

TIIG Cumbria Themed Report

Injuries in Older People across Cumbria

April 2011 to March 2014

August 2015

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To quote Abraham Lincoln: 'In the end, it's not the years in your life that count. It's the life in your years'. That more of us are living longer than ever before is to be celebrated. Our collective challenge, in the face of this demographic shift, is to take action so that as far as possible, older people not only live longer, but also enjoy active, healthy and fulfilling lives.



In Cumbria this challenge is all the more pressing, because a higher proportion of the population is aged 65 and over than in the rest of England, and this proportion is set to rise: the 2012-Based Subnational Population Projections predict that by 2037, numbers of residents aged 65 and over will have increased by over 50% in Cumbria, and will make up nearly a third of our half million population.

Sustaining an injury can represent a major setback for older adults and the prevention of injury is an important public health priority. The intelligence presented in this report gives some pointers as to the nature and extent of injuries in older Cumbrians, and their impact on health services. This in turn can guide collective efforts to prevent injuries, and to help older people recover their health and independence following an injury.

The data presented in this report suggest that injury attendances at Accident and Emergency Departments (AEDs) by Cumbrian residents aged 50 years and over have increased in recent years: from 9,303 in 2011/12 to 14,296 in 2013/14. This finding, while possibly related to changes in the way data is recorded, warrants further investigation, especially if this trend is sustained.

This report is clear about the limitations of the data it contains. The vast majority (92%) of injury related attendances at the county's AEDs are categorised as 'other'; and 'falls' are not currently recorded at our AEDS. The North West Ambulance Service estimates that falls make up about 88% of all injuries serious enough to warrant an ambulance call out for people aged 50 years and over; it is therefore likely that falls make up about 9 out of 10 injuries leading to AED attendances in Cumbria.

The report also raises concerns about intentional injuries to older people, whether self-inflicted or following an assault (2% and 1% respectively of all AED attendances for injuries). We have a collective responsibility to protect those who are vulnerable from abuse and neglect. And as a community, we can help prevent deaths through suicide by enabling older people to get the support they need, instilling hope, and reducing loneliness and isolation.

Many of the report's findings are as expected – for example the proportion of those admitted increases from 17% for persons aged 50-59, to 54% for persons aged 90+. This is nonetheless an important issue to highlight and quantify. Cumbria's Clinical Commissioning Group and County Council are committed to improving care and support in local communities to help people to stay well, and to recover fully on discharge from hospital. Focusing on frail elderly people is especially important, as an admission to hospital can compromise their capacity to live independently.

The report also makes linkages to other important contemporary public health issues, for example the impact of alcohol consumption on injuries in older people. As the report suggests, the observed peak in injury attendances between midnight and 1am may be alcohol-related, and has potential implications for clinical practice.

As well as a wealth of information about injury-related AED activity, this report also summarises the extensive evidence base informing action to reduce injuries. In particular, it highlights the value of physical activity in preventing, and recovering from, injury. A lifetime of active living will best equip us to age well. But it is never too late to explore new ways of being active.

As the report points out, as older people recover from their injury, they may fear subsequent falls, and further limit their daily activities. By addressing these fears and helping older people regain the level of activity of which they are capable, we can not only reduce the risk of a subsequent fall, but also help reduce their social isolation. So finally, perhaps the report's fundamental message is the importance of 'being in our bodies', whatever our age.

A handwritten signature in black ink, appearing to read 'Jane Mathieson', written in a cursive style.

Dr Jane Mathieson
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SUMMARY OF DATA

- Between April 2011 and March 2014, there were 36,849 total attendances to Cumbria Emergency Departments (EDs) by people aged 50 years and over; of these 33,820 (92%) were Cumbria residents.
- Among Cumbria residents, injury attendances increased 54% over this three year period, from 9,303 in 2011/12 to 14,296 in 2013/14.
- The highest number of injury attendances of people aged 50 years and over was to Cumberland Infirmary (17,324), followed by West Cumberland Hospital (10,764) and Furness General Hospital (4,453).
- The highest number of attendances (11,701) and the highest rate of attendance per 100,000 population (27,118) were from residents of Carlisle Local Authority (LA). Copeland (22,173) and Allerdale (17,268) had the second and third highest rates of attendance per 100,000 population. South Lakeland had the lowest number of attendances (2,388) and the lowest rate of attendance per 100,000 population (4,758).
- Females accounted for 57% (19,190) and males accounted for 43% (14,630) of injury attendances of people aged 50 years and over to Cumbria EDs between April 2011 and March 2014.
- Twenty-nine percent (9,797) of all injury attendances were made by people aged 50 to 59 years, of which 51% (5,017) were male. Older age groups were comprised of increasing proportions of females; 59% of attendees aged 70 to 79 years, 65% of attendees aged 80 to 89 years, and 73% of attendees aged 90 years or over.
- Where ethnicity was recorded at the ED (74% of patients), the vast majority (99%; 28,158) were white.
- The majority (92%) of injury attendances were recorded as 'other injury' however falls were not categorised at Cumbria EDs and are likely to comprise a substantial proportion of this injury group. Four percent of injury attendances were for road traffic collisions, 2% were for deliberate self-harm and 1% were for assaults and sports injuries individually.
- In terms of incident location, 65% of injuries (21,956) occurred in the home, 24% (7,952) occurred in 'other' locations, 8% (2,763) occurred in a public place and 3% (1,116) occurred at a place of work.
- Forty-eight percent (16,152) of attendees were self-referred to an ED, 31% (10,519) were brought in by the emergency services and 15% (4,941) were referred by a General Practitioner.
- In terms of arrival mode, 43% (14,381) of attendees were brought in by ambulance, 6% (2,045) arrived by foot and 51% (17,379) arrived by other modes.
- In terms of disposal from the ED, 39% (13,069) of attendees were discharged with no further treatment required, 32% (10,702) of attendees were admitted to hospital and 28% (9,358) were referred for follow up treatment.

