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Contains provisional data

Data Commentary:
Falls Among Older Adults

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- There are approximately 836,260 people in West Sussex, of whom 186,900 are aged 65 years and over (22.3% of the population). This includes an estimated 55,720 people aged 80 years and over
- There are some small areas of West Sussex where more than 50% of the resident population are aged 65 or above. All of these areas are within Coastal West Sussex CCG and tend to be along the coastal strip
- The population of older adults is projected to increase nationally and locally. In West Sussex, the population of adults aged 70+ is projected to grow at the fastest rate. In 2039, more than 30% of the resident population is projected to be aged 65 or older
- Life expectancy at birth and at age 65 is significantly higher for men and women in West Sussex when compared to England, and is similar to the South East
- The number of adults over the age of 65 who are projected to have a fall is expected to increase from nearly 50,000 adults in 2014, to more than 87,000 by 2039
- Over the next 25 years, the number of adults aged 65+ admitted to hospital due to a fall is projected to nearly double, rising from 3,940 admissions in 2014 to 7,330 in 2039
- In 2015/16, there were approximately 4,410 emergency hospital admissions due to injuries from falls among adults aged 65 and over in West Sussex; a rate of 2,166.0 admissions per 100,000 persons (65+)
- Rates of emergency hospital admissions for falls are greater among women. In 2015/16, there were approximately 1,370 emergency admissions for fall injuries for men aged 65+ in West Sussex, this compares to 3,040 admissions for women in the same age group
- Nearly a third (32.9%) of emergency admissions of older adults (65+) for falls in West Sussex occurred as a result of slipping, tripping and stumbling on the same level
- 11.1% of patients admitted to hospital for falls injuries during 2014/15 and 2015/16 were admitted more than once
- In 2015/16, injuries to the head (28.8%) and injuries to the hip and thigh (28.8%) were the most commonly identified primary diagnosis categories for older adults (65+) admitted to hospital for a fall in West Sussex
- The single biggest primary diagnosis following a fall was fracture of the femur, which accounts for more than a quarter of all falls admissions (26.7%)
- 57.9% of emergency admissions for falls among older adults required treatment for one or more fractures in 2015/16
- In West Sussex, there were approximately 1,195 emergency hospital admissions due to femur fractures among people aged 65+ in 2015/16. Of these, the majority were for adults aged 80 or above (N = 925)
- Rates of emergency hospital admissions for femur fractures are consistently higher for women than men; with 685.5 admissions per 100,000 females aged 65+ compared to 419.4 per 100,000 males aged 65+
- Between 10 and 13% of patients admitted to hospital for treatment for a femur fracture were readmitted with 28 days following discharge in Clinical Commissioning Groups (CCGs) within West Sussex

4 Background

Falls and injuries sustained due to a fall are a common and serious problem for older people. People aged 65 and older have the highest risk of falling, with 30% of people older than 65, and 50% of people older than 80 falling at least once a year[1]. Annually, approximately 5% of older people who fall obtain a fracture or require hospitalisation for a fall-related injury[2].

The human cost of falling includes; distress, pain, injury, loss of confidence, psychological problems such as depression, as well as increases in dependency, disability and mortality. Falls are the most common cause of death from injury in adults aged 65+ and are estimated to cost the NHS more than £2.3 billion per year[3]. Therefore, falls have a huge impact on quality of life, health and healthcare costs.

NICE guidance on falls[4] cover all adults aged 65 or older, and adults aged 50 to 64 who are judged as being at high risk of a fall on admission to hospital due to an underlying condition/s. According to NICE recommendations, all people aged 65 or older who are admitted to hospital should be assessed for their risk of falls during their hospital stay, and for their community-based falls risk.

4.1 PHOF Falls Indicator

The Public Health Outcomes Framework (PHOF) includes emergency hospital admissions due to falls in older adults (stratified by age: 65+, 65-79 and 80+; and sex: males, females and persons). Note that this indicator includes admissions from any location, not just accidents occurring in the home. In addition, the geographies described relate to the residence of the patient, not the location of the hospital. This indicator examines cause and diagnosis fields from Hospital Episode Statistics (HES), the method of which is:

- *Definition of numerator:* The number of first finished consultant episodes (episode number =1) where the admission method was an emergency (admission method begins with 2), injury is classified in the primary diagnosis field (S00-T98) and the fall (W00-W19) is classified in the external cause field, in adults aged 65+, in the financial year in which the episode ended
- *Definition of denominator:* Mid-year population estimates (quinary age bands by sex for local authorities in England and Wales, estimated resident population (ages 65+ years))
- *Value type:* Directly standardised rate per 100,000 population (European Standard Population 2013)

Counts reflect number of admissions, rather than patients, as the same person may have been admitted to hospital multiple times in one year.

4.2 A Note on Data Quality

Falls data should generally be viewed with caution. The recording of falls is relatively poor nationally. This is because a large number of falls go unreported (particularly where no injury is sustained), or records are incomplete; e.g. where injuries are recorded but not the cause. Thus, the number and impact of falls are likely to be underestimated.

The data presented within this summary is not inclusive. This summary intends to give an overview of the demography of older populations within West Sussex, and reviews key data sources relating to falls.

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[1] NICE Guidance (CG161) – Falls in older people: assessing risk and prevention. Accessed on 31 May 2017 from: https://www.nice.org.uk/guidance/cg161/chapter/Introduction

[2] Rubenstein L.Z. (2001). Fall risk assessment measures: an analytic review. *Journal of Gerontology, Biological Sciences and Medical Sciences, 56*(12): M761-M766

[3] NICE Guidance(CG161) – Falls in older people: assessing risk and prevention.

[4] NICE Guidance (CG161) – Falls in older people: assessing risk and prevention.

5 Demography of West Sussex

5.1 Resident population (2015)

There are approximately 836,260 people in West Sussex, of whom 186,900 are aged 65 years and over (22.3% of the population). This includes an estimated 55,720 people aged 80 years and over (Table 1).

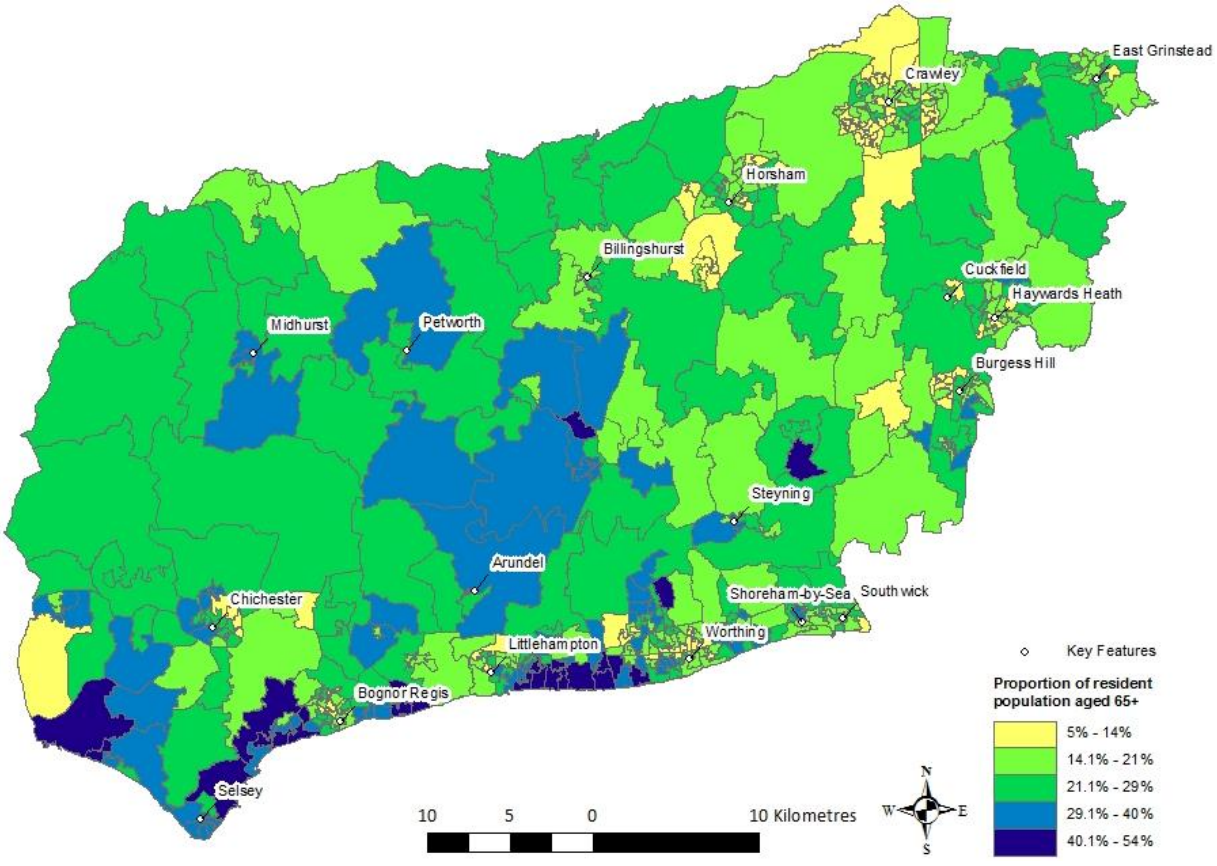
Table 1: 2015 Mid-Year Population Estimates for Adults aged 65 and over in the local authorities of West Sussex

	Grand Total	65+	Number of residents aged 65+					
			65-69	70-74	75-79	80-84	85-89	90+
Adur	63,429	14,702	4,255	3,375	2,810	2,119	1,379	764
Arun	155,732	43,996	12,548	10,000	8,365	6,271	4,181	2,631
Chichester	116,976	31,069	8,762	7,200	5,762	4,593	2,948	1,804
Crawley	110,864	14,597	4,568	3,029	2,496	2,177	1,550	777
Horsham	135,868	29,583	9,000	6,818	5,403	4,124	2,670	1,568
Mid Sussex	145,651	28,980	8,833	6,683	5,006	4,014	2,789	1,655
Worthing	107,736	23,974	6,821	5,088	4,358	3,448	2,518	1,741
West Sussex	836,256	186,901	54,787	42,193	34,200	26,746	18,035	10,940

Source: ONS mid-year estimate 2015

Figure 1 shows the proportion of the population of West Sussex who are aged 65 or over at lower super output area (LSOA). Small areas along the coast of the county tend to contain older populations rather than inland, urban areas (such as Crawley, Horsham and Burgess Hill). In particular, four small areas in Arun have populations where more than 50% are aged 65 and above. These areas sit within the wards Rustington East, Rustington West, East Preston with Kingston and Ferring and are situated to the east of Littlehampton on the coastal strip.

