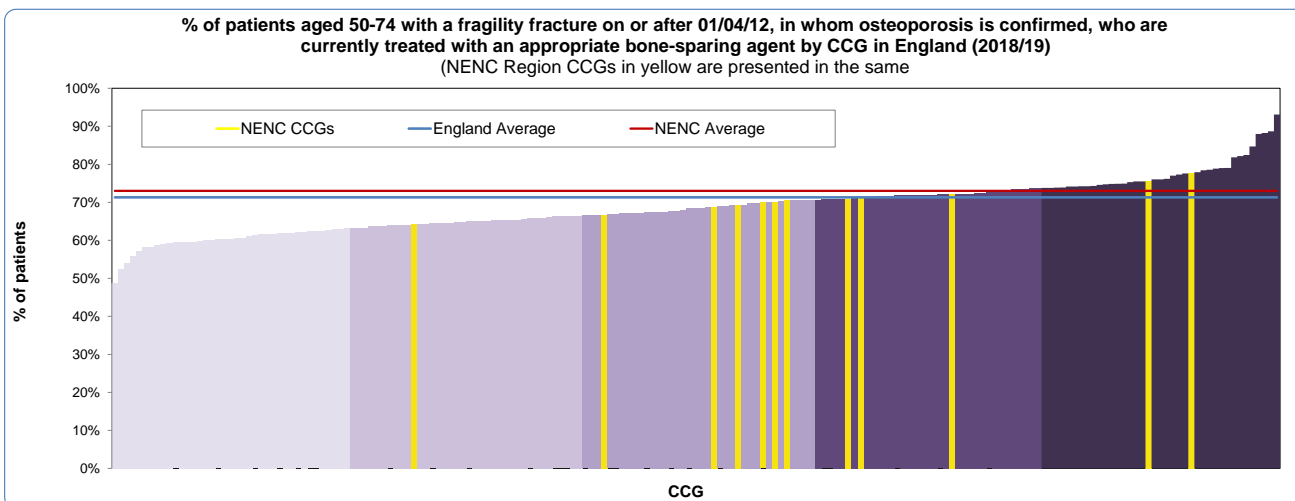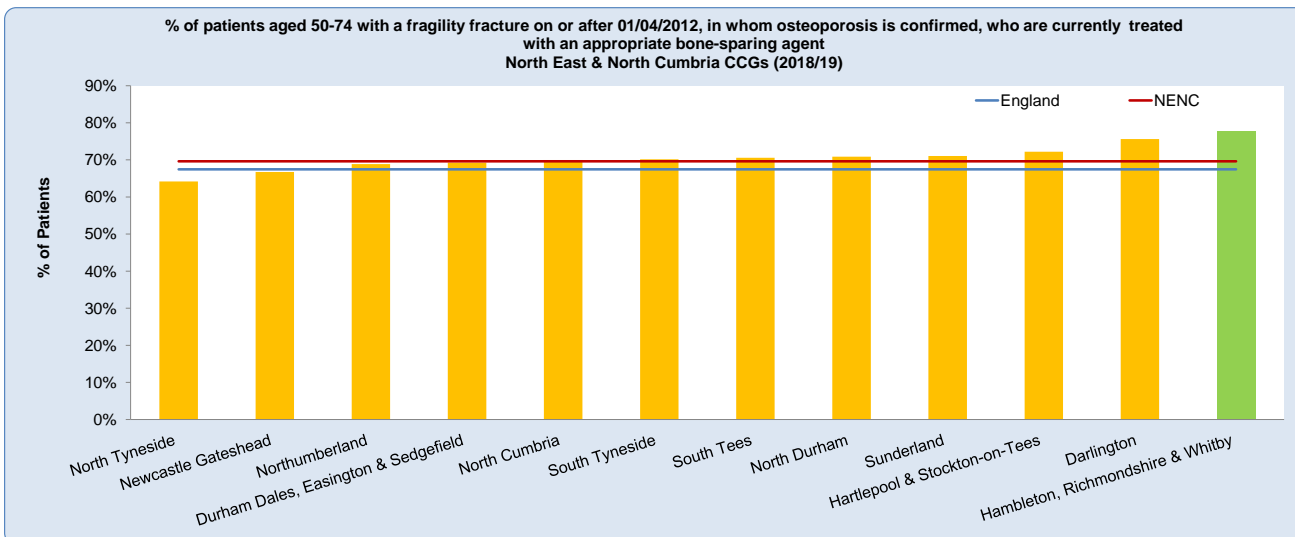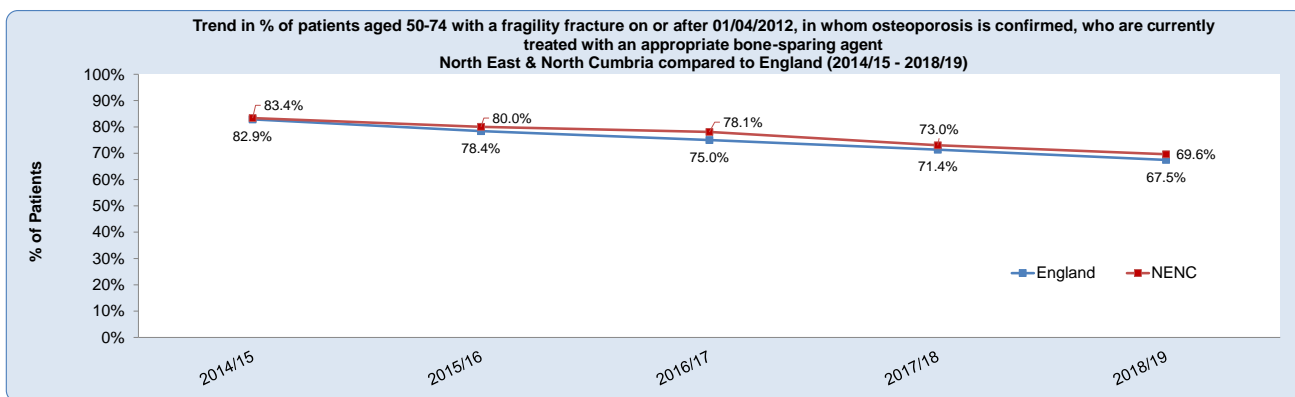
Definitions / Notes

This data is taken from the Quality and Outcomes Framework (QOF), indicator OST002.

For all QOF indicators included in this report the data includes excepted cases in the denominator as this is a better indication of the real clinical picture and will therefore not be the same as the published QOF achievement for each CCG.