SUMMARY OF DATA BY LOCAL AUTHORITY

- **Allerdale:** There were 7,283 injury attendances for people aged 50 years and over; which was a crude rate of 17,268 per 100,000 population. Of total attendees, 57% were female, 97% were for unintentional injuries, and 32% were admitted to hospital.
- **Barrow-in-Furness:** There were 3,071 injury attendances for people aged 50 years and over; which was a crude rate of 11,246 per 100,000 population. Of total attendees, 53% were female, 97% were for unintentional injuries, and 27% were admitted to hospital.
- **Carlisle:** There were 11,701 injury attendances for people aged 50 years and over; which was a crude rate of 27,118 per 100,000 population. Of total attendees, 57% were female, 96% were for unintentional injuries, and 31% were admitted to hospital.
- **Copeland:** There were 6,546 injury attendances for people aged 50 years and over; which was a crude rate of 22,173 per 100,000 population. Of total attendees, 57% were female, 97% were for unintentional injuries, and 21% were admitted to hospital.
- **Eden:** There were 2,831 injury attendances for people aged 50 years and over; which was a crude rate of 11,656 per 100,000 population. Of total attendees, 57% were female, 98% were for unintentional injuries, and 54% were admitted to hospital.
- **South Lakeland:** There were 2,388 injury attendances for people aged 50 years and over; which was a crude rate of 4,758 per 100,000 population. Of total attendees, 57% were female, 98% were for unintentional injuries, and 43% were admitted to hospital.

KEY DATA ISSUES

- Cumbria EDs do not currently categorise falls, which comprise the main injury group among older people, particularly those aged 65 years and over. While it is assumed that the majority of 'other injuries' are falls, especially among older age groups, it would be useful for the purposes of prevention and treatment to distinguish between falls and other accidents.
- While intentional injuries comprise a small percentage of ED attendances for people aged 50 years and over, the collection of enhanced data fields by Cumbria EDs, particularly relating to assaults, would be useful in providing community partners with greater insight into the nature and causes of assaults and other intentional injuries.
- Routine sharing of monthly injury data is not currently in operation for EDs in Cumbria. In response to this highlighted need, the Trauma and Injury Intelligence Group (TIIG) is working with partners in Cumbria to facilitate data sharing, which can assist strategic policing and inform mechanisms to prevent injuries at home and in the community.

RECOMMENDATIONS FOR CONSIDERATION FOR COMMISSIONERS

Recommendations presented here are derived from evidence reported in the literature and information presented in this report, including Trauma and Injury Intelligence Group (TIIG) and North West Ambulance Service (NWAS) data. The recommendations have been presented in the following categories: data collection and quality; and, prevention and intervention.

DATA COLLECTION AND QUALITY

- Since NWAS data indicates that falls comprise approximately 88% of all injuries serious enough to warrant an ambulance call out for people aged 50 years and over. Falls are currently not recorded at Cumbria EDs or Royal Lancaster Infirmary; therefore, consider mechanisms to enable the further categorisation of unintentional injuries to include falls.. This can be achieved through multi-agency meetings and dialogue, primarily between the TIIG team and EDs. A potential barrier may be the IT systems used by EDs, which may be overcome with cooperative action and by highlighting the importance of such data in informing prevention and intervention strategies.
- Consistent with other areas in the North West, consider the potential to share all injury data from Cumbria EDs on a monthly basis with community partners, particularly Cumbria Constabulary. Discussions between TIIG and local councils to facilitate data sharing commenced in March 2015. Data shared can be used to inform strategic healthcare initiatives, community prevention mechanisms and targeted policing. Maximising the potential of TIIG data is likely to save health and emergency services costs, in addition to improving the health and well-being of older people in Cumbria.
- Consider mechanisms to record whether patients aged 50 years or over have previously presented at EDs for unintentional injuries. Local patient identifiers can be used by EDs to identify 'frequent flyers' (i.e. older people who often use ED services), assessments can then be made as to whether individuals require additional help, treatment or may be more appropriately served by community based services. This process may provide better outcomes for older people and reduce the burden on EDs.
- In terms of deliberate self-harm, which accounts for the majority of intentional injuries among older people, consider the potential to record and report whether patients have received a psycho social assessment; currently EDs in Cumbria do not report this information. Whether or not an assessment has been carried out can be related to disposal methods and treatment outcomes and can form an important component in improving treatment services for older victims of deliberate self-harm.
- In terms of assault related injuries, consider mechanisms to improve the collection of the College of Emergency Medicine recommended questions (e.g. assault date and time, location details and weapons used) and begin collecting TIIG recommended enhanced data items (whether and where alcohol was consumed, and information relating to the perpetrator of the assault). Enhanced assault information allows TIIG to build up a profile of the nature of the assault and to identify whether an attendance was an isolated incident or was part of sustained abuse.
- Consider mechanisms to improve the recording of ethnicity within EDs. While attendees have the right to withhold such information, when compared to other areas, it may be unlikely that 16% of attendees would refuse to volunteer their ethnic origin.
- Consider mechanisms to expand the categories for incident location; six percent of all records had an incident location recorded as 'other'. This may be achieved with liaison between the TIIG team, ED receptionists and ED systems representatives.

- Alcohol may be a contributing factor to the peak in ED attendances between 00:00 and 01.59am. Consider mechanisms to record whether a patient had been drinking prior to the incident, this information may help to determine whether patients require referral for alcohol or substance use screening or treatment services.