Figure 1: The proportion of the population of West Sussex aged 65 years or above, by lower super output area (2015 mid-year estimate)



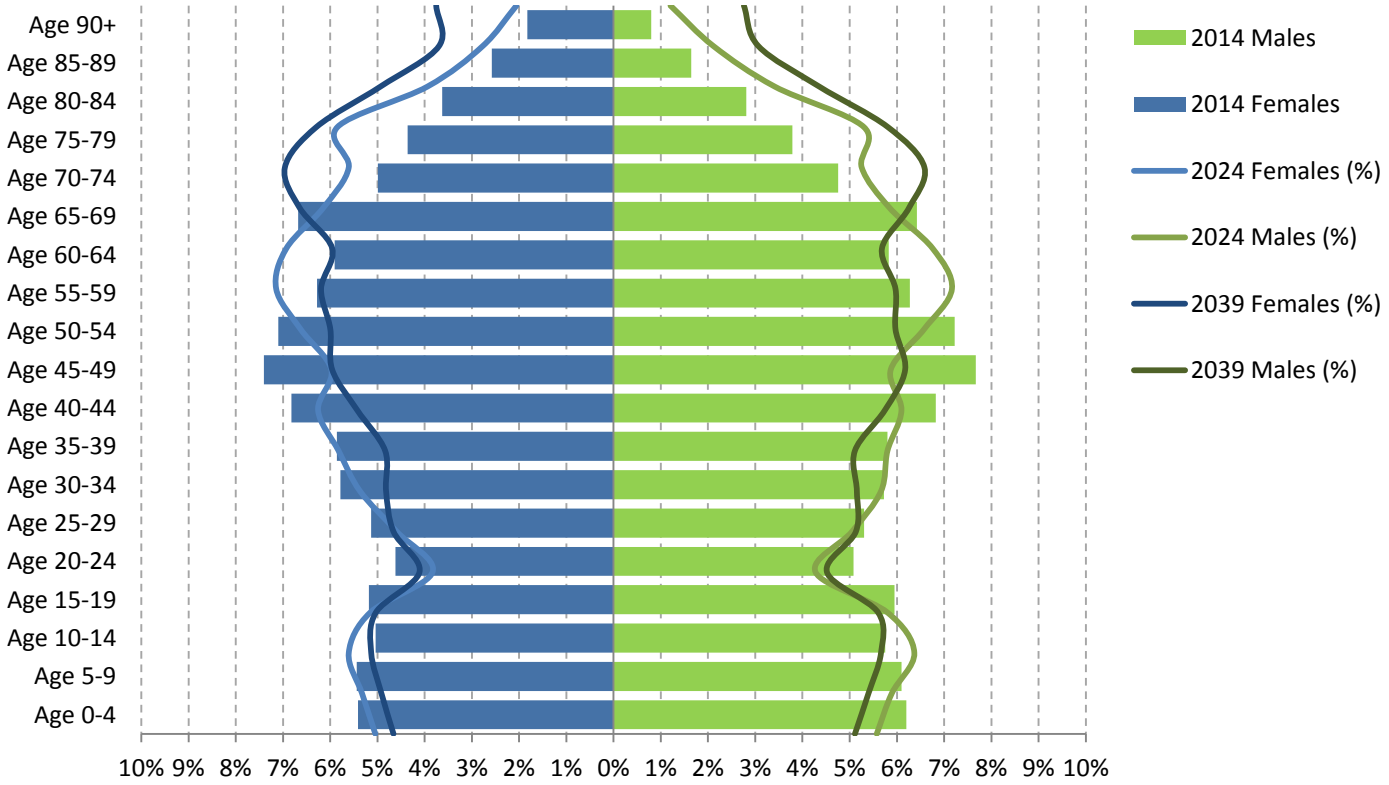
5.2 Projected change in age structure of West Sussex

Nationally, the population of older adults is projected to increase. The number and proportion of older people continues to rise, with over 11.6 million people (17.8% of the population) in the UK aged 65 and over and 1.5 million (2.3% of the population) aged 85 and over in mid-2015.

The population of the UK is ageing. Since mid-2005, the UK population aged 65 and over has increased by 21%, and the population aged 85 and over has increased by 31%. The number of males aged 85 and over has increased by 54% since mid-2005; this compares to an increase of 21% for females in the same age group. This difference reflects greater improvements in factors contributing to male mortality (such as changes in smoking habits, occupation and housing standards etc.), as well as greater life expectancies for both groups.

Population projections are released every two-years by ONS and are based on the mid-year population estimate available at the time of release (this data uses mid-2014). Figure 2 illustrates the aging population of West Sussex[5]. The population of adults aged 70 or over is projected to grow at the fastest rate, whereas the population of working age adults (approx. ages 20-59 years) is projected to decrease. In 2014, approximately 22.2% of the population of West Sussex are aged 65 or above. This is projected to increase to nearly a quarter by 2024 (24.8%), and to more than 30% by 2039 (30.6%).

Figure 2: Population estimate for males and females in 2014 and projected size of the population in 2024 and 2039 in West Sussex



Source: ONS Population Projections (2014 based)
Note that population projections are not forecasts. These projections are based on the population estimate for 2014 and patterns of fertility, births, deaths and migration in the preceding five years. They do not take into account future changes in policy or policies that have yet to have an impact.

[5] Source: ONS Sub-National Population Projection (2014 based)

These population projections have many implications for older people, particularly affecting health and social care services. As people age, they are more likely to live with complex co-morbidities, disability and frailty. In 2015-16, 52% (£7.05 billion) of gross current expenditure on Adult Social Care Services in England was spent on short and long-term support for adults aged 65 and over[6]. As the population continues to age, this expenditure will need to increase to meet the growing demand on health and social care services.

At a local authority level, the projected change in the size of the retirement age population varies (Table 2). The greatest change is expected in Crawley and Worthing (approx. increase of 77% by 2039 from 2014), although this population is expected to have grown by more than half that of 2014 in all local authorities in West Sussex by 2039. In addition, the population of adults aged 75+ is projected to more than double in Horsham and Mid Sussex by 2039 (Table 3).

Table 2: 2014 mid-year population estimate (000's) and projected change for adults aged 65+ in West Sussex

AREA	Mid-year population estimate 2014 (000's)	Projected change from 2014*				
		2019	2024	2029	2034	2039
Adur	14.7	5.4%	13.6%	25.9%	41.5%	52.4%
Arun	43.4	8.8%	20.3%	35.0%	50.9%	62.4%
Chichester	30.5	8.5%	19.3%	33.4%	47.2%	56.7%
Crawley	14.3	9.8%	24.5%	43.4%	62.2%	76.9%
Horsham	28.8	12.8%	26.7%	44.1%	61.8%	72.9%
Mid Sussex	28.6	10.8%	22.7%	37.8%	53.8%	66.4%
Worthing	23.6	8.9%	22.9%	41.1%	61.0%	76.7%
West Sussex	183.9	9.6%	21.5%	37.4%	53.8%	66.0%
South East	1,648.8	10.1%	22.2%	38.1%	54.0%	65.8%
England	9,537.8	9.4%	20.4%	34.9%	49.3%	59.2%

*These projections published on 25 May 2016 are based on the 2014 mid-year population estimates published in June 2015
Source: ONS subnational population projections (2014 based)

Table 3: 2014 mid-year population estimate (000's) and projected change for adults aged 75+ in West Sussex

AREA	Mid-year population estimate 2014 (000's)	Projected change from 2014*				
		2019	2024	2029	2034	2039
Adur	7.1	7.0%	26.8%	38.0%	53.5%	71.8%
Arun	21.3	10.3%	35.2%	51.6%	68.1%	90.1%
Chichester	14.9	12.1%	34.9%	49.7%	66.4%	87.2%
Crawley	7.0	0.0%	18.6%	37.1%	60.0%	84.3%
Horsham	13.4	15.7%	44.0%	64.9%	86.6%	112.7%
Mid Sussex	13.5	13.3%	40.7%	58.5%	77.8%	101.5%
Worthing	12.0	7.5%	32.5%	50.8%	71.7%	99.2%
West Sussex	89.2	10.7%	35.0%	52.2%	70.6%	94.2%
South East	766.3	12.2%	37.7%	55.6%	74.4%	98.5%
England	4,374.9	10.8%	33.9%	50.7%	67.8%	89.8%

*These projections published on 25 May 2016 are based on the 2014 mid-year population estimates published in June 2015
Source: ONS subnational population projections (2014 based)

[6] Source: NHS Digital - Personal Social Services: Expenditure and Unit Costs, England 2015-16. Accessed from http://www.content.digital.nhs.uk/catalogue/PUB22240/pss-exp-eng-15-16-fin-rep.pdf (on 31st May 2017)

5.3 Life expectancy and healthy life expectancy at birth and age 65

Period life expectancy for an area is the average number of years a person would expect to live, if he or she experiences that particular area's age-specific mortality rates, for that time-period, throughout his or her life. A longer average life expectancy contributes to an aging population. Life expectancy at birth for males has increased from 77.8 years in 2000 to 2002 to 80.5 years in 2013 to 2015 in West Sussex. For females, life expectancy at birth has increased from 81.6 years in 2000 to 2002, to 84.1 years in 2013 to 2015. This is significantly higher than in England (male life expectancy: 79.5 years, female life expectancy: 83.1 years -Table 4).

Healthy life expectancy at birth reflects the average number of years a person would expect to live in good health based on current mortality and health status rates. In 2013 to 2015, males at birth in West Sussex could expect to spend 82.0% of their lives in good health. This is similar for females, who could expect to spend 79.2% of their lives in good health. In England, males can expect to spend a greater proportion of their lives in good health (79.7%) compared to females (77.1%), despite having a lower average life expectancy.

Between 2013 and 2015 in West Sussex, men aged 65 could expect to live for a further 19.3 years with 63.5% of these years in good health (12.3 years). In comparison, women aged 65 could expect to live for a further 21.9 years, with 61.6% of these years spent in good health (13.5 years).

Table 4: Life expectancy at birth and at 65, and healthy life expectancy at birth in West Sussex the South East and England (2013-15); confidence intervals are shown in parentheses.

	West Sussex		South East		England	
	Males	Females	Males	Females	Males	Females
Life expectancy at birth	80.5 *(80.3 - 80.7)*	84.1 *(83.9 - 84.3)*	80.5 *(80.4 - 80.5)*	84 *(83.9 - 84.0)*	79.5 *(79.4 - 79.5)*	83.1 *(83.1 - 83.1)*
Life expectancy at 65	19.3 *(19.2 - 19.5)*	21.9 *(21.7 - 22.0)*	19.2 *(19.2 - 19.3)*	21.7 *(21.6 - 21.7)*	18.7 *(18.7 - 18.7)*	21.1 *(21.1 - 21.1)*
Healthy life expectancy at birth	64.6 *(63.0 - 66.2)*	66.6 *(65.0 - 68.2)*	66.0 *(65.6 - 66.4)*	66.7 *(66.3 - 67.2)*	63.4 *(63.2 - 63.5)*	64.1 *(63.9 - 64.3)*
Healthy life expectancy at 65	12.3 *(11.3 - 13.3)*	13.5 *(12.3 - 14.6)*	11.9 *(11.6 - 12.2)*	12.5 *(12.1 - 12.8)*	10.5 *(10.3 - 10.6)*	11.2 *(11.1 - 11.3)*

Source: Public Health Outcomes Framework. ONS: Health State Life Expectancy at birth and at age 65 by local areas, UK