Cumbria CCG ceased to exist in April 2017, and North Cumbria CCG was created, which covers Allerdale, Carlisle, Copeland and Eden. North Lancashire, South Lakes and Furness are now part of Morecambe Bay CCG. The 2016/17 QOF data onwards is reported by NHS Digital based on these new organisations and their boundaries. To ensure comparability of North Cumbria's data for the latest two years with data for previous years (which relates to Cumbria as a whole), the QOF data for 2014/15 and 2015/16 (see trend chart on next page) has been re-calculated by NEQOS to reflect the current North Cumbria CCG boundary.

What is the data telling us?

The first chart shows that achievement on this indicator has been declining over the last five years. The North East and North Cumbria (NENC) is performing slightly better than the England average in the management of at risk patients, with on average 69.6% of at risk patients being treated with a bone-sparing agent in 2018/19, compared to 67.5% nationally. A similar pattern is evident both nationally and across all the regions.

The second chart shows the achievement level for each of the NENC CCGs, ranging from 64.2% in North Tyneside to 77.8% in Hambleton, Richmondshire and Whitby CCG. The final chart shows how the performance of CCGs in NENC in 2018/19 is ranked across all CCGs in England and gives a sense of the scale of variation nationally in the use of bone-sparing agents in this age group.

The trend chart on the next page presents data for the past 5 years for each of the NENC CCGs, with the majority showing a decrease in treatment rates over this period. After an upward trend in treatment rates in South Tyneside and Hambleton, Richmondshire and Whitby they too have seen declines in the latest time period.

6.1 Percentage of patients aged 50 - 74 treated with a bone-sparing agent

Trend in percentage of patients aged 50-74 with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent.

Trend in percentage of patients aged 50-74 with a fragility fracture on or after 01/04/2012, in whom osteoporosis is confirmed, who are currently treated with an appropriate bone-sparing agent
North East & North Cumbria CCGs (2014/15 - 2018/19)
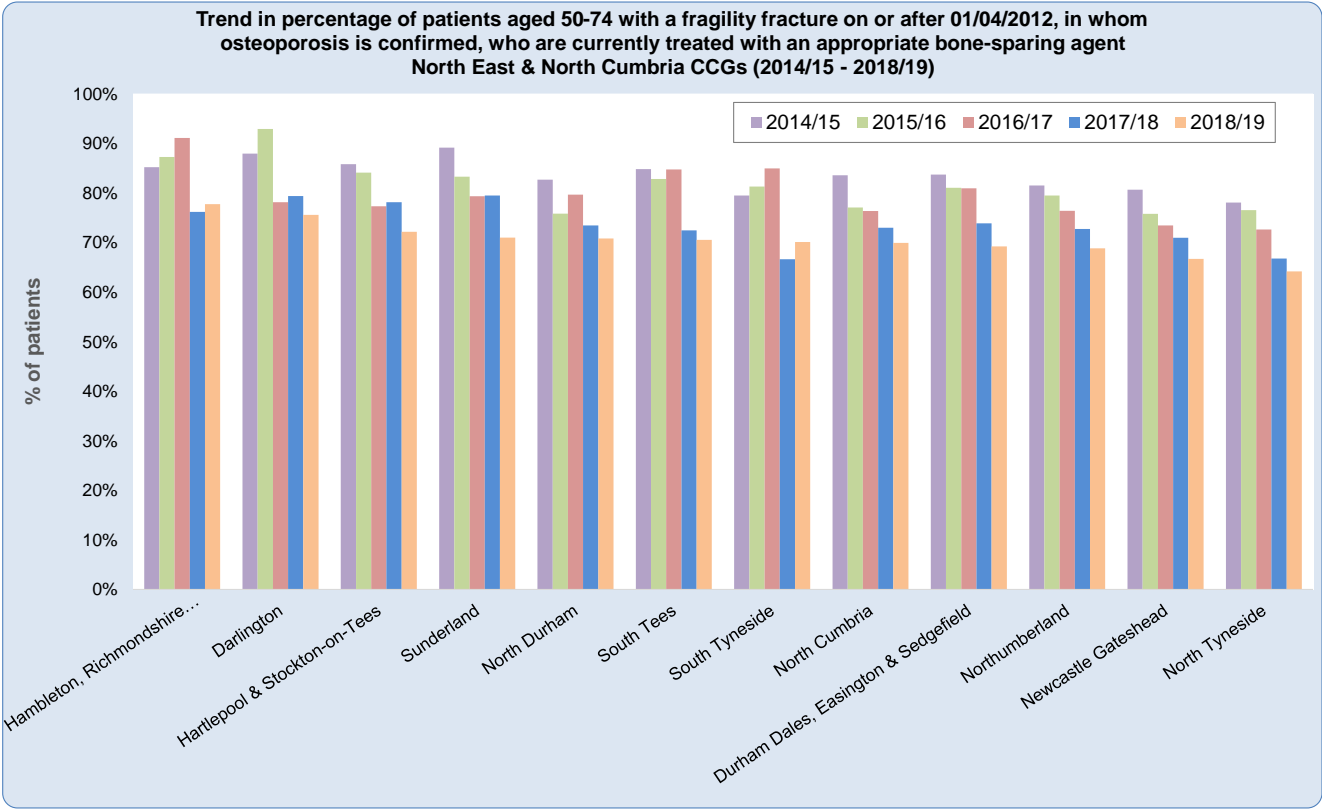
6.2 Percentage of patients aged 75+ treated with a bone-sparing agent

Percentage of patients aged 75 or over with a fragility fracture on or after 1 April 2014 and a diagnosis of osteoporosis, who are currently treated with an appropriate bone-sparing agent.

Trend in % of patients aged 75+ with a fragility fracture on or after 01/04/2014, who are currently treated with an appropriate bone-sparing agent
North East & North Cumbria compared to England (2014/15 - 2018/19)

Percentage of patients aged 75+ with a fragility fracture on or after 01/04/14, who are currently treated with an appropriate bone-sparing agent
North East & North Cumbria CCGs (2018/19)

Percentage of patients aged 75+ with a fragility fracture on or after 01/04/14, who are currently treated with an appropriate bone-sparing agent by CCG in England (2018/19)
(NENC Region CCGs in yellow are presented in the same order as in the chart above

Data source: Quality and Outcome Framework (QOF), NHS Digital https://qof.digital.nhs.uk/

Definitions / Notes
This data is taken from the Quality and Outcomes Framework (QOF), indicator OST005.
For all QOF indicators included in this report the data includes excepted cases in the denominator as this is a better indication of the real clinical picture and will therefore not be the same as the published QOF achievement for each CCG.

Cumbria CCG ceased to exist in April 2017, and North Cumbria CCG was created, which covers Allerdale, Carlisle, Copeland and Eden. North Lancashire, South Lakes and Furness are now part of Morecambe Bay CCG. The 2016/17 QOF data onwards is reported by NHS Digital based on these new organisations and their boundaries. To ensure comparability of North Cumbria's data for the latest two years with data for previous years (which relates to Cumbria as a whole), the QOF data for 2014-15 and 2015-16 (see trend chart on next page) has been re-calculated by NEQOS to reflect the current North Cumbria CCG boundary.