PREVENTION AND INTERVENTION

- Consider ways that TIIG data can feed into strategies to reduce the risk of falls for older people. Older adults who have a history of falls are significantly more likely to fall again (WHO, 2004); therefore patients attending EDs for falls, can be referred to various follow up treatments or preventative interventions. In addition to medical treatment for injuries, patients may also require: mental health assessments to identify feelings of social isolation or depression; rehabilitation or counselling to reduce the fear of falling again; regular eye tests to maximize vision; and, enrolment on exercise programs to increase leg strength and improve balance.
- In addition to older people who have previously fallen, individuals at elevated risk of falling are patients: who suffer from neurological conditions or cognitive problems; who are visually impaired; who are recovering from infections; and, who have mobility issues or are suffering from bone or joint conditions such as arthritis (The Health Foundation, 2012). ED attendees, especially elderly patients, suffering from any of the above conditions may be appropriate for specific follow up treatments
- Explore the possible reasons as to why injury attendances increased so substantially between the end of 2012/13 and the beginning of 2013/14; this increase was maintained throughout 2013/14. While this increase may be due to improvements in recording injury data within EDs or the longer term cumulative effects of an ageing population, there may be other factors causing this increase, such as a reduction in community services or increased social isolation. Identification of causal factors may enable commissioners and community partners to effectively prioritise prevention mechanisms and interventions.
- Consider the high proportion of injuries for people aged 50 years and over that occur in the home. Community interventions may seek to make homes safer in a number of ways, including reducing tripping hazards, adding grab bars or railings at strategic points, and improving lighting within the home.
- Explore why rates of attendance for people aged 50 years and over are highest in Carlisle, Copeland and Allerdale. Such exploration may include a further analysis of the relationship between deprivation and injury, and an assessment of extrinsic factors, or dangerous environments, which may include busy roads, hazards for pedestrians or risk factors in or around people's homes.
- Explore the differences in ED attendances by males and females in Cumbria. A proportion of this discrepancy is likely to be due to the difference in life expectancy (i.e. females live longer than males on average and account for an increasing proportion of attendances with increasing age group). However, there may also be a disinclination among older males to engage with healthcare services, including EDs. A challenge for community partners may be to increase awareness of health treatment services, especially among males.

These recommendations are unlikely to be achieved without sustained working between cooperating agencies. However their implementation would be likely to initiate substantial positive change by preventing and reducing unintentional and intentional injuries among older populations in Cumbria.

There are more people aged 65 years or older in the UK than ever before. Owing to the post-war baby boom of 1946/47, the number of people who reached state retirement age in 2012 increased by 169,000 to 726,069 (ONS, 2015). The number of people turning or aged 65 is expected to continue increasing steadily with over 800,000 people projected to be turning or aged 65 by 2030 and future cohorts are not expected to return to pre-2012 levels for at least the next 25 years (Department for Work and Pensions, 2010). It is forecast that by 2033, 38.1% of the population in Cumbria will be aged 60 years or more, compared to the average in England of 28.2%; South Lakeland and Eden are likely to be among the LAs with the oldest age profiles in England (NWPFO, 2010).

Ageing populations, primarily due to increasing life-expectancy, are a success of the developed world due to improved nutrition, health care and economic well-being (UNFPA, 2015). Despite this success, ageing populations create a demographic and economic 'pinch', where increasing burdens are placed on working age people (Willett, 2010). As a consequence the UK faces new social and economic challenges which create the need for health and social care policies to be reappraised. The United Kingdom (UK) is currently ranked 11th overall on the Global Age Watch Index of older people's wellbeing² and performs high on most domains, particularly the enabling environment which includes measures of social connectedness, safety, civic freedom and access to public transport. However, the UK's lowest ranking is in the health domain (ranked 27th; Global Age Watch, 2015). For this reason a key challenge faced by local governments and public services in the UK is to improve the safeguarding of health and well-being of older people (over 65). The avoidance of preventable injuries is an important component of the successful safeguarding of health and well-being, which can help facilitate the integration and celebration of senior citizens.

Among older people, there are inequalities in life expectancy and general health, and it is often the poorest older adults who suffer the greatest disadvantage. In Cumbria levels of deprivation and health outcomes for older people vary across the county; for example, 65 year old males and females in South Lakeland have longer life expectancies than the average for England (18.6 and 21.1 years respectively; ONS, 2015), while 65 year old males and females in Allerdale have shorter life expectancies than the average for England (NWPFO, 2010). Longer life expectancies do not always correlate with healthy life expectancy and it is important to understand the needs and risks for older people to ensure their later years of life are healthy and happy. A key aim of health and social care providers is to invest in local prevention services which offer advice, support and interventions which help healthy older people to live long and independent lives and help injured or unwell older people to regain independence and prevent or delay the onset of further health problems or injuries (DoH, 2009).

Falls comprise the majority of injuries among older people (DoH, 2001), can cause bone fractures and head traumas and can increase the risk of early death (NCIPC, 2014). Every five hours in England an older person dies as a result of a fall and fall-related injuries are the leading cause of death among older people (DoH, 2009). In an LA with a population of just over 100,000, such as Carlisle, there would be approximately 5,600 falls among older people each year; approximately 800 of those will attend an ED³ and 400 will sustain a fracture, of which just under one third will be a fracture of the hip (DoH, 2009). Falls can precipitate admission to long-term care and people aged 65 and over spend four million days in hospital each year as a result of falls and fractures (Royal College of Physicians, 2011). Falls can also result in hypothermia, pressure-related injuries and infection (DoH, 2001). The consequences of falls are not just physical; the fear of subsequent falls can severely limit daily activities, and patients

² The index is comprised of 96 countries worldwide.