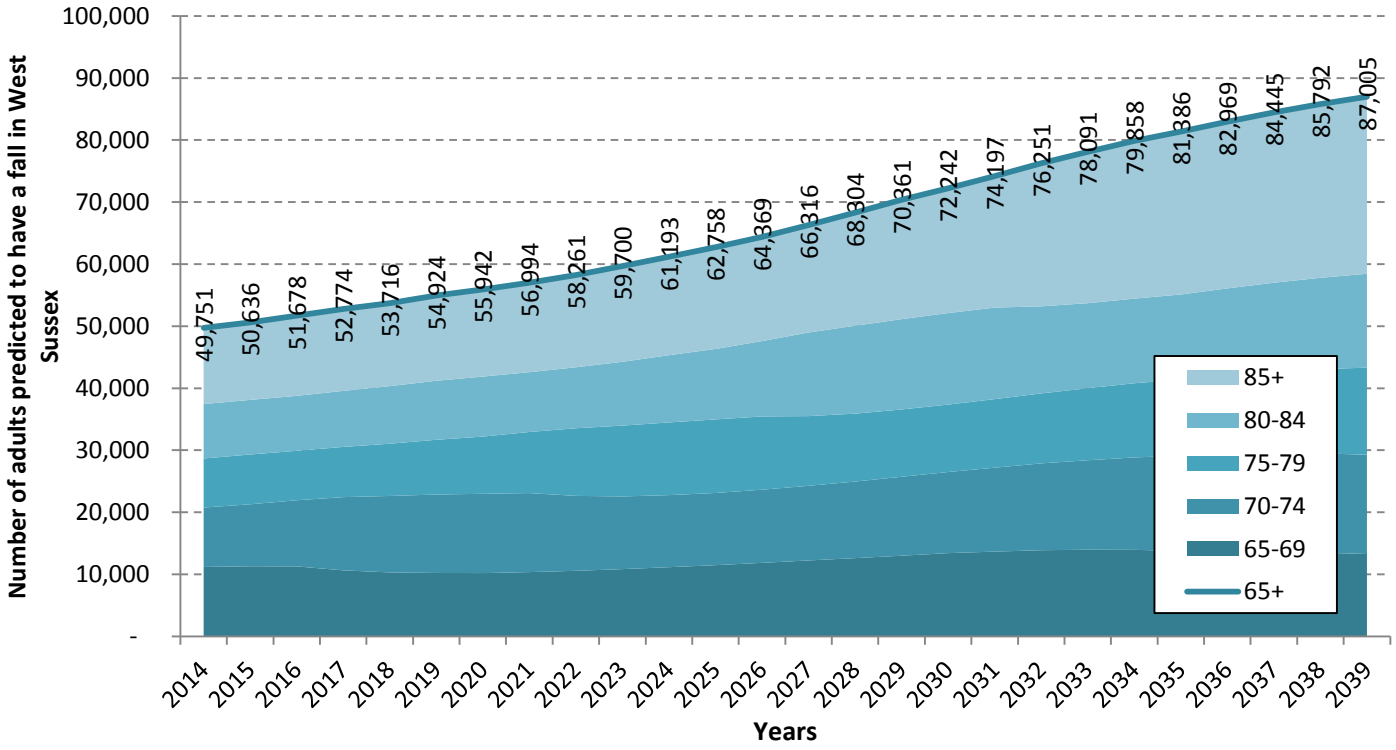
6 Projections

6.1 Number of adults (65+) projected to have a fall

Figure 3 shows the number of adults aged 65 years and over (5-year age bands) who are projected to have a fall in West Sussex (2014-2039). The prevalence of falls was estimated from data recorded in the 2005 Health Survey for England. These figures have been applied to the subnational population projections for West Sussex (based on mid-2014 population estimate) to produce Figure 3. These projections are based on current trends in births, deaths, fertility and migration in the 5 years preceding 2014, and do not take into account recent or future changes in policy and services.

The number of adults over the age of 65 predicted to have a fall is expected to increase by more than 37,000 from 2014 to 2039. This places a significant burden on health and social care resources to meet the increasing demand.

Figure 3: Population of adults aged 65 and over projected to have a fall in West Sussex (2014 to 2039)



Source: POPPI. Health Survey for England (2005), volume 2, table 2.1. Prevalence of falls in the last 12 months, by age and sex. The prevalence of falls from the HSE (2005) was applied to the subnational population projections (SNPP) released by the ONS in May 2016 (2014 figure uses the mid-year population estimate).

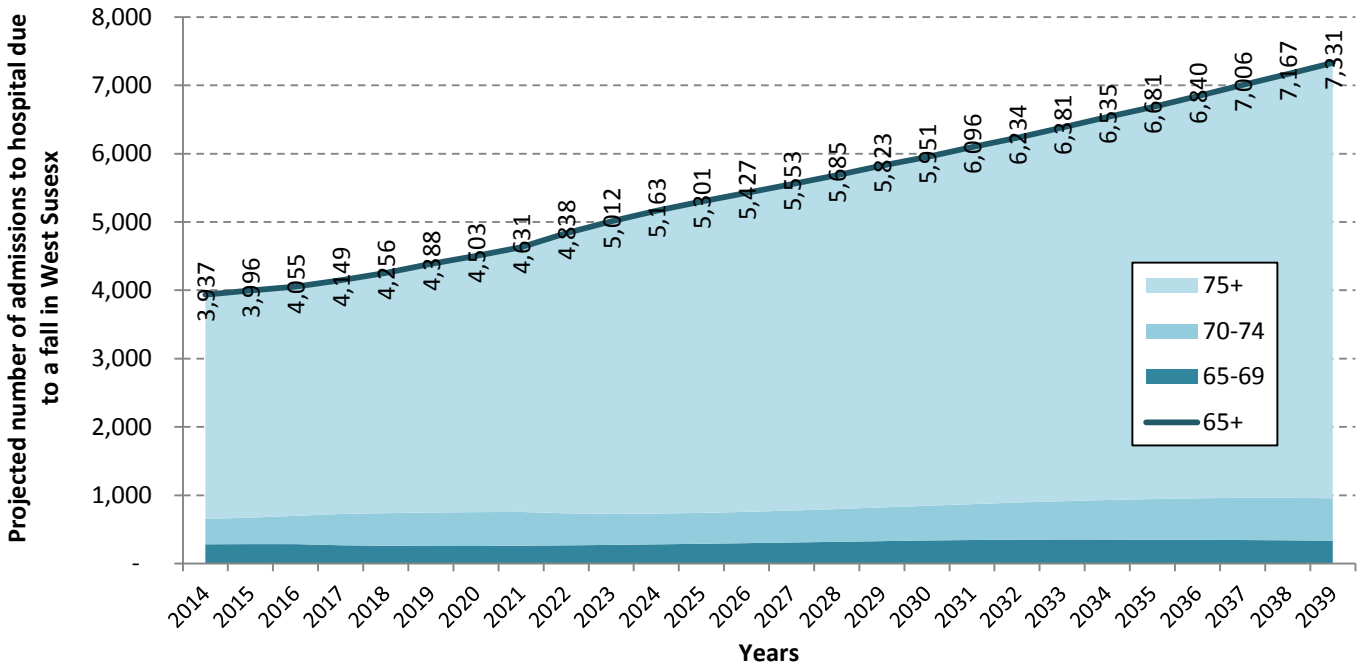
6.2 Number of adults (65+) projected to be admitted to hospital due to a fall

Figure 4 shows the number of adults aged 65 years and over (by ages 65-69, 70-74 and 75+) who are predicted to be admitted to hospital as a result of an unintentional fall in West Sussex (2014-2039). The rates for hospital admissions due to falls were estimated from a study of A&E attendances and admissions for fall related injuries[7]. These figures have been applied to the subnational population projections for West Sussex. As previously stated, these projections are based on current trends in births, deaths, fertility and migration in the 5 years preceding 2014, and do not take into account changes in policy and services.

The number of adults over the age of 65 projected to be admitted to hospital due to a fall is expected to nearly double that of 2014 by 2039. Adults aged 75+ account for the largest proportion of those (aged 65+) projected to be admitted to hospital due to a fall.

[7] Scuffham, P. et al, Incidence and costs of unintentional falls in older people in the United Kingdom, Journal of Epidemiology and Community Health, Vol. 57, No.9, Sept. 2003, pp.740-744.

Figure 4: Projected number of hospital admissions due to a fall in West Sussex, adults aged 65+ by age (2014 to 2039)



Source: POPPI. The rate of admissions to hospital due to falls from Scuffham (2003) was applied to the subnational population projections (SNPP) released by the ONS in May 2016 (2014 based).

7 Emergency admissions for falls (65+)

7.1 Emergency hospital admissions for falls (65+ years)

Admissions to hospital for falls and fractures among older people are a serious and growing public health issue. Whilst most falls are not serious, falls among older and at risk populations (e.g. those with pre-existing medical conditions such as osteoporosis) are more likely to result in significant injury. Serious fractures, such as femur fractures, are costly for the NHS to treat, and have long-term impacts on the health and wellbeing of the individual. Among older adults, falls and falls-related injuries are a common precipitating factor leading to permanent moves to residential care homes, limiting independence.

7.1.1 2015/16 local authority level

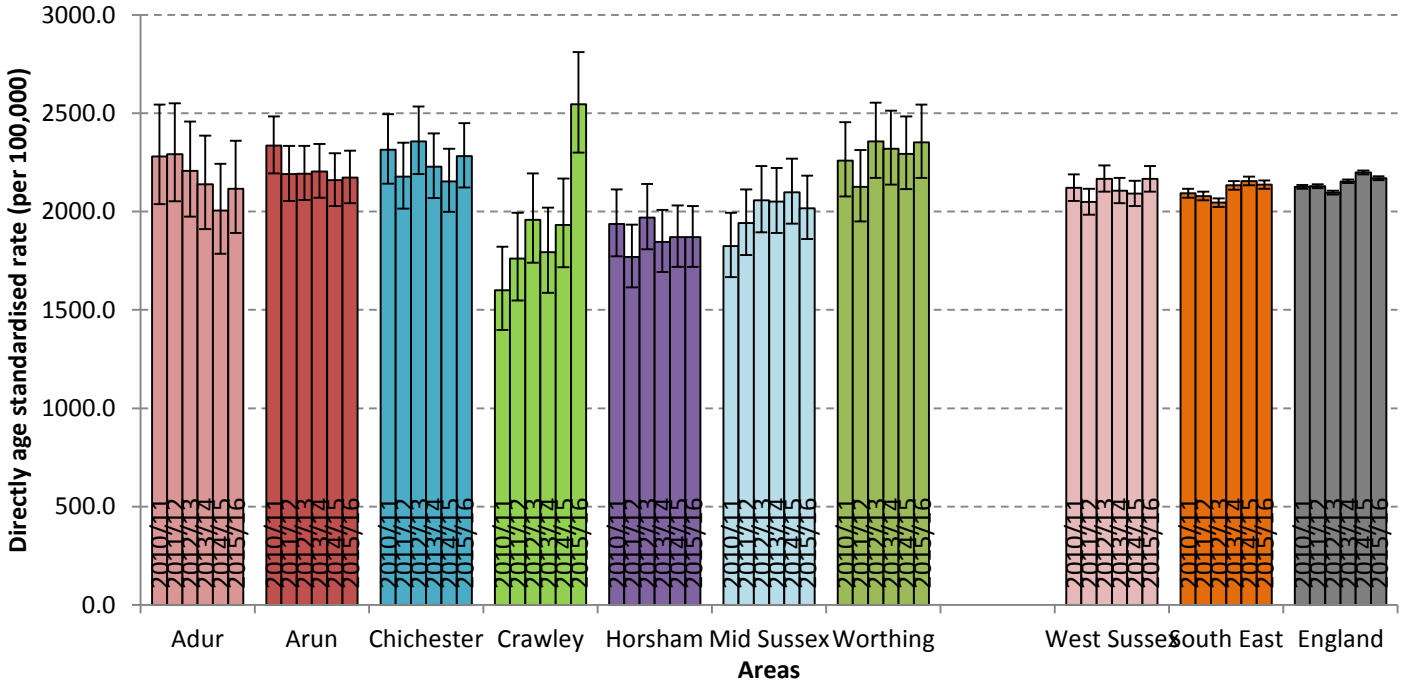
In 2015/16, the rate of emergency hospital admissions for falls has risen to 2,166.0 per 100,000 persons aged 65+ (95% confidence level: 2,102.0 – 2,231.4). Whilst this is not a significant change from the previous year, this increase is reflected in the number of emergency hospital admissions in the county, rising from 4,199 admissions to 4,408 admissions – a percentage increase of around 5% from 2014/15.