What is the data telling us?
This data shows that in 2018/19, 55.9% of at risk patients, aged over 75 are treated with a bone-sparing agent in the North East and North Cumbria (NENC), a similar proportion as in the country as a whole. Achievement on this indicator in NENC has been declining over the last five years, a pattern that is repeated across all the regions in the country.

The second chart shows the achievement level for each of the NENC CCGs, ranging from 49.6% in North Cumbria to 68.4% in South Tyneside. The final chart shows how the performance of CCGs in NENC in 2018/19 is ranked across all CCGs in England and gives a sense of the scale of variation nationally in the use of bone-sparing agents in this age group.

The trend chart on the next page presents data for the past 5 years for each of the NENC CCGs, with all showing a generally declining trend in treatment rates. North Cumbria and Darlington CCGs are the only organisations in NENC not to have seen a drop in treatment rates in 2018/19.
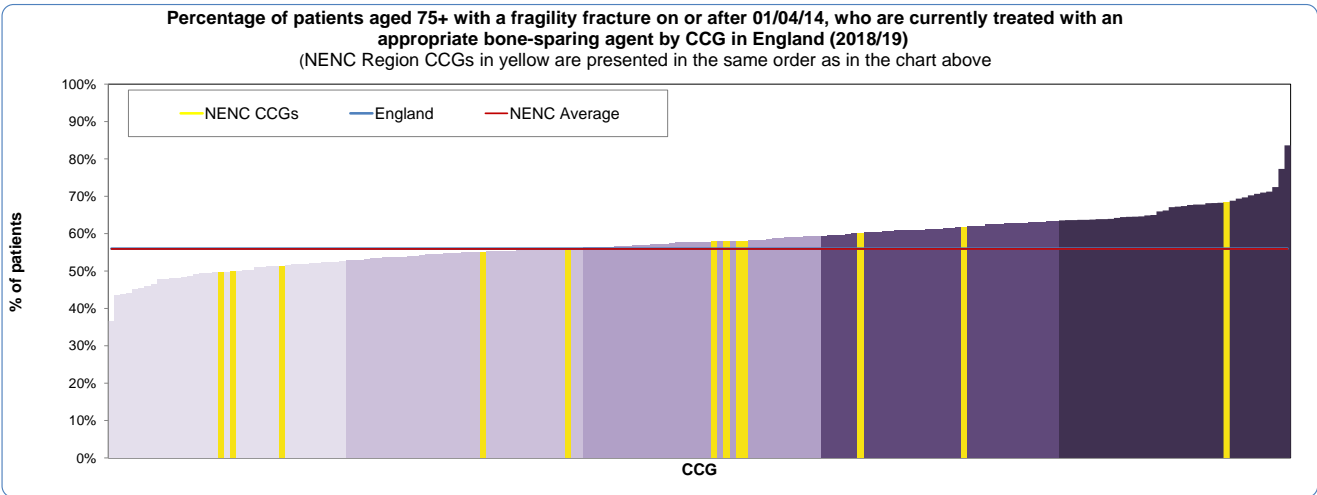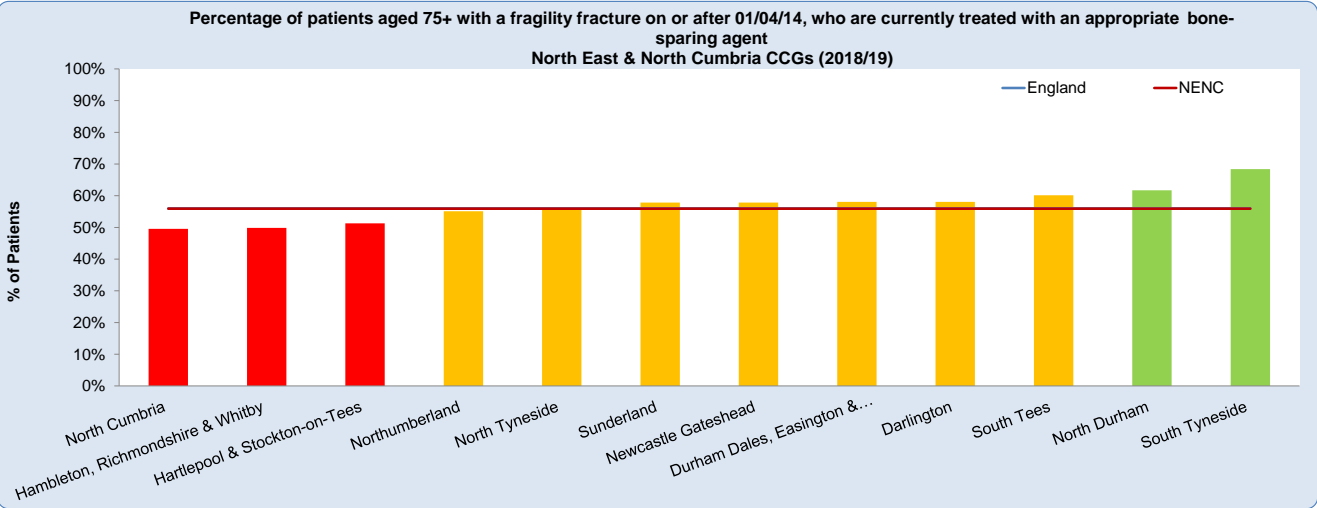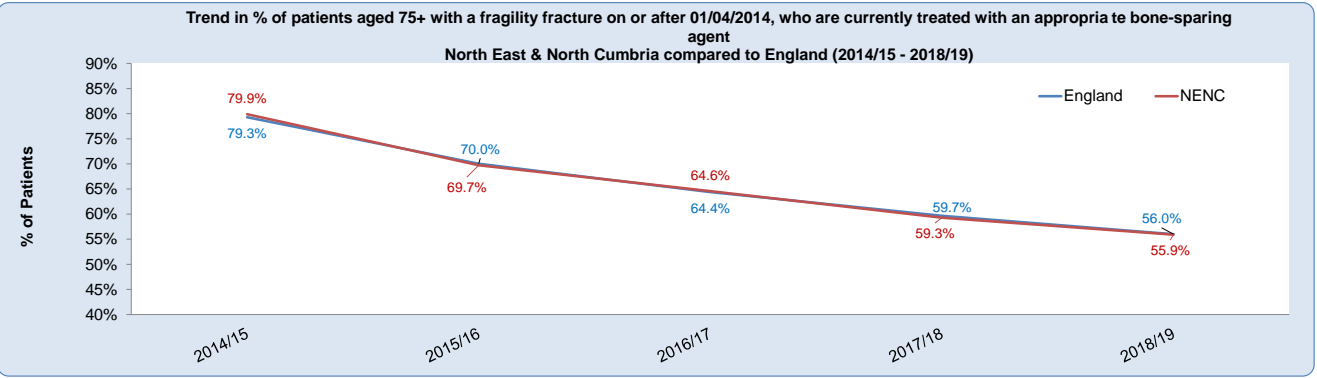
6.2 Percentage of patients aged 75+ treated with a bone-sparing agent
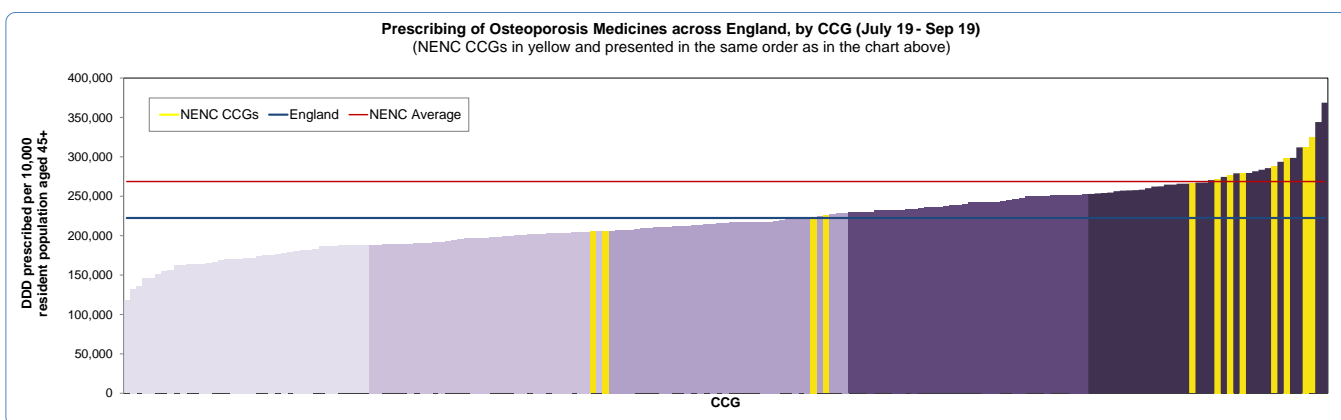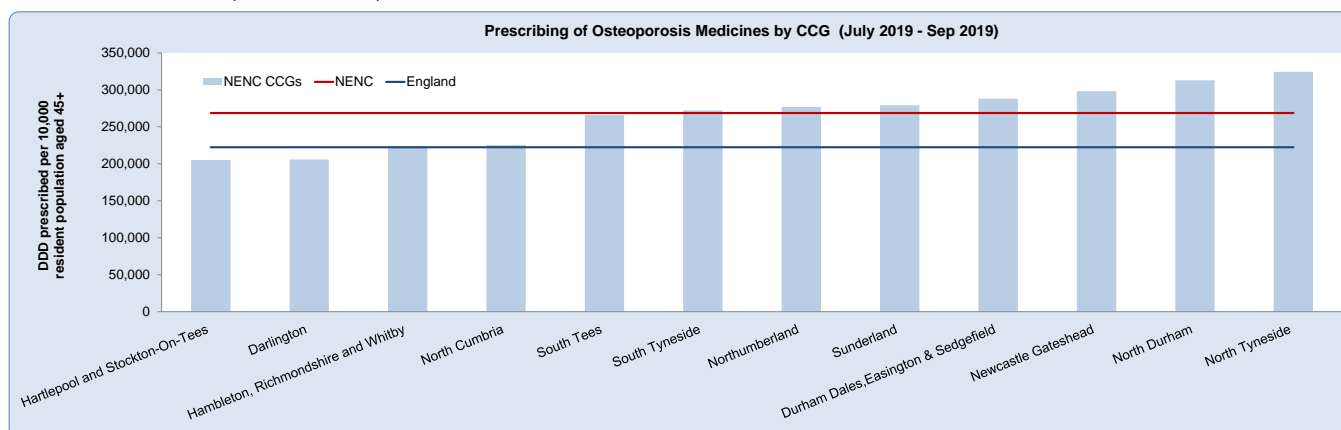
Trend in percentage of patients aged 75 or over with a fragility fracture on or after 1 April 2014, who are currently treated with an appropriate bone-sparing agent.