³ A similar number will call out an ambulance.

may also experience social isolation⁴ and depression due to loss of mobility and an increase in dependency (DoH, 2001). In terms of the economic costs, falls alone cost the National Health Service (NHS) in England £1.8 billion a year and the direct cost of a hip fracture is estimated to be £10,000 before the cost of social care (DoH, 2009). Effective falls prevention services could facilitate direct savings to LAs such as Carlisle, South Lakeland and Allerdale of just under £90,000 over five years.

This Trauma and Injury Intelligence Group (TIIG) Themed Report presents injuries suffered by older people across Cumbria primarily using ED recorded data between April 2011 and March 2014. While older people are usually categorised as people aged 65 years and older, this report considers people aged 50 years and older, as agreed with local partners. This report will contextualise ED data by providing an overview of the population, highlighting who is at increased risk of injury and describing the specific level of need in Cumbria. This report provides detailed recommendations for local government and commissioners in terms of the efficient use of resources, and to health and social care providers in terms of delivering improved outcomes, with the overarching aim of enabling older people to live happy, healthy and independent lives.

POPULATION OVERVIEW

According to mid-2013 census based population estimates, the population of the United Kingdom (UK) was 64.1 million, of which 22.8 million were people aged 50 years and over (ONS, 2015). Cumbria is the second largest county in England but is the second least densely populated. In 2013, the population of Cumbria was just under half a million (498,070) but the proportion of people aged 50 years and over was 43.5%, which was substantially higher than the proportions for both the North West (36.2%) and the UK (35.5%), as displayed in table 1.

TABLE 1: Proportion of people aged 50 years and over for Cumbria and by region and country⁵

Area	Over 50 population	Total population	Proportion of population over 50
Cumbria	216,633	498,070	43.5
North West	2,570,970	7,103,260	36.2
England	18,976,687	53,865,817	35.2
England and Wales	20,168,428	56,948,229	35.4
United Kingdom	22,773,508	64,105,654	35.5

Table 2 displays the population of Cumbria LAs by age group. The most populated LA is Carlisle, followed by South Lakeland and Allerdale; the LAs with the highest proportion of people aged 50 years or more are South Lakeland and Eden (48.5% and 46.2% respectively).

⁴ Three and a half million people aged 65 years or over live alone in England and Wales (ONS, 2014).

⁵ Mid-2013 population estimates, (ONS, 2015).

TABLE 2: Cumbria residents aged 50 years and over by Local Authority and age group, with total population and proportion of total population⁶

Local Authority	50-59	60-69	70-79	80-89	90+	Over 50 population	Total population	Proportion of population over 50
Allerdale	13,801	13,686	9,171	4,611	907	42,176	96,208	43.8
Barrow in Furness	9,265	8,708	5,983	2,739	612	27,307	67,831	40.3
Carlisle	15,139	13,270	8,921	4,802	1,016	43,148	107,949	40.0
Copeland	10,478	9,326	6,207	2,977	534	29,522	70,019	42.2
Eden	7,767	7,947	5,234	2,762	579	24,289	52,607	46.2
South Lakeland	15,308	16,356	10,917	6,266	1,344	50,191	103,456	48.5
Total	71,758	69,293	46,433	24,157	4,992	216,633	498,070	43.5

DEPRIVATION

The English Indices of Deprivation (2010) are calculated across the seven distinct domains of income, employment, health and disability, education skills and training, barriers to housing and other services, crime and living environment. The North West of England contains many of the country's most deprived areas (52% of the top 1% most deprived areas and 35% of the top 5% most deprived areas). Table 3 ranks Cumbria's LAs for local concentration⁷, extent⁸, income⁹, employment¹⁰, average LA score¹¹ and average LA rank¹². The rank of average scores gives an overall score and rank (lower ranks are more deprived) for each LA for all domains combined. There is substantial variation between and within LAs in Cumbria; Barrow-in-Furness is Cumbria's most deprived LA (32nd of 326 nationally), while South Lakeland is Cumbria's least deprived LA (242nd of 326 nationally).

TABLE 3: Local Authorities in Cumbria ranked by measures of deprivation

Local Authority	Rank of Local Concentration	Rank of Extent	Rank of Income Scale	Rank of Employment	Rank of Average Score	Rank of Average Rank
Allerdale	75	108	180	160	111	121
Barrow-in-Furness	12	38	188	148	32	37
Carlisle	107	110	177	147	109	109
Copeland	72	92	224	179	78	74
Eden	288	294	320	317	211	197
South Lakeland	274	280	274	256	242	231

The vast majority (98%) of the most deprived LSOAs in England are in urban areas but there are also pockets of deprivation across rural areas. Cumbria has a large land mass which is overwhelmingly rural; 51.6% of Cumbria's residents live in rural areas (ACT, 2010). Cumbria is not as deprived as other counties within the North West of England but, owing to the dispersed nature of the population, the true level of deprivation of residents in rural areas can be difficult to define by traditional methods.

⁶ Mid-2013 population estimates (ONS, 2015).

⁷ A weighted average of the LAs most deprived Lower layer Super Output Areas (LSOAs) that contain 10% of the districts population.

⁸ The proportion of an LAs population living in the most deprived LSOAs.

⁹ The number of people who are income deprived.

¹⁰ The number of people who are employment deprived.

¹¹ A weighted average of the combined scores for the LSOAs in an LA.

¹² A weighted average of the combined ranks for the LSOAs in an LA.

WHO IS AT RISK AND WHY?