Table 5: Directly age standardised rate of emergency hospital admissions for injuries due to falls; males, females, persons aged 65 years and over, per 100,000 (2015/16)

Area Name	Persons				Males				Females			
	Count	Value	LCI	UCI	Count	Value	LCI	UCI	Count	Value	LCI	UCI
Adur	326	2115.8	1891.1	2359.7	113	1854.1	1524.6	2233.1	213	2343.7	2035.8	2684.6
Arun	1,043	2173.3	2042.5	2310.2	312	1663.2	1481.8	1860.5	731	2515.1	2332.2	2708.3
Chichester	775	2281.8	2122.8	2449.5	237	1824.1	1595.4	2076.0	538	2626.1	2404.0	2862.8
Crawley	406	2545.8	2300.0	2810.4	126	2067.2	1716.5	2467.5	280	2880.3	2542.7	3249.2
Horsham	579	1869.4	1719.5	2028.7	199	1628.9	1407.6	1874.8	380	2035.2	1833.2	2253.3
Mid Sussex	627	2017.2	1861.0	2182.8	189	1541.1	1326.5	1780.2	438	2347.2	2127.3	2583.3
Worthing	652	2351.6	2170.8	2543.3	194	1880.6	1623.8	2166.4	458	2649.0	2401.1	2914.7
West Sussex	4,408	2,166.0	2,102.0	2,231.4	1,370	1737.9	1646.1	1833.4	3,038	2,466.3	2,377.4	2,557.6
South East	37,252	2136.9	2115.2	2158.9	11,773	1691.7	1660.9	1723.0	25,479	2442.2	2411.8	2472.8
England	211,928	2169.4	2160.2	2178.7	67,965	1733.4	1720.1	1746.7	143,956	2471.3	2458.4	2484.2

Source: Public Health Outcomes Framework

Figure 5: Age standardised rate of emergency hospital admissions for injuries due to falls in persons aged 65+ per 100,000 population in West Sussex local authorities, 2010/11 to 2015/16



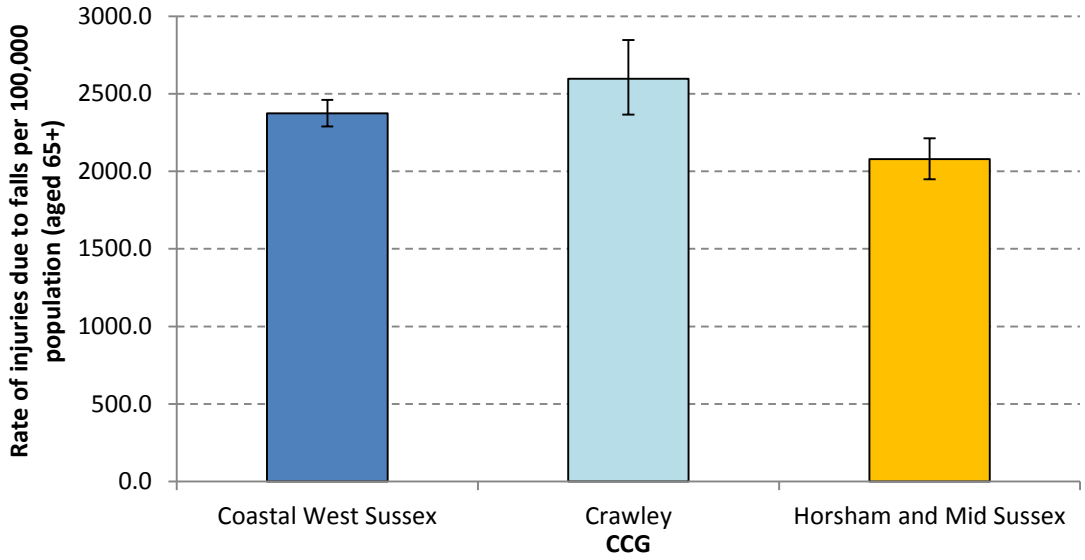
Source: Public Health Outcomes Framework

At a local level, Crawley has seen a significant rise in the rate of emergency hospital admissions for falls (65+) from 2014/15. This appears to be due to increased numbers of emergency admissions for both sexes, with more than 100 additional admissions for falls in 2015/16 compared to the previous year. The rate of emergency hospital admissions for falls in Crawley significantly exceeds West Sussex in 2015/16 – the only local authority to do so. Horsham has a lower rate of admissions for falls among people aged 65+ when compared with West Sussex.

7.1.2 Clinical Commissioning Groups

There are also differences in the rate of falls resulting in emergency hospital admissions across the Clinical Commissioning Groups (CCGs) in West Sussex (Figure 6). NHS Crawley CCG and NHS Coastal West Sussex CCG have a significantly higher rate of emergency admissions for falls injuries in persons aged 65 and over when compared to NHS Horsham and Mid Sussex CCG.

Figure 6: The rate of emergency admissions for injuries due to falls in people aged 65 and over per 100,000 population, CCGs in West Sussex (2015/16)



Source: NHS RightCare - Data used in the 2016 Where to Look packs and tools – Injuries due to falls per 100,000 population aged 65+ (2015/16)

Whilst it is useful to examine variation in the number and rate of falls between the CCGs in West Sussex, the characteristics of the populations served by the CCGs may be quite different. The NHS Commissioning for Value (CfV) tool identifies a group of ten comparable CCGs that are similar in terms of age structure, ethnicity and population density to each individual CCG. It is interesting to note that none of the CCGs in West Sussex includes another of the CCGs in the county within the benchmarked group, suggesting variation in the demographics of the populations served.

Table 6 shows the performance of the CCGs in West Sussex on three trauma and injury indicators when compared to the average of the ten most similar CCGs. Coastal West Sussex CCG has significantly higher rates of admissions for hip fractures and for injuries due to falls in people aged 65+ when compared to its benchmarked group, but lower rates of all fractures. Horsham and Mid Sussex CCG does not differ from its ten most similar CCG group on any of the indicators presented. Finally, Crawley CCG has significantly higher rates of injuries due to falls and fracture admissions for adults aged 65+ when compared to its benchmarked group.

Red cells indicate that the CCG has significantly worse performance than the average of the 10 most similar CCGs, and green cells indicate significantly better performance. White cells suggest no statistically significant difference. Average rates for the benchmarked group are shown in parentheses.

Table 6: Performance of West Sussex CCGs (compared to the average of 10 similar CCGs) for key trauma and injury indicators affecting adults aged 65 and over.

Area	Performance of West Sussex CCGs on indicators benchmarked against 10 similar CCGs for trauma and injury indicators		
	Rate of all fracture admissions per 100,000 population aged 65+ (2015/16)	Rate of injuries due to falls per 100,000 population aged 65+ (2015/16)	Rate of hip fractures in people aged 65+ (2013/14 – 2015/16)
NHS Coastal West Sussex CCG	1589.16 *(1719.17)*	2373.90 *(2055.04)*	668.65 *(598.45)*
NHS Crawley CCG	1651.96 *(1462.25)*	2596.74 *(2221.07)*	627.97 *(581.83)*
NHS Horsham and Mid Sussex CCG	1400.38 *(1505.50)*	2077.77 *(2004.87)*	568.84 *(588.72)*

Source: Commissioning for Value: Refreshed 'Where to Look' packs (Jan 2017)

8 Multiple admissions (2014/15 to 2015/16)

During 2014/15 – 2015/16, there were 8,607 emergency hospital admissions for falls in West Sussex among adults aged 65+. This data reflects the number of admissions rather than the number of patients. The same individual may be admitted to hospital following a fall on multiple occasions, and these will be counted as separate admissions.

Further analysis of local HES data revealed that 7,584 patients accounted for the 8,607 admissions for falls in West Sussex (2014/15 and 2015/16). Of these, 839 patients (11.1% of patients) were admitted on more than one occasion. These patients accounted for 21.6% of all emergency admissions for falls during the 2-year period. As a result, 1,023 emergency admissions for falls (11.9%) were multiple admissions during these two years[8] (i.e. subsequent admissions of the same patient).

Table 7: Number of patients admitted to hospital for falls during 2014/15 to 2015/16 in West Sussex

Number of admissions during 2014/15 – 2015/16	Number of patients per admission	Number of admissions (number of admissions*patients)
1	6,745	6,745
2	700	1,400
3 or more	139	462
Total	7,584	8,607

Source: HES local level analysis

9 Cause of admission (2015/16)

During 2015/16, nearly a third of admissions for falls among people aged 65+ in West Sussex were due to slipping, tripping and stumbling on the same level (*W01*). A further 26.1% of falls were unspecified (*W19*), and more than a fifth of falls admissions were for other falls on same level (*W18* - 22.5%). Six causes accounted for more than 95% of all hospital admissions for falls in West Sussex among people aged 65+ in 2015/16.

Table 8: Number and proportion of emergency hospital admissions for falls in West Sussex among persons aged 65+ by ICD-10 cause code (2015/16)

ICD-10 code	ICD-10 description	Number of admissions	Proportion of admissions
W01	Fall on same level from slipping, tripping and stumbling	1,451	32.9%
W19	Unspecified fall	1,152	26.1%
W18	Other fall on same level	993	22.5%
W10	Fall on and from stairs and steps	335	7.6%
W06	Fall involving bed	207	4.7%
W07	Fall involving chair	116	2.6%
W11	Fall on and from ladder	47	1.1%
W17	Other fall from one level to another	36	0.8%
W08	Fall involving other furniture	27	0.6%
W05	Fall involving wheelchair	22	0.5%
Other*	Other falls codes with 10 or fewer counts	22	0.5%
Grand Total		4,408	100.0%

Note. *The final cause groups have been combined due to small counts (counts are 10 or fewer (incl. 0)).

[8] This figure represents a count of multiple admissions only. This does not include the first instance that a person was admitted for a fall. Instead, this is a count of subsequent admissions of the same individual for a fall. Due to limited availability of data, this only includes falls admissions that occurred within 2 years (2014/15-2015/16). Some individuals may have been admitted for a fall prior to this, and may not have been identified as a multiple admission.

10 Primary diagnosis for falls (2015/16)

There are twenty diagnosis fields in HES, which contain information about a patient's illness or condition. The primary field can be used to identify the primary diagnosis of the patient. The codes are defined by the International Statistical Classification of Disease, Injuries and Causes of Death (ICD-10). The first character of the code relates to the chapter for example, *S* or *T* represents *Chapter XIX: Injury, poisoning and certain other consequences of external causes*. These are subdivided into blocks of categories, which are represented by the first three characters (e.g. block *S00 – S09* contains codes categorised into *Injuries to the head*, such as *S00: Superficial Injuries of the head*). A three-character category that has no further subdivision is a stand-alone code for a disease/injury, but in many instances greater specificity is possible by further subdivisions (characters 3 through 6), for example *S00.0: Superficial injury of scalp*.

Primary diagnoses for falls are from *Chapter XIX: Injury, poisoning and certain other consequences of external causes (S00-T98)*. Counts are presented by blocks of categories for ease of interpretation. Further detail is provided for categories that are most frequently identified.

In 2015/16, injuries to the head (*S00-S09* – 28.8%) and injuries to the hip and thigh (*S70-S79* – 28.8%) were the most commonly identified primary diagnoses for older adults (65+) admitted to hospital for a fall in West Sussex. The single biggest primary diagnosis following a fall was fracture of the femur (*S72*), which accounts for more than a quarter of all admissions (26.7%). This is followed by open wound to the head (*S01*) and superficial injury of head (*S00*), accounting for 12.4% and 8.2% of all admissions respectively.