Trend in percentage of patients aged 75+ with a fragility fracture on or after 01/04/2012, who are currently treated with an appropriate bone-sparing agent
North East & North Cumbria CCGs (2014/15 - 2018/19)
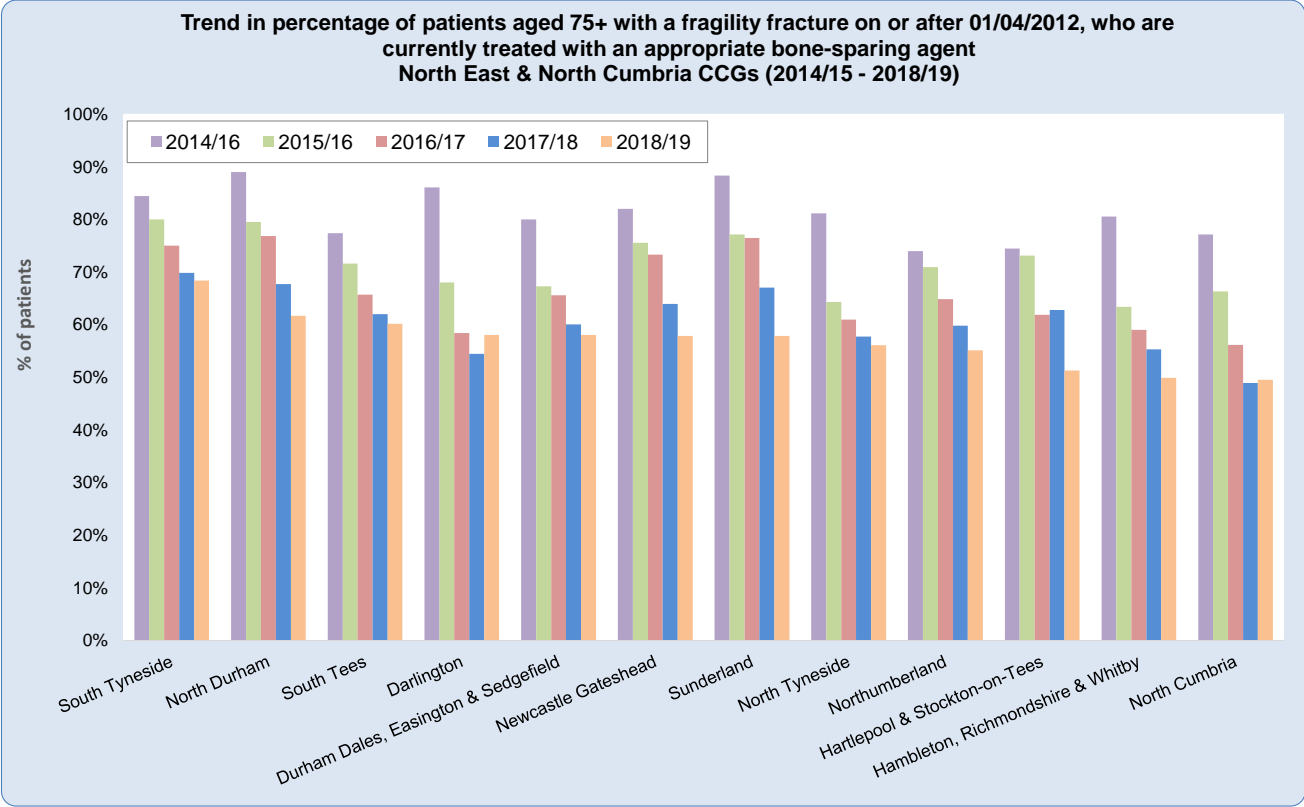
7 Prescribing of Osteoporosis Medicines