Unintentional injuries, particularly falls, are the most frequent type of injury suffered by older people in the UK. Groups at elevated risk of unintentional injuries, or the adverse consequences of them, are elderly people (aged 75 years or older), inactive people, and people living in relative isolation. People who have existing health problems are also at elevated risk of suffering unintentional injuries and the resulting adverse consequences. Each of these groups is considered in more detail below. Intentional injuries, including assaults and deliberate self-harm, also constitute a small but important proportion of preventable injuries among older people and are considered in Case Studies 1 and 2.

ELDERLY PEOPLE

Increasing age is often coincident with decreased activity and strength, poor balance and impaired vision, all of which increase the risk of sustaining unintentional injuries, particularly falls (MDPH, 2008). Elderly people are also at greater risk of suffering adverse consequences of a fall; people aged 75 years or more are five times more likely to be admitted to a long term care facility for a fall compared to people aged between 65 and 74 years (Scott, 1990). Among elderly people, there are some gender differences in terms of elevated risk of falling and suffering adverse consequences: evidence suggests that elderly females are twice as likely to sustain fractures than males (Donald and Bulpitt, 1999); however, elderly males are 40% more likely to die from a fall than females (NCIPC, 2013). Falls can be prevented by reducing hazards in the physical environment; encouraging appropriate exercise programs to improve balance and strength; and having regular health screenings, particularly to monitor changes in vision (MDPH, 2008).

While elderly people are at the greatest risk of suffering unintentional injuries and the adverse consequences of them, people aged 50 to 64 years also require consideration. There are a number of lifestyle changes or physical conditions which become increasingly common for people over 50 years of age. Aging brings a natural slowing to individuals' metabolisms, which is often coupled with decreasing levels of activity and reduced engagement with community activities. In terms of specific conditions, changes in vision and hearing, and bone and joint problems such as arthritis and osteoporosis also contribute to an elevated risk of incurring unintentional injuries (The Health Foundation, 2012). Prevention of injuries for this age group is crucial in reducing the burden on EDs and healthcare services and in preventing the health problems that may exacerbate the effects of unintentional injuries in later life.

INACTIVE PEOPLE

There is substantial evidence that older people who engage in physical activity at least five times per week (as recommended by the Department of Health; 2004) are likely to maintain mobility, retain muscle strength and reduce incidence and adverse consequences of falls by improving strength, balance and endurance (Age UK, 2010). Physical activity among older people also greatly improves general quality of life, cognitive functioning and mental well-being. However, large proportions of older people live sedentary lives, particularly those that live in deprived areas, those that are of an ethnic minority group; and, those who have a disability (Age UK, 2010). Older people who live in unsafe environments or areas with multiple physical barriers are also less likely to engage in physical activity and suffer from reduced fitness and mobility problems. Among older people, females are reported to be less active than males but both genders exhibit reduced activity as they age: 70% of 50 year old males meet recommended activity targets, compared to 30% of 75 year old males; and, 62% of 50 year old females meet recommended activity targets, compared to 13% of 75 year old females (HSCIC, 2013).

MOBILITY PROBLEMS

There are approximately one million people aged 75 years or older in the UK who find it very difficult to get to their local hospital and mobility problems are projected to increase over the next 10 years (Holmes and Rossall, 2008). Table 5 displays the number of people aged 65 years or older in Cumbria who suffer from mobility problems as measured by the inability to undertake mobility activities on their own. South Lakeland has the highest proportion (18.9%), followed by Carlisle (18.5%), Allerdale and Eden (18.4%).

TABLE 4: Number of people aged 65 years or over who were unable to undertake at least one mobility activity in Cumbria in 2014¹³

Local Authority	Number of people by age group					Total	Total Population	Proportion of 65+ population with mobility problems
	65-69	70-74	75-79	80-84	85+		65 to 85+	Percent
Allerdale	595	692	723	727	1,215	3,952	21,482	18.4
Barrow-in-Furness	391	458	438	434	760	2,481	13,780	18.0
Carlisle	562	656	678	727	1,300	3,923	21,195	18.5
Copeland	398	468	471	463	760	2,560	14,358	17.8
Eden	348	390	405	405	760	2,308	12,533	18.4
South Lakeland	739	838	834	926	1,790	5,127	27,083	18.9
Cumbria	3,016	3,496	3,549	3,711	6,550	20,322	110,431	18.4

ISOLATED PEOPLE

There are currently one million older people who are socially isolated in the UK; this number is projected to increase by 2.2 million in the next 15 years (IPPR, 2008). Among older people, owing to the gendered discrepancy in life expectancy, there are more females living alone than males, particularly among the elderly (Age UK, 2010). Social isolation may result in mental health problems such as depression and anxiety, and reduced levels of physical activity, both of which can lead to elevated risks of suffering injuries and poorer outcomes when injuries are incurred. Social isolation may be physical, where individuals are sedentary within their homes, and in terms of community engagement; individuals who participate more within their communities are at lower risk of suffering unintentional injury but are also better engaged with healthcare services (Vellas et al., 1997).

Loss of independence can be gradual and mechanisms to prevent isolation may be more effective if they are implemented at the age of retirement rather than among elderly people, for whom social isolation may be difficult to reverse. Specific mechanisms which may prevent or improve social isolation may include making changes to the physical environment, such as promoting community activities and improving road safety for older pedestrians; elderly people have been found to be more concerned about traffic than about crime (ONS, 2008). Measures to improve housing and living conditions may also be crucial, since many homes in which people over 60 reside (2.2 million homes across the UK) have been deemed unfit for purpose (Age UK, 2010).

¹³ Projecting Older People Population Information System (POPPI; 2014).