Table 9: Number and proportion of emergency hospital admissions for falls in West Sussex among persons aged 65+ by primary diagnosis code (ICD-10) during 2015/16

ICD-10 block code	ICD-10 block description	Count of admissions	Proportion of admissions
S00-S09	Injuries to the head	1,271	28.8%
S70-S79	Injuries to the hip and thigh	1,268	28.8%
S80-S89	Injuries to the knee and lower leg	390	8.8%
S50-S59	Injuries to the elbow and forearm	375	8.5%
S40-S49	Injuries to the shoulder and upper arm	364	8.3%
S30-S39	Injuries to the abdomen, lower back, lumbar spine and pelvis	293	6.6%
S20-S29	Injuries to the thorax	119	2.7%
S60-S69	Injuries to the wrist and hand	104	2.4%
S10-S19	Injuries to the neck	64	1.5%
S90-S99	Injuries to the ankle and foot	52	1.2%
All other chapter codes contributing fewer than 1% of total falls admissions (all T codes)		108	2.5%
Total		4,408	100.0%

Source: local analysis of HES

More than half of all emergency admissions of older people (65+) for falls in West Sussex had a primary diagnosis of a fracture[9] (55.4% of falls admissions were fractures). Note this is based on the primary diagnosis field only. This may result in an underestimation of the number of admissions for falls that required treatment for a fracture, as there are cases where a fracture is secondary to the treatment required for another injury. Of the 4,408 emergency admissions for falls in West Sussex among older people (65+), 2,552 had a record of one or more fractures in any diagnostic field. This equates to 57.9% of falls admissions requiring treatment for fracture/s.

[9] This is calculated using the same primary diagnosis codes as described in the Commissioning for Value indicator 5.12.3 Rate of all fracture admissions per 1,000 population aged 65+. https://www.england.nhs.uk/wp-content/uploads/2016/03/Ccfv-metadata-2016.pdf. This includes codes S02, S12, S22, S32, S42, S52, S62, S72, S82, S92, T02, T08, T10, T12 and T14.2.

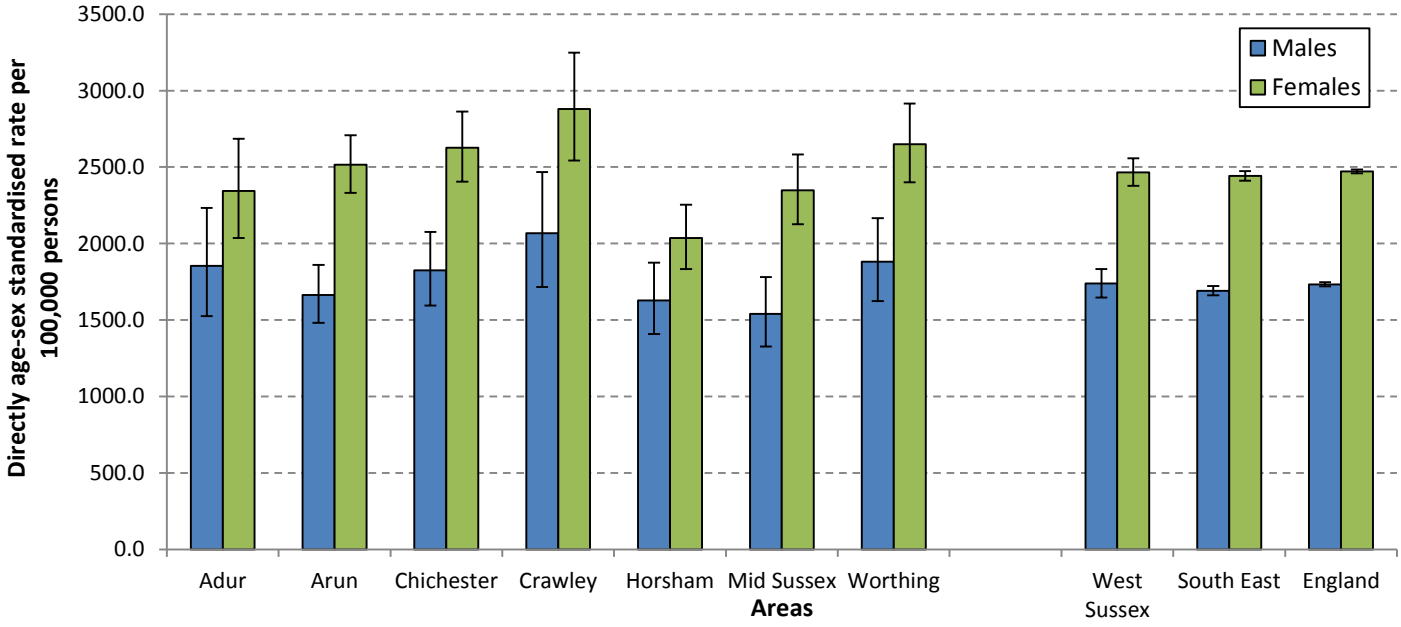
11 Factors increasing risk of serious falls

11.1 Gender

Figure 7 demonstrates the consistently higher rates of emergency hospital admissions due to injuries sustained from falls for women compared to men (aged 65+). In 2015/16, there were approximately 1,370 emergency admissions for fall injuries for men aged 65 and above in West Sussex, this compares to 3,040 admissions for women in the same age group. Beside Adur and Horsham, all local authorities have a significantly higher rate of admissions for women than men aged 65+.

Compared to England, West Sussex has a similar rate of emergency admissions for falls injuries in males and females aged 65 and over (2015/16). Table 5 presents the rates and confidence levels by gender.

Figure 7: Directly age-sex standardised rate per 100,000 emergency hospital admissions for falls injuries in men and women aged 65 and over in local authorities across West Sussex (2015/16)

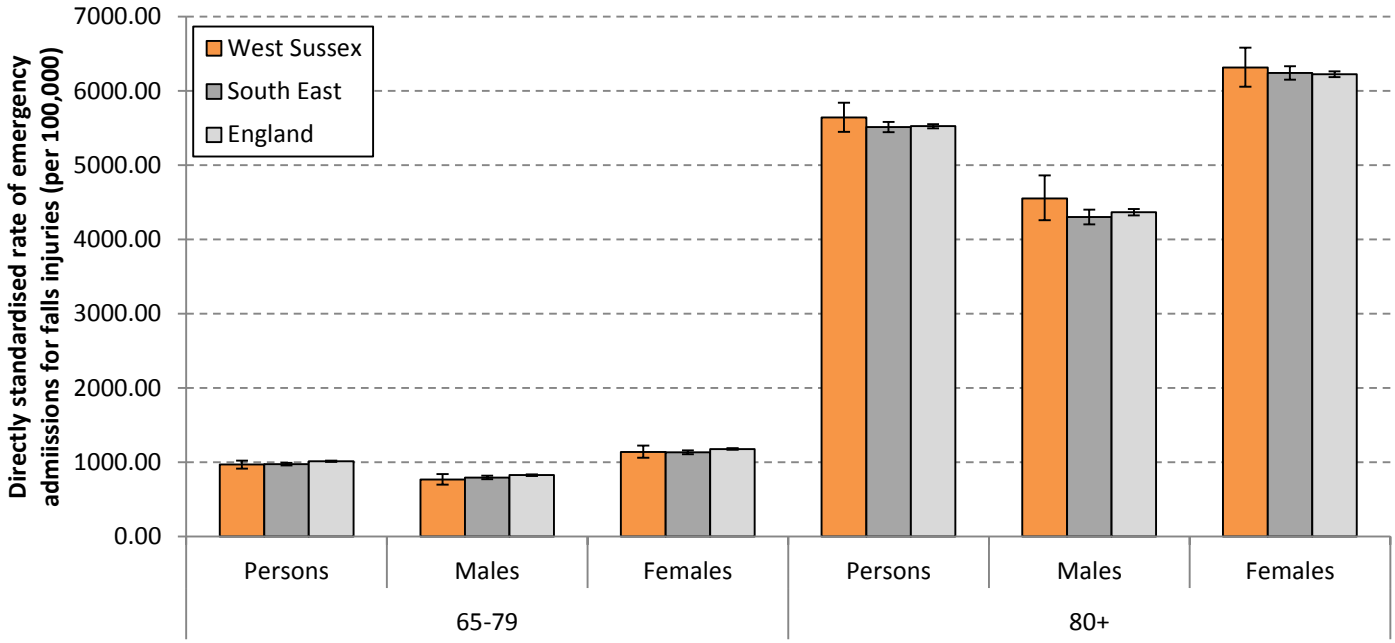


Source: PHOF – Rate of emergency hospital admissions for falls injuries in males and females aged 65+ (2015/16)

11.2 Age

Older adults are more likely to be admitted to hospital due to injuries sustained from a fall. This reflects a greater frequency of falls and a higher risk of serious injury in older populations (Figure 8), where frailty and conditions affecting mobility and bone strength are more prevalent. In West Sussex, the rates of admissions due to falls for both males and females aged 65-79 and 80+ do not differ to England (Appendices - Table 17 and Table 18).

Figure 8: Directly standardised rates for emergency hospital admissions for falls injuries in persons, men and women aged 65-79, and 80 and over (2015/16)



Source: PHOF – Rate of emergency hospital admissions for falls injuries in males and females aged 65-79, and 80+ (2015/16)

11.3 Osteoporosis

Osteoporosis is a condition that weakens bones and makes them fragile and more likely to break. Every year, an estimated 300,000 fragility fractures occur in the UK, many of which could be prevented with earlier diagnosis and treatment[10] [11]. Because of increased bone loss after the menopause in women, and age-related bone loss in both women and men, the prevalence of osteoporosis increases with age; rising from 2% at 50 years to more than 25% at 80 years in women for example. As the life expectancy of the population increases, so will the incidence of osteoporosis and fragility fracture[12].

Table 10: Estimates of bone health and post-menopausal women in West Sussex

Estimates of bone health amongst post-menopausal women in West Sussex	Number
Total Population of West Sussex:	836,260
Estimated number of post-menopausal women:	153,310
Estimated number of post-menopausal women with undiagnosed osteoporosis:	48,500
Estimated number of post-menopausal women with a previous fracture:	19,230
Estimated number of post-menopausal women with a new fracture (yearly):	2,510

Source: Using figures presented in *Falls and Fractures: Effective Interventions in Health and Social Care* (Department of Health, 2009): http://www.slips-online.co.uk/resources/Fallsandfractures-effectiveinterventionsinhealthandsocialcare.pdf
Note. Rounded to the nearest 10

The Quality and Outcomes Framework (QOF) incentivises GPs to keep a register of patients (aged 50+) with osteoporosis. This includes patients aged 50-74 with a record of a fragility fracture and a diagnosis of osteoporosis confirmed through a DEXA scan, and patients aged 75+ with a diagnosis (no scan required). Fragility fractures are

[10] British Orthopaedic Association (2007). The care of patients with fragility fracture.
[11] National Osteoporosis Society (2015). The Osteoporosis Agenda England. https://www.nos.org.uk/file/resources/agendas-2015/Agenda-for-osteoporosis-England-2015-FINAL.pdf
[12] NICE Guidelines (CG146) – Osteoporosis: assessing the risk of fragility fracture. https://www.nice.org.uk/guidance/CG146/chapter/introduction

fractures that result from mechanical forces that would not ordinarily result in a fracture. This is quantified as forces equivalent to a fall from standing height or less. Fragility fractures are most common in the spine, hip and wrist.