Osteoporosis Drugs prescribed, Defined Daily Doses (DDD) per 10,000 registered population aged 45 and over.

North East & North Cumbria	England
268,680	222,421

Prescribing of Osteoporosis Medicines by CCG (July 2019 - Sep 2019)

Legend: NENC CCGs, NENC, England

Y-axis: DDD prescribed per 10,000 resident population aged 45+

X-axis CCGs: Hartlepool and Stockton-On-Tees, Darlington, Hambleton, Richmondshire and Whitby, North Cumbria, South Tees, South Tyneside, Northumberland, Sunderland, Durham Dales,Easington & Sedgefield, Newcastle Gateshead, North Durham, North Tyneside

Prescribing of Osteoporosis Medicines across England, by CCG (July 19 - Sep 19)
(NENC CCGs in yellow and presented in the same order as in the chart above)

Legend: NENC CCGs, England, NENC Average

Y-axis: DDD prescribed per 10,000 resident population aged 45+

X-axis: CCG

Data source: NHSBSA Information Services

Definitions / Notes

Data used in this analysis has been sourced from the NHS Business Services Authority (NHSBSA) Information Services Data Warehouse and includes products prescribed on NHS prescriptions and dispensed in the Community. The data captured from prescription processing includes prescription items which were prescribed in England and dispensed in the community in England as well as items prescribed in England and dispensed in Wales, Scotland, Northern Ireland, Guernsey, Jersey, Alderney and the Isle of Man.

The Data excludes:
•   Items not dispensed, disallowed and those returned to the contractor for further clarification;
•   Prescriptions prescribed and dispensed in Prisons, Hospitals and Private prescriptions;
•   Items prescribed but not presented for dispensing or not submitted to NHS Prescription Services by the dispenser.

Defined Daily Doses (DDDs) are a standardised measure of prescribed drugs which can be used to compare the volume of drugs prescribed. A DDD is the assumed average maintenance dose, per day, for a drug used for its main indication in adults.
The data presented has not been adjusted for demography or disease prevalence and the osteoporosis medication definition is based upon advice from the NHSBSA (December 2019).

What is the data telling us?

The charts show the number of daily doses of osteoporosis medicines prescribed, per 10,000 registered CCG population aged 45 and over, for the period between July and September 2019. These medicines increase bone strength and have been approved by NICE for use in the primary and secondary prevention of frag ility fractures in post-menopausal women.
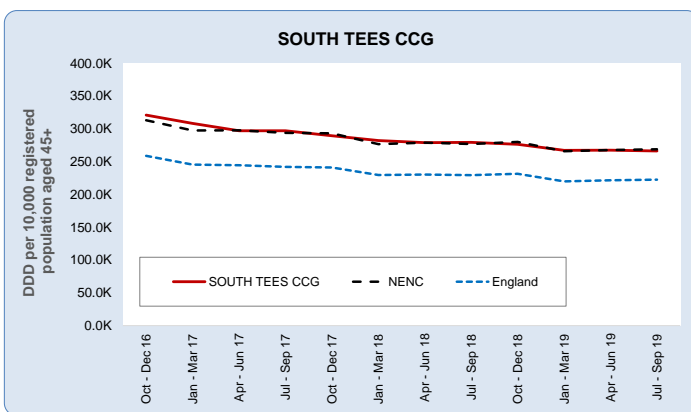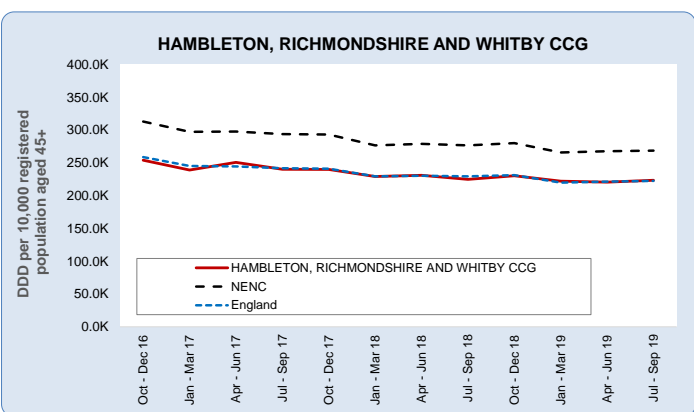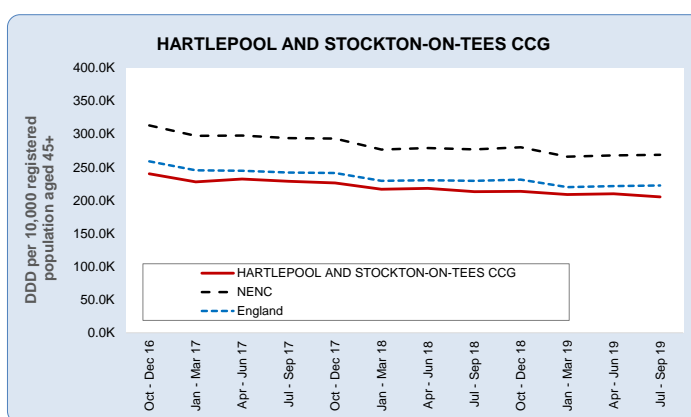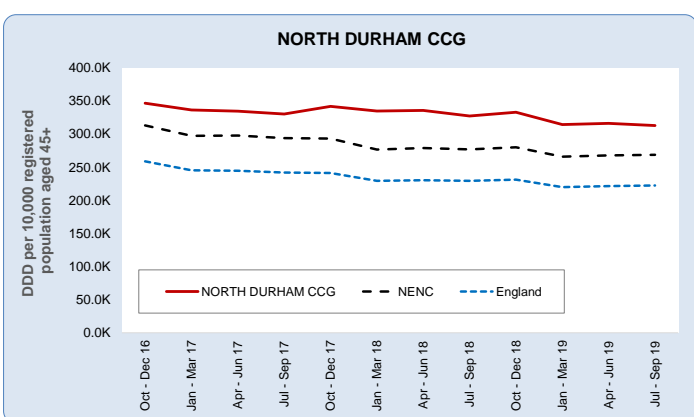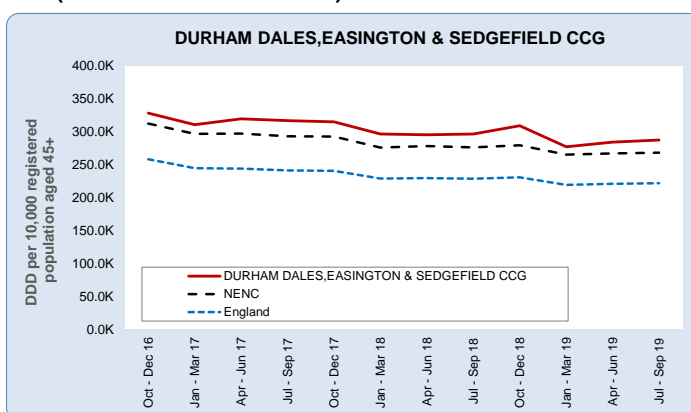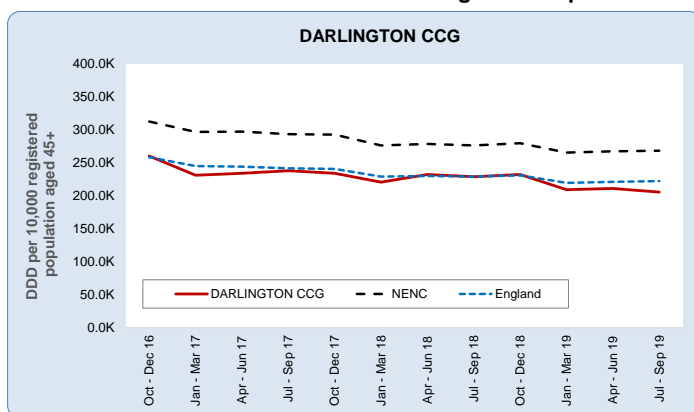
The data shows that the North East and North Cumbria (NENC) has a higher prescribing rate of these medicines than the England average, with only two CCGs below the national average, and eight of the 12 CCGs in the highest performing quintile nationally. Increased prescribing in CCGs with lower rates may lead t o cost savings through fracture prevention, although it should be noted that the rates presented have not been adjusted to take account of local demography or disease prevalence.