PEOPLE SUFFERING FROM HEALTH PROBLEMS

People with existing health problems, including mental health problems, face an elevated risk of sustaining injuries; risk factors for deaths from unintentional injuries include osteoporosis, dementia, general illnesses and taking multiple medications (MDPH, 2008). Elderly people in particular are associated with increasing frailty, a term used to describe individuals who have limited functioning reserves or are unable to respond to stress (Sari, Cracknell and Sheldon, 2008). Elderly people who become frail are likely to suffer from multiple co-morbidities, such as taking multiple medicines and having sensory or cognitive impairments. For example, almost half (47%) of adults who suffer from arthritis also have at least one comorbid condition (National Health Interview Survey, 2007). A characteristic of these co-morbidities is that relatively minor injuries can result in serious physiological, social or functional harms (The Health Foundation, 2012).

Many older people have long-term or chronic physical health conditions, such as arthritis, and one of the consequences of chronic conditions can be mental health problems, which further deteriorate health outcomes and reduce quality of life (Naylor et al., 2012). People with comorbid conditions disproportionately live in deprived areas, where physical environments are less conducive to community engagement and residents have access to fewer resources of all kinds (Naylor et al., 2012). This complexity presents various challenges for healthcare services, including EDs, in designing safe systems of care and community-based services (The Health Foundation, 2012). Care for older people with long-term conditions could also be improved by better integrating mental health support with primary care and by providing physical activity programs designed to teach people the skills they need to take charge of their conditions.

DATA FROM ACCIDENT AND EMERGENCY DEPARTMENTS

EMERGENCY DEPARTMENTS IN CUMBRIA

Within Cumbria there are three Accident and Emergency Departments; Cumberland Infirmary in Carlisle, Furness General Hospital in Barrow-in-Furness and West Cumberland Hospital in Copeland. For the purposes of this report, data from Royal Lancaster Infirmary are also included owing to the large number of Cumbria residents who attend this ED.

INJURY GROUP DATA ITEMS

Each ED records data items as recommended by the College of Emergency Medicine (CEM), as displayed in table 5. Falls comprise the majority of injuries among older people but are not categorised as an injury group in any of the EDs relevant to this report; therefore falls are included with other accidents as 'other injuries'.

TABLE 5: Injury group data items collected by

Local Authority	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary
Assault	Y	Y	Y	Y
Other injury	Y	Y	Y	Y
Road traffic collision	Y	Y	Y	Y
Sports injury	Y	Y	Y	Y
Deliberate self-harm	Y	Y	Y	Y
Fall	N	N	N	N

EMERGENCY DEPARTMENT ATTENDEES

Between April 2011 and March 2014, a total of 36,849 ED injury attendances were recorded across Cumbria EDs, and Royal Lancaster Infirmary, by people aged 50 years and over (table 6). Between 2011/12 and 2013/14 there was a 52% increase in injury attendances by older people.

TABLE 6: Attendances to Cumbria EDs¹⁴ of people aged 50 years and over by financial year and month, April 2011 to March 2014

Month	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2011/12	910	868	823	958	901	878	809	812	881	779	762	835	10,216
2012/13	891	939	860	906	841	971	853	871	936	825	1,044	1,217	11,154
2013/14	1,224	1,236	1,252	1,552	1,377	1,294	1,196	1,229	1,380	1,331	1,172	1,236	15,479
Total	3,025	3,043	2,935	3,416	3,119	3,143	2,858	2,912	3,197	2,935	2,978	3,288	36,849

Table 7 displays injury attendances by Cumbria EDs and Royal Lancaster Infirmary by people aged 50 years and over. The highest number of attendances was to Cumberland Infirmary (19,490; 53%) and West Cumberland Hospital (11,301; 31%).

TABLE 7: Attendances to Cumbria EDs¹⁴ of people aged 50 years and over by ED, April 2011 to March 2014

ED	Attendances
Cumberland Infirmary	19,490
Furness General Hospital	4,779
Royal Lancaster Infirmary	1,279
West Cumberland Hospital	11,301
Total	36,849

Of the 36,849 injury attendances made by people aged 50 years and over, 33,820 (92%) were made by residents of Cumbria. The highest out of region attendances came from Northumberland (60), Lancaster (42), Cheshire East (25) and Sefton (23). Data presented throughout the remainder of this report will be for Cumbria residents only.

Table 8 displays attendances to EDs by LA areas; as expected, residents generally attended EDs to which they were geographically closest. Ninety-nine percent of Barrow-in-Furness residents attended Furness General Hospital, just under 100% of Carlisle residents attended Cumberland Infirmary and 94% of Copeland residents attended West Cumberland Hospital. For LAs without an ED: South Lakeland residents generally attended Furness General Hospital and Royal Lancaster Infirmary (47% and 51%); Allerdale residents generally attended Cumberland Infirmary and West Cumberland Hospital (37% and 63%); and, residents of Eden overwhelmingly attended Cumberland Infirmary (99%).

¹⁴ Including Cumbria residents attending Royal Lancaster Infirmary.