Table 11 presents QOF recorded disease prevalence of osteoporosis for patients aged 50+ in CCGs across West Sussex. It should be noted that the data recorded within QOF were originally designed as a payment system for GP's. Therefore, QOF prevalence rates may not reflect those published elsewhere, or the true prevalence rate. These figures account for patients that are registered and diagnosed following fragility fracture. As such, there are likely to be a large number of undiagnosed patients within the population of West Sussex who are not receiving treatment.

Table 11: Recorded disease prevalence of osteoporosis (registered patients aged 50+) in CCGs across West Sussex, April 2015 to March 2016

Area	List Size (50+)	Register	Prevalence (%)
NHS Coastal West Sussex CCG	230,096	935	0.41%
NHS Crawley CCG	40,487	138	0.34%
NHS Horsham and Mid Sussex CCG	93,196	360	0.39%
South of England Commissioning Region	5,682,900	21,276	0.37%
ENGLAND	20,473,472	64,426	0.31%

Source: QOF 2015/16

12 Mortality from Falls

Falls among older people are more likely to result in injury and fractures. In addition, prolonged time on the floor can result in further complications and precipitate loss of independence. Injury from falls is often a leading cause for people moving into long-term nursing or residential care. Approximately 1 in 20 older people living in the community experience a fracture or need hospitalisation after a fall. Falls and fractures in those aged 65 and above account for over 4 million bed days per year in England[13].

12.1 Mortality from Falls

In 2014, there were an estimated 62 deaths of adults aged 65 and over in West Sussex due to an accidental fall[14] (approx. 70 deaths across all ages). This includes any accidental fall, not just those occurring within the home. Small numbers make it difficult to determine trends over time.

Table 12 shows the directly age-standardised rate of mortality from accidental falls during 2012-14 per 100,000 European Standard population (2013 - all ages). Whilst this data spans all age groups, the majority of these deaths are likely to occur among older populations, where there is a greater risk of serious injury following a fall. Wide confidence intervals and small numbers of deaths make it difficult to determine the significance of these differences, although West Sussex appears to have a lower rate of mortality from accidental falls than England.

[13] Royal College of Physicians (2010). Falling standards, broken promises. https://www.nos.org.uk/document.doc?id=1516
[14] HSCIC Indicator Portal – Mortality from Accidental Falls: Number, by age group, annual (2014)

Table 12: Directly age standardised rate of mortality from accidental falls; per 100,000 persons (2012-14 pooled)

	DEATHS	Directly age-standardised rate per 100,000 persons (all ages)		
		DSR	LOWER 95% CONFIDENCE LIMIT	UPPER 95% CONFIDENCE LIMIT
Adur	17	7.56	4.37	12.16
Arun	28	4.07	2.65	5.94
Chichester	18	3.60	2.12	5.72
Crawley	20	8.21	4.96	12.75
Horsham	36	7.80	5.45	10.80
Mid Sussex	41	8.93	6.38	12.14
Worthing	27	6.70	4.36	9.83
West Sussex	187	6.19	5.33	7.16
South East	1,758	6.77	6.46	7.10
England	11,744	8.03	7.88	8.17

Source: HSCIC Indicator Portal – Mortality from Accidental Falls (ICD10 W00-W19). Directly standardised rates have been calculated using the 2013 European Standard Population.

13 Hip Fractures

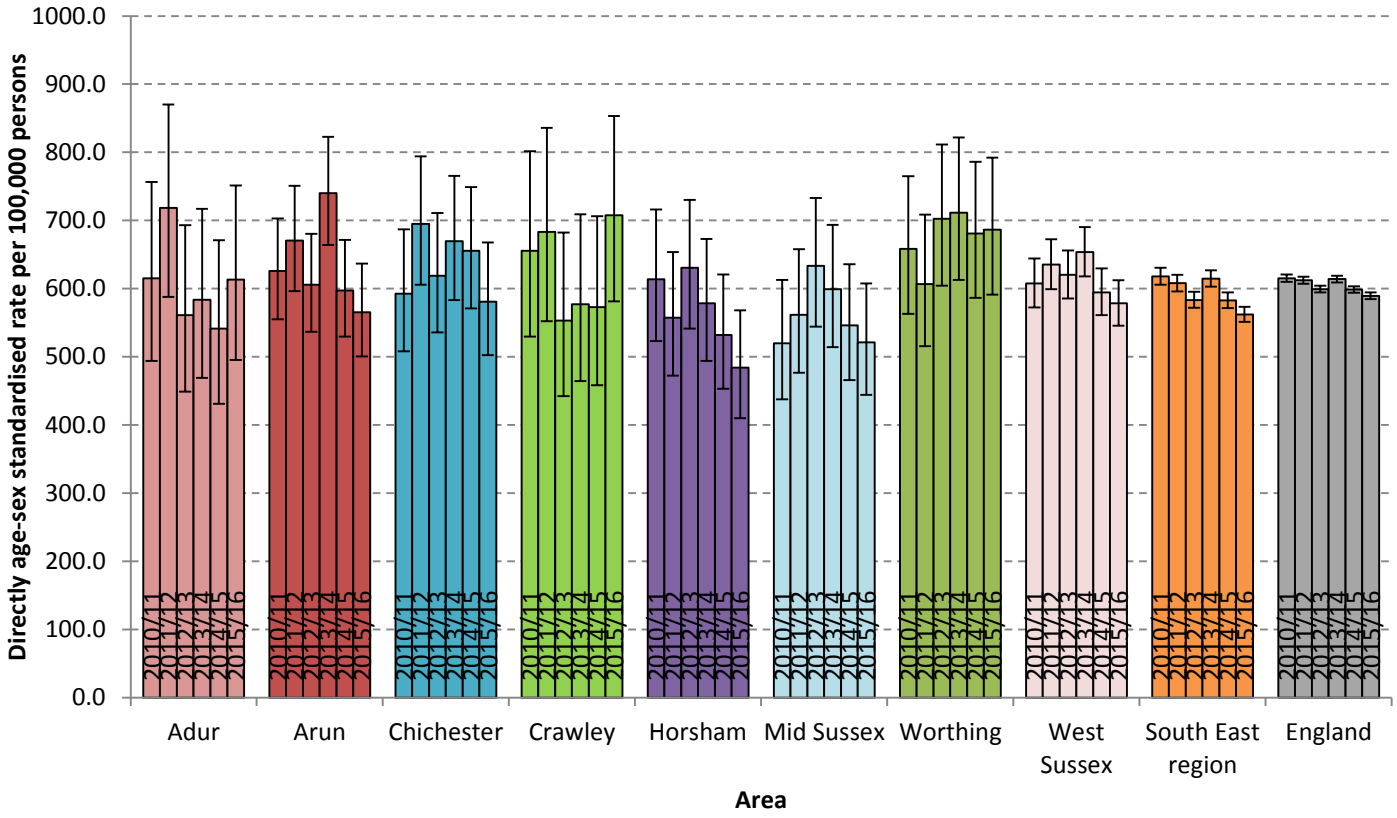
One of the most serious consequences of a fall is hip fracture, with half of people suffering a hip fracture failing to return to their original level of independence. The average age of persons sustaining hip fractures is approximately 83 years[15], with a greater incidence among women. Hip fractures following a fall are far more common in people who have osteoporosis, a condition that is also more common among women. The National Hip Fracture Database reports that mortality from hip fracture is high – up to a third of people with hip fracture die within a year of the injury[16]. Hip fractures are therefore a major public health concern, with considerable cost required for acute care, long-term hospitalisation and social care, as well as a significant impact on an individual's wellbeing, independence, disability and mortality.

In West Sussex, there were approximately 1,195 emergency hospital admissions due to femur fractures among people aged 65+ in 2015/16. Of these, the majority were for adults aged 80 or above (N = 925). Most admissions for femur fractures were following a fall. Among people aged 65+, 1,176 falls admissions had a primary diagnosis code of S72 – Fracture of Femur. This number is expected to rise in future years due to an ageing population, and increasing life expectancy.

Figure 9 shows the directly standardised rate of emergency hospital admissions for hip fractures in adults aged 65 and over (per 100,000) in local authorities across West Sussex. Overlapping confidence intervals suggest little difference in the rate of admissions for femur fractures across the county.

[15] PHOF – Hip fractures in people aged 65+ and over (aged 80+)
[16] National Hip Fracture Database (NHFD), National Hip Fracture Database National report 2016. Available at: http://web1.crownaudit.org/Report2016/NHFD2016Report.pdf

Figure 9: Emergency hospital admissions for fractured neck of femur in persons aged 65 and over, directly age-sex standardised rate per 100,000 persons



Source: PHOF – Emergency hospital admissions for fractured neck of femur in persons aged 65 and over, directly age-sex standardised rate per 100,000 persons (2010/11 to 2015/16)

Note: Primary diagnosis of fractured neck of femur as defined by ICD10 codes S72.0 to S72.2. The ICD10 codes used to define femur fractures varies for different sources. Therefore, similar indicators may produce different statistics due to the codes used.

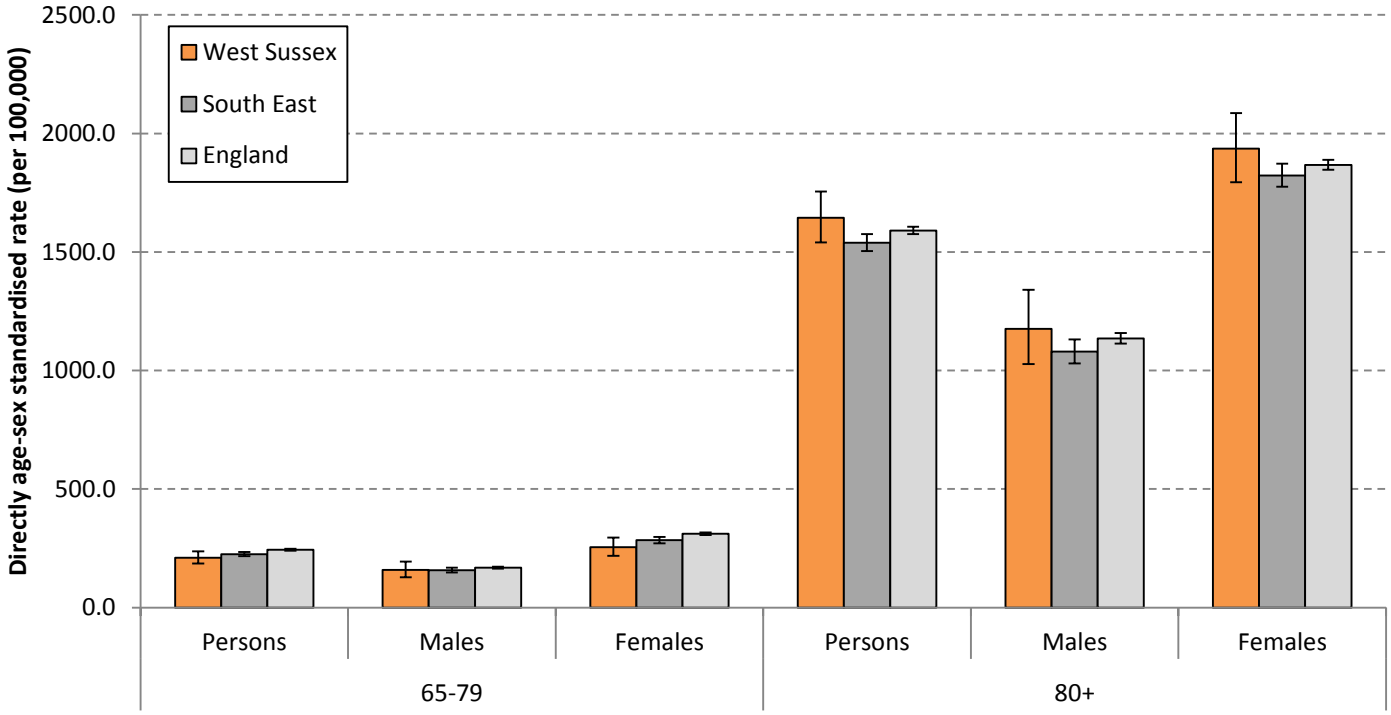
13.1 Age and gender

The rate of emergency hospital admissions for femur fractures is consistently greater for women (685.5 emergency admissions per 100,000 females aged 65+) than men (419.4 per 100,000 males aged 65+) in West Sussex (2015/16). This may in part be due to a higher incidence of osteoporosis for post-menopausal women[17]. In 2015/16, there were approx. 870 emergency hospital admissions for femur fractures in women (65+) in West Sussex. This compares to approx. 325 emergency admissions for femur fractures for men (65+).