Note that the definition has changed since the last report, and is now expressed per 10,000 registered population aged 45 years and over.

7 Prescribing of Osteoporosis Medicines : Trend

Osteoporosis Drugs prescribed, Defined Daily Doses (DDD) per 10,000 registered population aged 45 and over

Prescribing of Osteoporosis Medicines (Q2 1617 - Q2 1920 Trends)

DARLINGTON CCG

DURHAM DALES,EASINGTON & SEDGEFIELD CCG

NORTH DURHAM CCG

HARTLEPOOL AND STOCKTON-ON-TEES CCG

HAMBLETON, RICHMONDSHIRE AND WHITBY CCG

SOUTH TEES CCG

Data source: NHSBSA Information Services
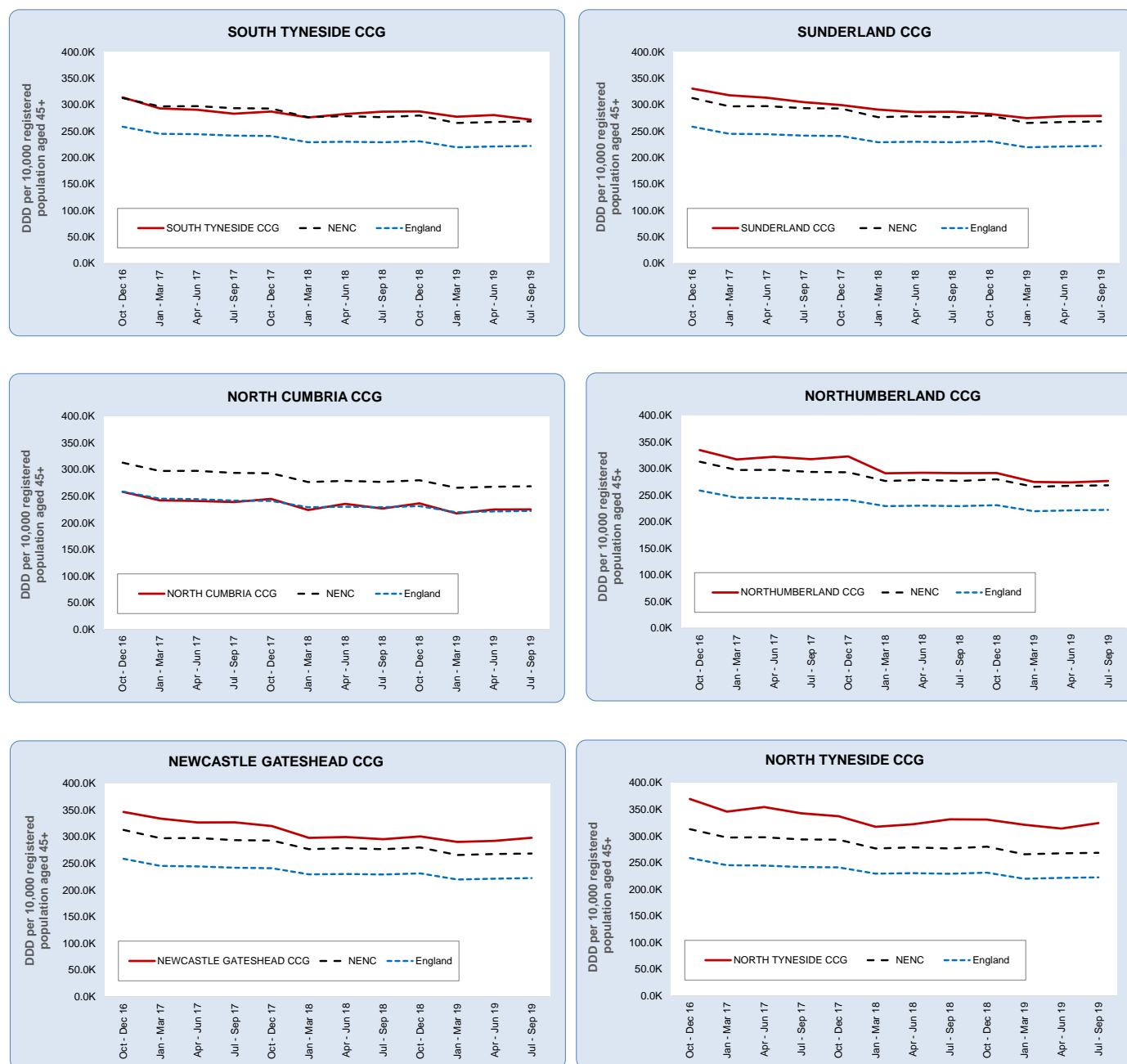
What is the data telling us?