TABLE 8: Attendances to Cumbria EDs of people aged 50 years and over by Local Authority, April 2011 to March 2014

ED	Allerdale	Barrow-in-Furness	Carlisle	Copeland	Eden	South Lakeland	Total
Cumberland Infirmary	2,698	5	11,665	129	2,795	32	17,324
Furness General Hospital	***	3,032	***	281	6	1,127	4,453
Royal Lancaster Infirmary	<15	16	<10	6	24	1,213	1,279
West Cumberland Hospital	4,570	15	27	6,130	6	16	10,764
Total	7,283	3,071	11,701	6,546	2,831	2,388	33,820

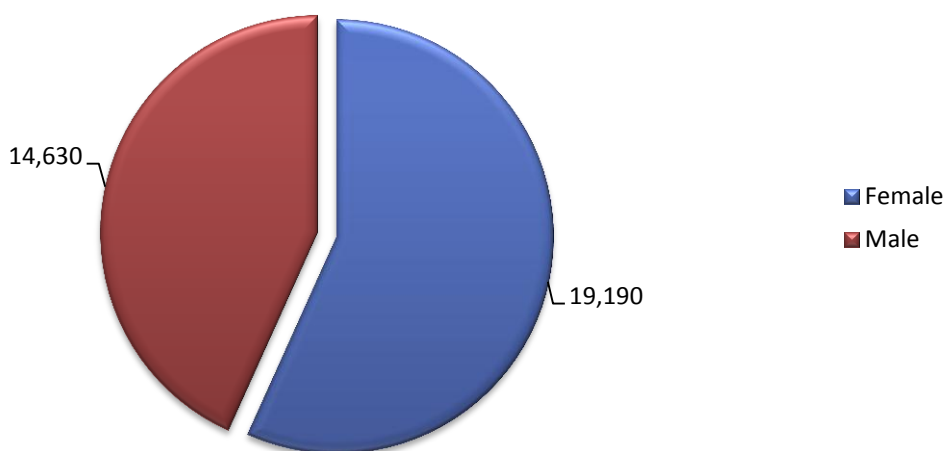
Table 9 shows the proportion of injury attendances made by people aged 50 years and over compared to population estimates for the same age range by LA. The highest number and rate of attendances (11,701; 27,118 per 100,000) was by residents of Carlisle; residents of Copeland and Allerdale were also above the average rate for Cumbria (22,173 and 17,268 compared to the average of 15,611 per 100,000 population). South Lakeland had the lowest number and rate of attendances (2,388; 4,758 per 100,000)¹⁵.

TABLE 9: Attendances and attendance rates per population to Cumbria EDs of people aged 50 years and over, April 2011 to March 2014

Local Authority	Number of Injury Attendances	Population of over 50s (mid-2013 estimates)	Rate of attendance per 100,000 people	Confidence Intervals 95%
Allerdale	7,283	42,176	17,268	16,874 to 17,669
Barrow-in-Furness	3,071	27,307	11,246	10,852 to 11,651
Carlisle	11,701	43,148	27,118	26,629 to 27,614
Copeland	6,546	29,522	22,173	21,639 to 22,717
Eden	2,831	24,289	11,656	11,230 to 12,093
South Lakeland	2,388	50,191	4,758	4,569 to 4,953
Total	33,820	216,633	15,611	15,446 to 15,779

As displayed in figure 1, just under three in every five (57%) injury attendances for people aged 50 years or older between April 2011 to March 2014 were made by females.

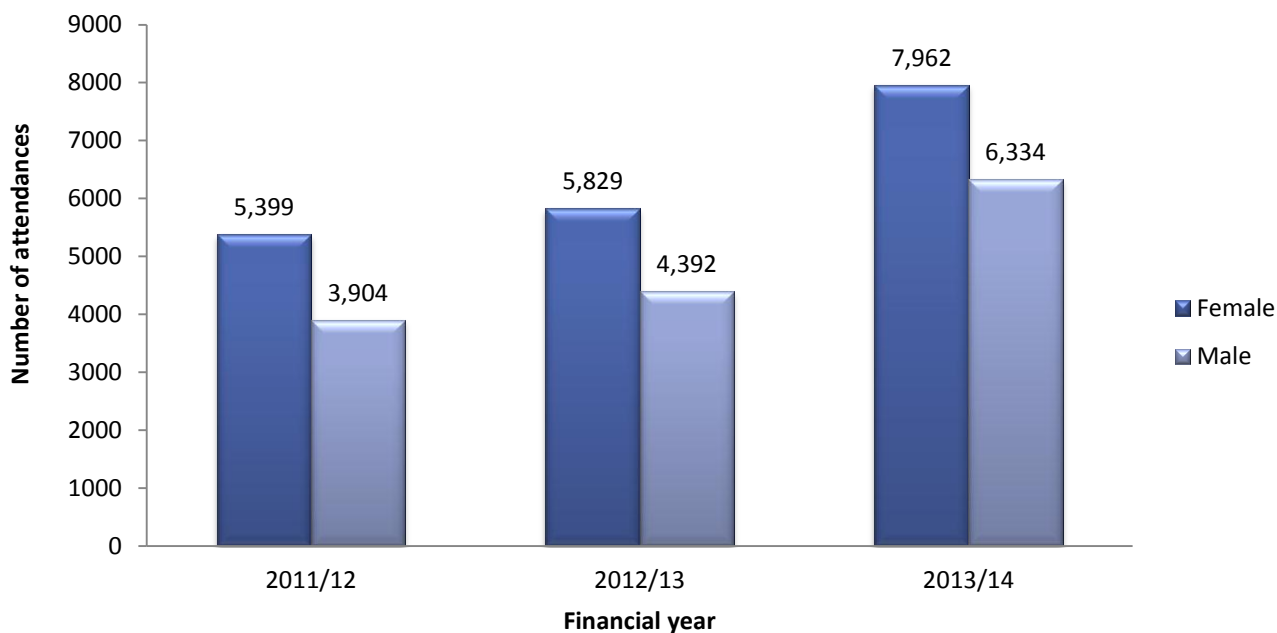
FIGURE 1: Attendances to Cumbria EDs of people aged 50 years and over by gender, April 2011 to March 2014



¹⁵ See appendix 1 for attendance rates by rank of deprivation score.