Figure 10 demonstrates the greater rate of emergency admissions for femur fractures among older populations. During 2015/16, there were approximately 270 emergency admissions for femur fractures among adults aged 65-79 years in West Sussex; this compares to 925 admissions for adults aged 80 and above .

[17] National Osteoporosis Society. Accessed via https://www.nos.org.uk/about-us/media-centre/facts-and-figures
National Osteoporosis Society and Age UK (2013). *Report to the minister of state for care services: Breaking through: Better Falls and Fracture Services in England*. Accessed via: https://www.nos.org.uk/document.doc?id=987

Figure 10: Directly age-sex standardised rate of emergency hospital admissions for femur fractures in persons, males and females aged 65-79 years and 80+ years, per 100,000 (2015/16)



Source: PHOF – Emergency hospital admissions for fractured neck of femur in persons, males and females aged 65-79 and 80+, directly age-sex standardised rate per 100,000 (2015/16)

13.2 Discharge destination, readmission and recovery

Table 13 shows the percentage of patients returning to their usual place of residence following hospital treatment for a fractured femur. Note that this covers patients of all ages where a femur fracture was recorded as the primary diagnosis (not necessarily due to a fall). Coastal West Sussex CCG has the highest proportion of patients returning to their usual place of residence following a fractured femur (57.34%), although overlapping confidence intervals suggests little difference exists between the three CCGs.

Table 13: The percentage of patients returning to usual place of residence following hospital treatment for fractured femur (all ages) by CCG (2014/15)

Area	% of patients returning to usual place of residence following hospital treatment for femur fracture (2014/15)		
	%	95% Lower CI	95% Upper CI
NHS Coastal West Sussex CCG	57.34%	54.02%	60.60%
NHS Crawley CCG	46.67%	24.81%	69.88%
NHS Horsham and Mid Sussex CCG	52.67%	44.71%	60.49%

Source: Commissioning for Value – Trauma and Injury Pathway: % of patients returning to usual place of residence following hospital treatment for fractured femur (2014/15)

Table 14 shows the percentage of patients discharged from hospital following treatment for a fractured femur who were readmitted within 28 days of discharge. This does not indicate the cause for readmission. In West Sussex CCGs, between 10 and 13% of patients discharged from hospital following treatment for a hip fracture were readmitted within 28 days.

Table 14: The percentage of emergency readmissions to hospital within 28 days of discharge for patients who received treatment for a fractured femur (all ages) by CCG (2014/15)

Area	% of patients returning to usual place of residence following hospital treatment for femur fracture (2014/15)		
	%	95% Lower CI	95% Upper CI
NHS Coastal West Sussex CCG	12.89%	10.75%	15.38%
NHS Crawley CCG	11.46%	6.52%	19.36%
NHS Horsham and Mid Sussex CCG	10.67%	7.44%	15.08%

Source: Commissioning for Value – Trauma and Injury Pathway: % of emergency readmissions to hospital within 28 days for patients: hip fractures (2014/15)

The proportion of patients recovering to their previous level of mobility/walking ability at 30 days following a hip fracture is monitored in the CCG outcome indicator set (CCGOIS), using data from the National Hip Fracture Database (NHFD)[18].

In 2015, 21.1% (95% CIs: 17.5% to 25.2%) of patients admitted to hospital with a hip fracture had returned to their previous level of mobility at 30 days in Coastal West Sussex CCG. This proportion was estimated at 48.6% for Crawley CCG (95% CIs: 33.4% to 64.1%) and 55.3% for Horsham and Mid Sussex CCG (95% CIs: 39.7% to 69.9%), although data for these CCGs are based on small samples, Wide confidence intervals mean that this data is unlikely to be reliable.

At 120 days after admission to hospital, 58.3% of patients (95% CIs: 52.8% to 63.6%) with a hip fracture had recovered to their previous level of mobility at 120 days in Coastal West Sussex CCG. Again, due to small numbers, data is not presented for Crawley and Horsham and Mid Sussex CCG.

14 Seasonal variation

Cold weather is often associated with an increase in the number of falls and fall related injuries among older adults[19]. Many of these falls can be prevented by ensuring older people have adequately warm homes, or through appropriate treatment of surfaces during icy conditions.

The number of emergency admissions for falls in West Sussex is shown by month of admission in Table 15. Whilst there does appear to be an increase in the number of admissions for falls in winter 2015/16 (December – February), this pattern was not evident the previous year (2014/15 -Figure 11).

[18] CCGOIS – 3.10.i and 3.10.ii – Hip fracture: Proportion of patients recovering to their previous level of mobility/walking ability at 30/120 days (downloaded from the HSCIC Indicator portal)

[19] Hajat, S., Chalabi, Z., Wilkinson, P… et al. (2016). Public health vulnerability to wintertime weather: time-series regression and episode analyses of national mortality and morbidity databases to inform the Cold Weather Plan for England. *Public Health, 137,* 26-34. Doi:10.1016/j.pihe.2015.12.015.

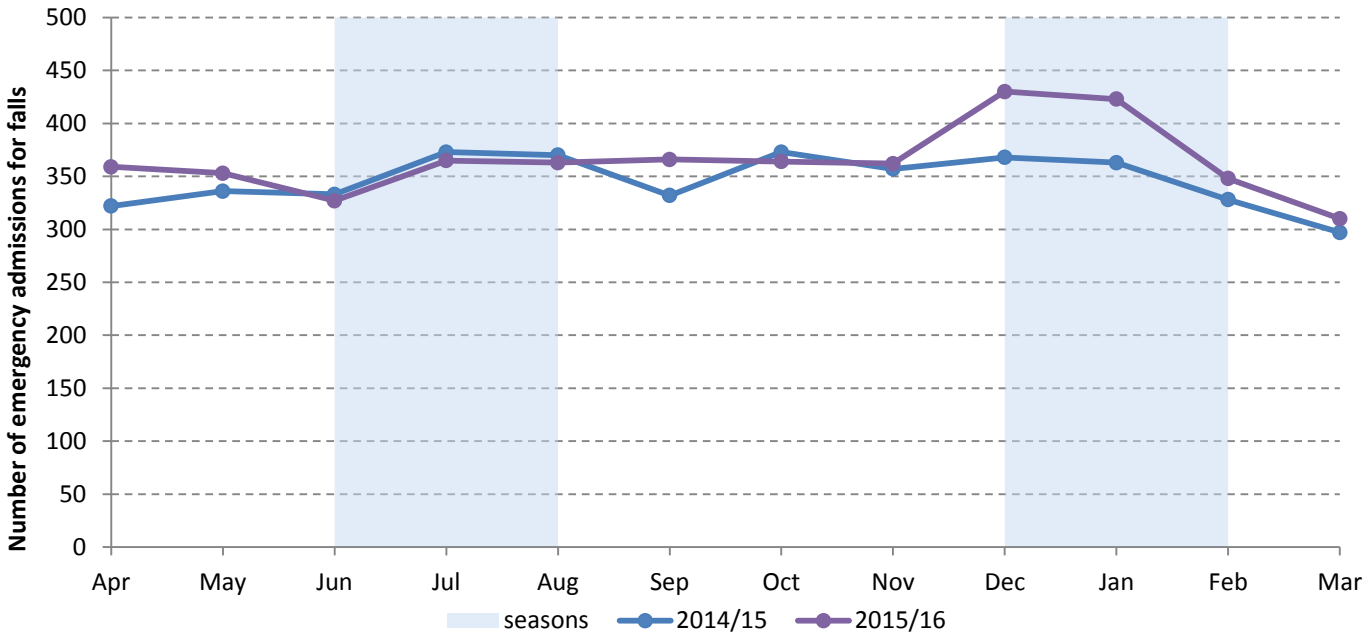
Table 15: The number of emergency admissions for falls among people aged 65+ in West Sussex by month of admission (2014/15 to 2015/16)

	2014/15			2015/16		
	65+	65-79	80+	65+	65-79	80+
April	322	102	220	359	109	250
May	336	82	254	353	107	246
June	333	102	231	327	91	236
July	373	113	260	365	104	261
August	370	89	281	363	93	270
September	332	88	244	366	93	273
October	373	105	268	364	94	270
November	357	93	264	362	98	264
December	368	113	255	430	124	306
January	363	98	265	423	121	302
February	328	91	237	348	96	252
March	297	91	206	310	99	211

Source: local analysis of Hospital Episode Statistics (HES)

Note. This is by month of admission. Counts differ to PHOF counts, which are by financial year in which the episode ended

Figure 11: Number of emergency admissions to hospital for falls among adults aged 65+ in West Sussex (seasonal variation - 2014/15 and 2015/16



Source: local analysis of HES

In order to examine whether an association exists between temperature and emergency admissions for falls, mean daily temperatures (Central England Temperature series HadCET[20]) were correlated with daily emergency admissions for falls among adults aged 65+ in West Sussex. Data was examined by year (2014/15 and 2015/16) and across both years. No significant associated was identified between mean daily temperature and falls admissions among older adults (p's > .05, R^2's < 0.01).