The charts on this page and the following page show the number of daily doses of osteoporosis medicines prescribed by each CCG, by quarter, per 10,000 registered CCG population aged 45 and over, for the period October to December 2016 to July to September 2019. The general trend is that prescribing rates are reducing over time, and it is possible that bisphosphonate holidays are having an effect.

The data shows that three of these CCGs (Darlington, Hartlepool and Stockton on Tees and Hambleton, Richmondshire and Whitby) have prescribing rates over time that are similar to or lower than the England rate, whereas the other three CCGs have rates that are similar to or higher than the North East and North Cumbria average.

Prescribing of Osteoporosis Medicines (Q2 1617 - Q2 1920 Trends)

SOUTH TYNESIDE CCG

SUNDERLAND CCG

NORTH CUMBRIA CCG

NORTHUMBERLAND CCG

NEWCASTLE GATESHEAD CCG

NORTH TYNESIDE CCG

Data source: NHSBSA Information Services

What is the data telling us?
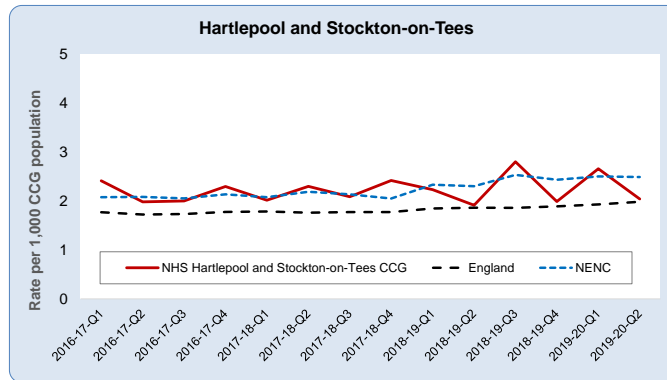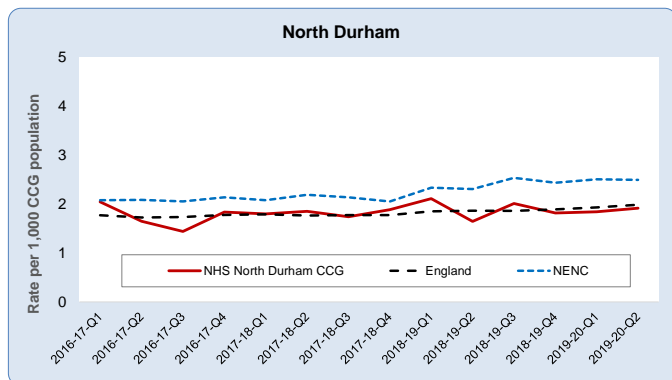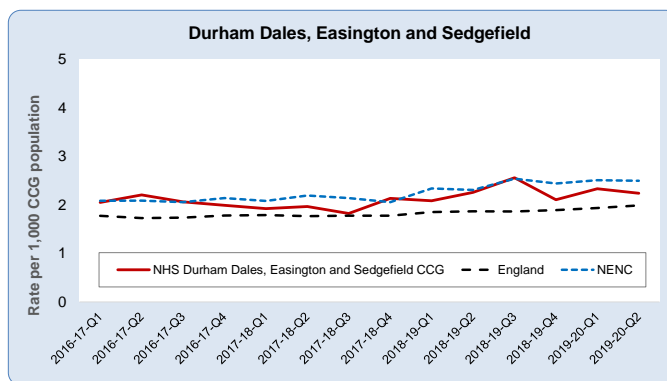The charts on this page and the following page show the number of daily doses of osteoporosis medicines prescribed by each CCG, by quarter, per 10,000 registered CCG population aged 45 and over, for the period October to December 2016 to July to September 2019. The general trend is that prescribing rates are reducing over time, and it is possible that bisphosphonate holidays are having an effect.

The data shows that North Cumbria CCG has a similar prescribing rate over time to the England rate, whereas the other five CCGs have rates that are similar to or higher than the North East and North Cumbria average.

8. Activity relating to DEXA scans

Number of planned test/procedures and waiting list test/procedures (excluding unscheduled activity) by Quarter by CCG, 2016/17 Q1 to 2019/20 Q2, rate per 1,000 registered CCG population

DEXA scan activity by CCG, 2016/17 Quarter 1 to 2019/20 Quarter 2

Darlington

Durham Dales, Easington and Sedgefield

North Durham

Hartlepool and Stockton-on-Tees

Hambleton, Richmondshire and Whitby

South Tees
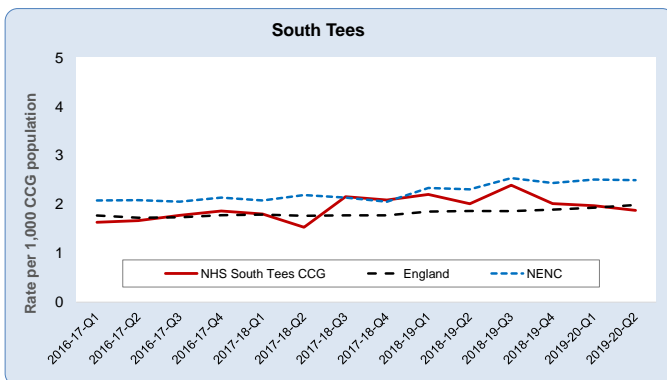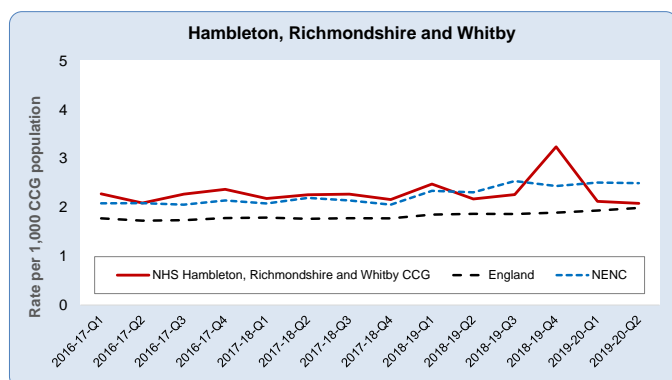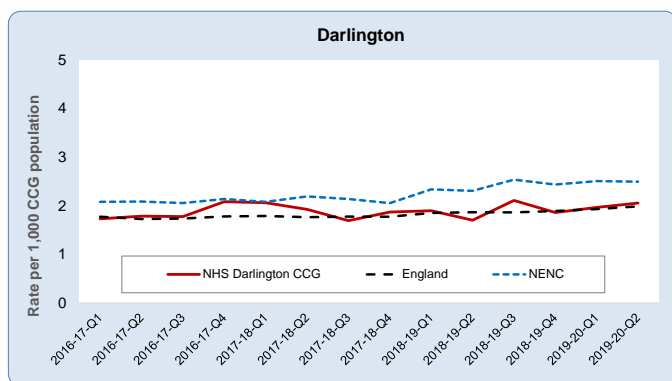
Data source: NHS England Monthly Diagnostics Waiting Times and Activity