[20] Parker, D.E., T.P. Legg, and C.K. Folland. 1992. A new daily Central England Temperature Series, 1772-1991. Int. J. Clim., Vol 12, pp 317-342

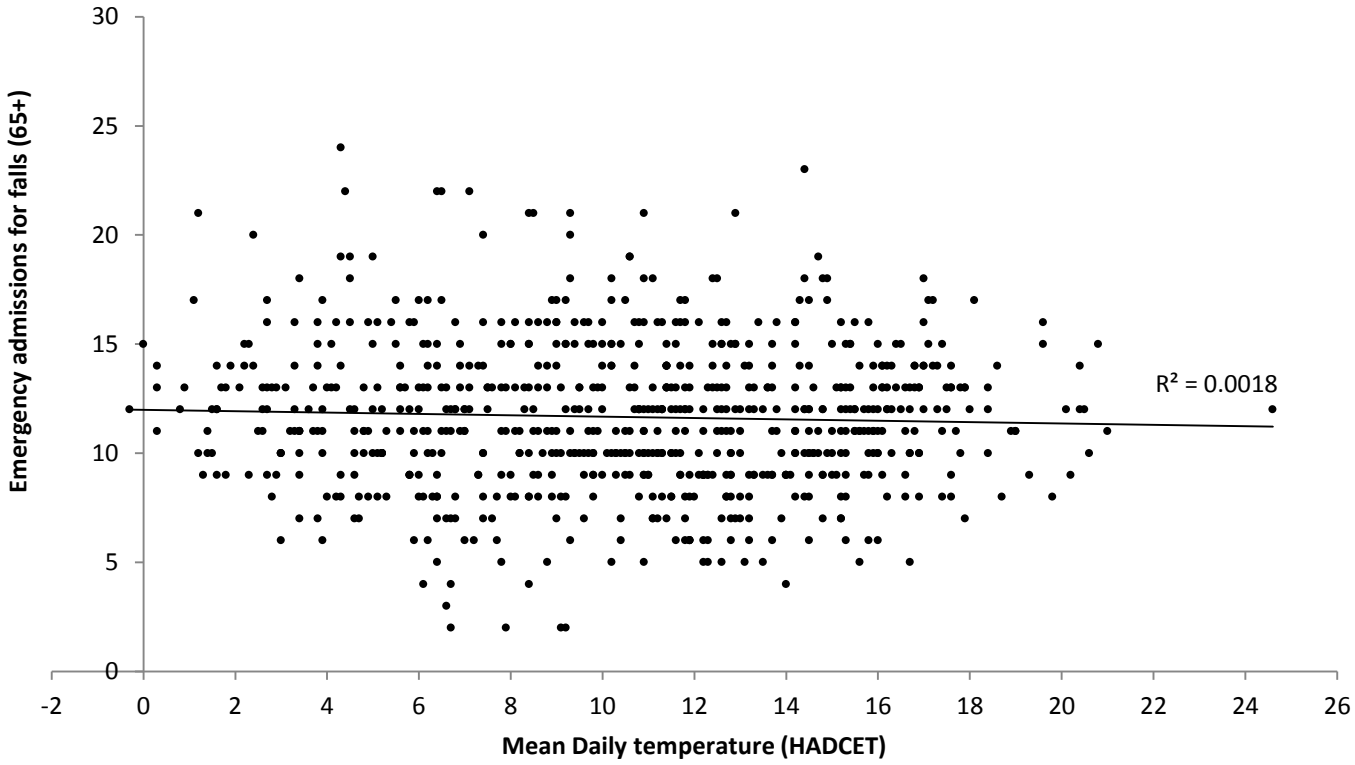
Table 16: Pearsons' R correlation coefficient between number of emergency admissions for falls (65+) in West Sussex and mean daily temperature (HadCET)

Time period	Pearson's R correlation	Effect size (R^2)	P- value
2014/15	0.009	0.00	.863 (*ns*)
2015/16	-0.094	0.01	.074 (*ns*)
both years	-0.042	0.00	.254 (*ns*)

Note. Ns – not significant when compared to critical p-value ($p < .05$)

The daily temperatures used here are representative of a roughly triangular area of central England and are based on data from three weather stations (Lancashire, London and Bristol). This is the most complete, freely accessible, daily record of temperature in England. This data does not however encompass West Sussex, and therefore may not be representative of the temperature changes in the South East of the country.

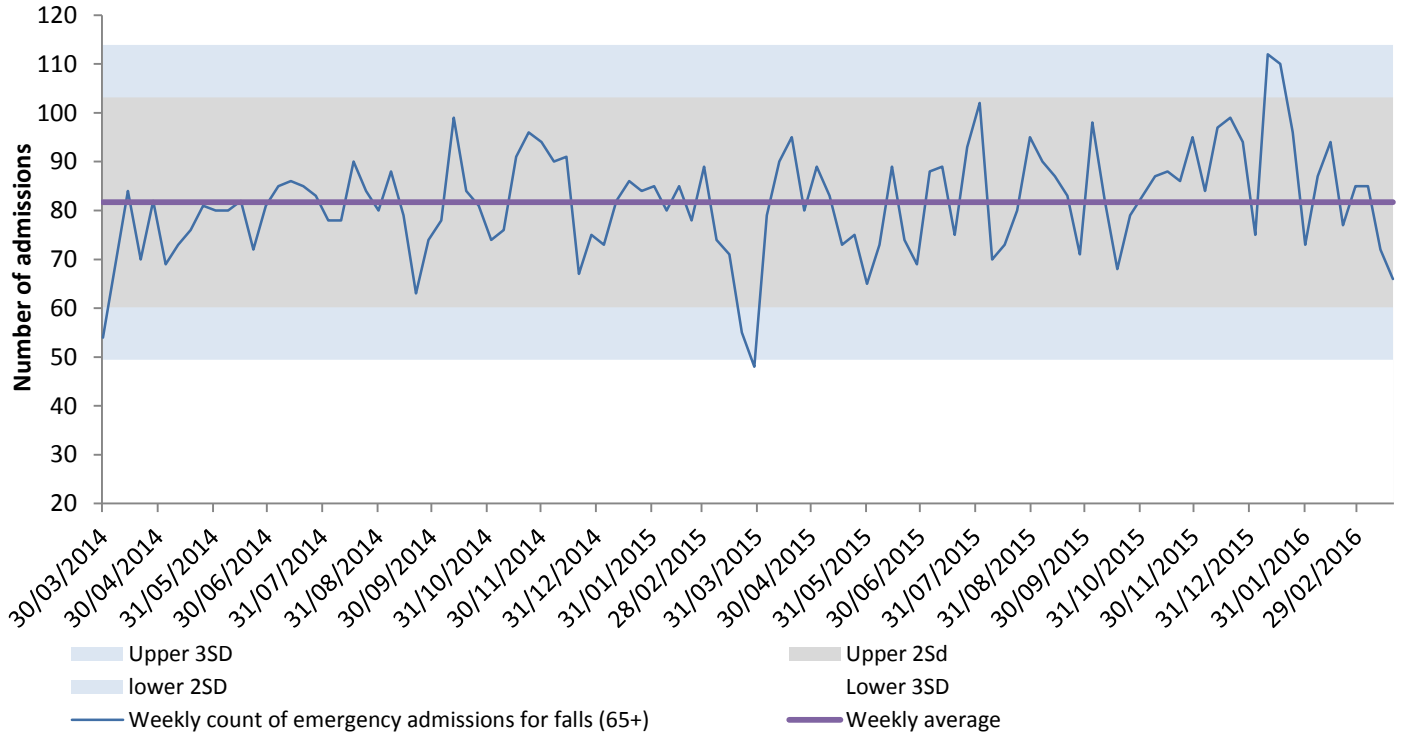
Figure 12: Correlation between number of emergency hospital admissions for falls (65+) and mean daily temperature (HADCET) in 2014/15 to 2015/16



Source: HES and HadCET temperatures

Figure 13 shows weekly numbers of emergency admissions for falls. This plots the total number of emergency admissions of West Sussex residents (aged 65+) for falls (blue line), the period average (14/15 to 15/16 – purple line), and areas that denote two (grey area) and three (blue area) standard deviations (SD) from the mean. Where the blue line strays outside the 3 SD area, this indicates that this week is outside of the normal limits of the dataset.

Figure 13: Number of emergency admissions for falls by weeks in 2014/15 to 2015/16



Note. The week commencing 29th March 2015 reflects the break between the two annual HES datasets – this week has been calculated by summing the number of admissions in the days 29th-31st March 2015 (HES 2014/15 datafile) and 1st – 4th April 2015 (HES 2015/16 datafile).

The lack of evidence for an association between falls and season in West Sussex may be due to a number of reasons. It is possible that 2014/15 was a milder winter; the average winter temperature in 2014 was 6.4°C compared with 4.9°C in 2015. However, average temperatures across a season can mask considerable fluctuations in daily temperatures (see appendices for correlation between minimum daily temperature and falls). It is also possible that extraneous variables interact with seasonal variation in falls. For example, in countries with more severe winter conditions, ice and snow are often associated with increased numbers of falls and fractures[21] (although this tends to be more apparent among younger populations who are less likely to stay indoors during periods of bad weather). Poorer health in winter, particularly among the most vulnerable and older populations, can increase susceptibility to falls. Cold weather is associated with an increase in heart attacks, stroke, respiratory disease, hypothermia and influenza[22]. Additional factors that could interact with the number of falls and season include where a person lives (e.g. care homes vs. living alone, rural vs. urban areas), age and sex, pre-existing vulnerabilities (e.g. bone density, medication use), and changing policies such as those targeting fuel poverty or cold weather plans.

Further analysis of data spanning multiple years would help establish whether an association does exist between emergency admissions for falls and season/temperature in West Sussex, and the factors that may contribute to this.

[21] Mondor, L., Charland, K., Verma, A., & Bukeridge, D. L. (2015). Weather warnings predict fall-related injuries among older adults. *Age and Ageing, 44,* 403-408. Doi: 10.1093/ageing/aful99.

[22] Hajat, S., Chalabi, Z., Wilkinson, P… et al. (2016). Public health vulnerability to wintertime weather: time-series regression and episode analyses of national mortality and morbidity databases to inform the Cold Weather Plan for England. *Public Health, 137,* 26-34. Doi:10.1016/j.pihe.2015.12.015.

15 Appendices

Table 17: Directly age-sex standardised rate of emergency hospital admissions due to falls in females aged 65-79 and 80+ (2015/16)

	65-79				80+			
	Count	Rate	LCI	UCI	Count	Rate	LCI	UCI
Adur	76	1340.5	1055.5	1678.7	137	5253.1	4409.1	6211.4
Arun	189	1151.3	992.7	1327.9	542	6470.2	5933.4	7042.3
Chichester	137	1206.0	1012.3	1425.9	401	6744.4	6098.0	7440.5
Crawley	70	1343.6	1045.0	1700.4	210	7336.6	6373.9	8403.2
Horsham	83	759.9	604.9	942.5	297	5733.6	5098.2	6426.0
Mid Sussex	119	1135.7	940.3	1359.7	319	5860.5	5230.8	6544.7
Worthing	108	1252.5	1027.0	1512.7	350	6699.0	6005.0	7450.3
West Sussex	782	1138.6	1060.1	1221.5	2256	6316.7	6057.5	6584.1
South East	6989	1131.6	1105.2	1158.5	18490	6242.8	6152.8	6333.7
England	42643	1177.5	1166.3	1188.7	101313	6223.3	6185.0	6261.8

Table 18: Directly age-sex standardised rate of emergency hospital admissions due to falls in males aged 65-79 and 80+ (2015/16)

	65-79				80+			
	Count	Rate	LCI	UCI	Count	Rate	LCI	UCI
Adur	29	621.7	416.1	893.2	84	5428.0	4314.7	6737.7
Arun	116	817.7	675.5	980.9	196	4115.2	3550.3	4743.3
Chichester	73	733.2	574.6	921.9	164	4987.9	4236.2	5832.1
Crawley	39	885.4	627.4	1213.1	87	5494.2	4379.6	6801.7
Horsham	71	733.5	571.9	926.3	128	4225.6	3514.8	5036.3
Mid Sussex	55	584.3	439.0	762.0	134	4315.7	3605.9	5122.8
Worthing	74	1021.6	801.0	1283.8	120	4371.9	3621.0	5231.9
West Sussex	457	767.7	698.7	841.6	913	4551.5	4256.8	4861.0
South East	4373	792.3	768.9	816.3	7400	4300.0	4201.1	4400.7
England	26819	825.4	815.5	835.4	41146	4366.5	4323.5	4409.9

Table 19: Pearsons' R correlation coefficient between number of emergency admissions of people aged 65+ for falls in West Sussex and minimum daily temperature (HadCET), 2014/15 to 2015/16

Time period	Pearson's R correlation	Effect size (R^2)	P- value
2014/15	0.03	0.00	.599 (*ns*)
2015/16	0.10	0.01	.069 (*ns*)
both years	0.04	0.00	.332 (*ns*)