Definitions / notes
Dual-energy X-ray absorptiometry (DEXA) is a type of X-ray used to measure the amount of calcium in bones. It is one of several techniques known as bone densitometry which can be used to measure the density of bones. Measurements of bone density are used:
- in the diagnosis of osteoporosis or to assess the risk of osteoporosis developing
- to monitor the effectiveness of treatment for conditions such as osteoporosis
- in the diagnosis of other bone disorders, such as osteopenia, an early sign of bone less where bone mineral density is lower than normal.
DEXA scan waiting times and activity information is reported to NHS England on a monthly basis by providers (along with information on 14 other diagnostic tests), and this information is collated and made available by NHS England on their website.The charts on this page and the following page show the DEXA scan rate per 1,000 registered population per CCG, over time. Only activity relating to planned tests and waiting list tests are reported, and this data therefore excludes any unscheduled activity.
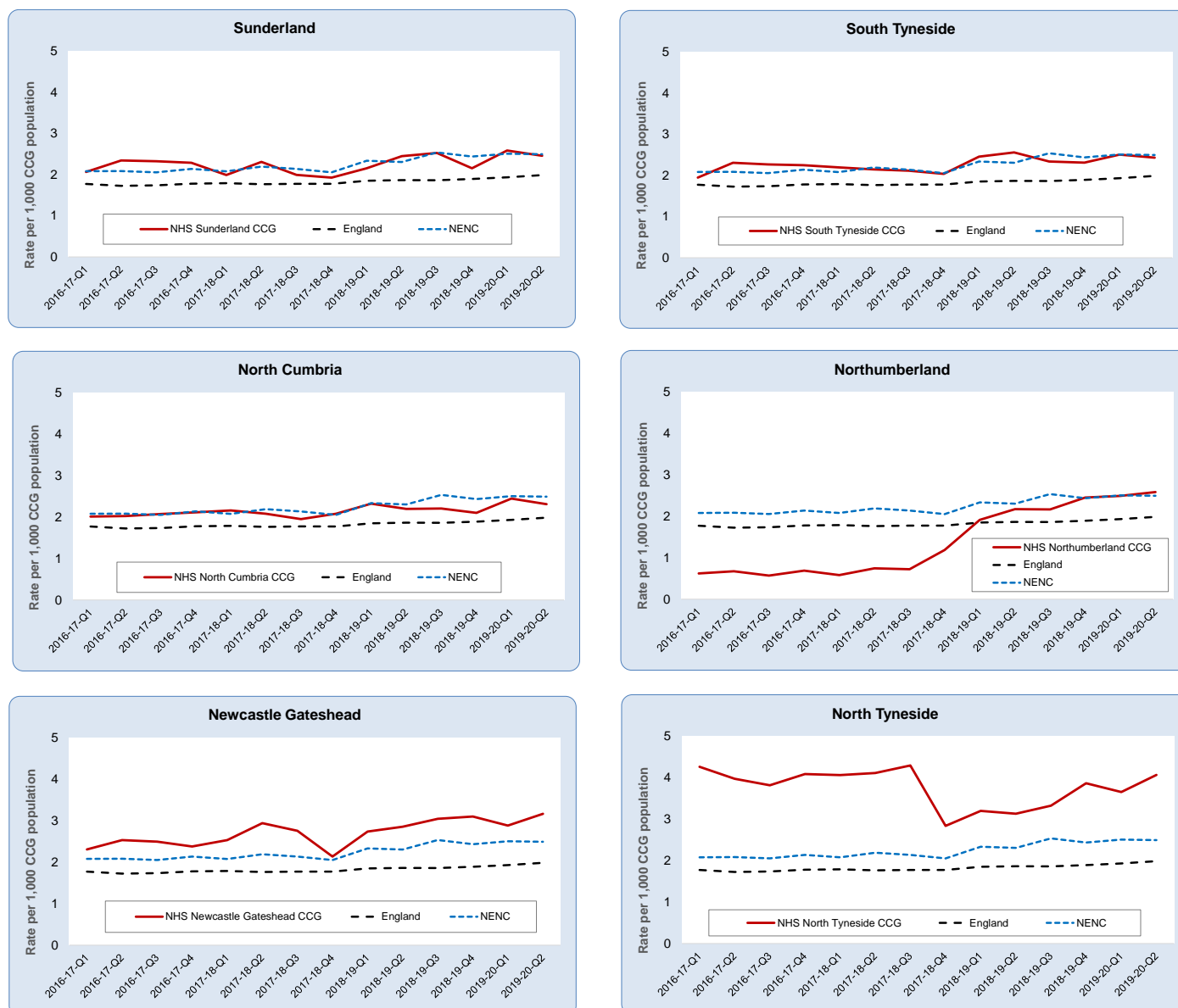
What is the data telling us?
The DEXA scan rate for both the NENC and England has slowly increased over time, with NENC increasing at a faster rate. There is no specific variation between the 6 CCGs shown on this page in terms of activity over time but there is sometimes a degree of fluctuation by quarter. This may be linked to the availability of imaging services locally or how the data is reported by each provider.

8. Activity relating to DEXA scans

Number of planned test/procedures and waiting list test/procedures (excluding unscheduled activity) by Quarter by CCG, 2016/17 Q1 to 2019/20 Q2, rate per 1,000 registered CCG population

DEXA scan activity by CCG, 2016/17 Quarter 1 to 2019/20 Quarter 2

Data source: NHS England Monthly Diagnostics Waiting Times and Activity

What is the data telling us?

The DEXA scan rate for both the NENC and England has slowly increased over time, with NENC increasing at a faster rate. There is interesting variation over time with some of the CCGs reported on this page. The rate for Newcastle Gateshead CCG is consistently higher than the NENC rate for the whole period. Rates for Northumberland and North Tyneside CCG show a step change in Q4 2017/18 which may be due to how one of the hospital providers had allocated DEXA scan activity prior to this date.

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