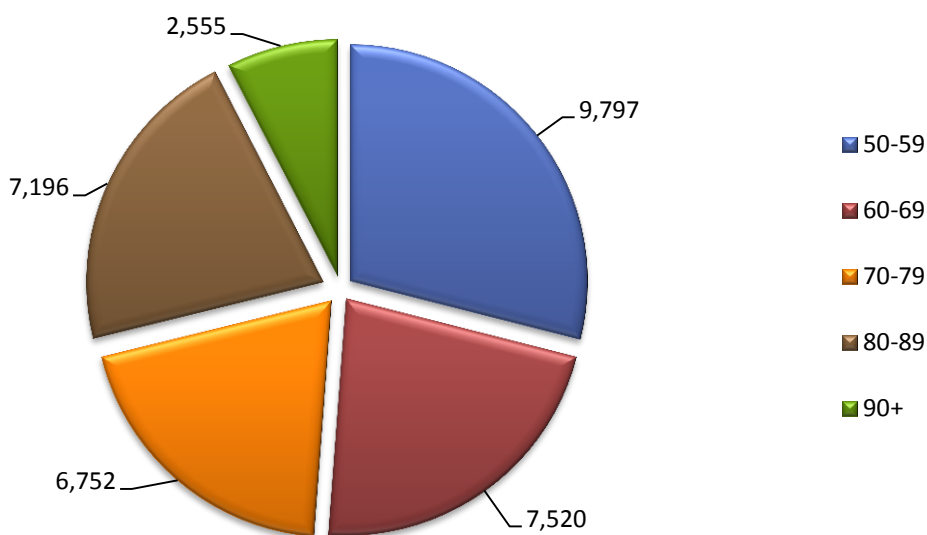
As displayed in figure 2, there were more female attendances than males (57% compared to 43%) of people aged 50 years or over between April 2011 and March 2014¹⁶. This was consistent across all three financial years; however the difference reduced slightly over this time period (58% in 2011/12, 57% in 2012/13 and 55% in 2013/14).

FIGURE 2: Attendances to Cumbria EDs of people aged 50 years and over by year and gender, April 2011 to March 2014



The largest proportion of injury attendances were by people aged 50 to 59 years (29%), followed by people aged 60 to 69 years (22%), 70 to 79 years (20%) and 80 to 89 years (21%); the fewest attendances were by people aged 90 years and older (8%; figure 3).

FIGURE 3: Attendances to Cumbria EDs of people aged 50 years and over by age group, April 2011 and March 2014



¹⁶ With the exception of people aged 50-59 years, as displayed in tables 10 and 11.

Table 10 displays injury attendances of people aged 50 years and over by gender, age group and ED. The distribution of age groups was similar across the EDs with the exception of Royal Lancaster Infirmary, where, compared to other EDs, attendances were comprised of a lower proportion of 50 to 59 year olds (257; 20%) and higher proportions of 80 to 89 year olds and people aged 90 years and over (359; 28% and 150; 12% respectively). There were more female than male attendances across all EDs overall, except among people aged 50-59, where there were more male than females attendances.

TABLE 10: Attendances to Cumbria EDs of people aged 50 years and over by ED, age group and gender, April 2011 to March 2014

Age group	50-59			60-69			70-79			80-89			90+			Total	
	Female	Male	%	Female	Male	%	Female	Male	%	Female	Male	%	Female	Male	%	Female	Male
Cumberland Infirmary	2,342	2,451	28	1,903	1,792	21	2,026	1,430	20	2,548	1,400	23	1,026	406	8	9,845	7,479
Furness General Hospital	664	700	31	537	530	24	499	436	21	496	300	18	221	70	7	2,417	2,036
Royal Lancaster Infirmary	120	137	20	141	130	21	138	104	19	233	126	28	110	40	12	742	537
West Cumberland Hospital	1,654	1,729	31	1,304	1,183	23	1,301	818	20	1,409	684	19	518	164	6	6,186	4,578
Total	4,780	5,017	29	3,885	3,635	22	3,964	2,788	20	4,686	2,510	21	1,875	680	8	19,190	14,630

Table 11 displays injury attendances of people aged 50 years and over by gender, age group and LA. There were some variations in ED attendances by age group across the LAs. For example, there were lower proportions from Eden and South Lakeland of attendees aged 50 to 59 years (611; 22% and 556; 23% respectively), and higher proportions of older age groups, e.g. attendees aged 90 years and over (300; 11% and 248; 10% respectively).

TABLE 11: Attendances to Cumbria EDs of people aged 50 years and over by Local Authority, age group and gender, April 2011 to March 2014

Age group	50-59			60-69			70-79			80-89			90+			Total	
	Female	Male	%	Female	Male	%	Female	Male	%	Female	Male	%	Female	Male	%	Female	Male
Allerdale	969	1,083	28	812	812	22	919	580	21	1,058	495	21	406	149	8	4,164	3,119
Barrow-in-Furness	473	511	32	361	370	24	340	311	21	325	199	17	136	45	6	1,635	1,436
Carlisle	1,707	1,747	30	1,305	1,207	21	1,372	896	19	1,674	896	22	645	252	8	6,703	4,998
Copeland	1,071	1,069	33	830	726	24	749	518	19	777	432	18	286	88	6	3,713	2,833
Eden	285	326	22	294	264	20	330	273	21	482	277	27	217	83	11	1,608	1,223
South Lakeland	275	281	23	283	256	23	254	210	19	370	211	24	185	63	10	1,367	1,021
Total	4,780	5,017	29	3,885	3,635	22	3,964	2,788	20	4,686	2,510	21	1,875	680	8	19,190	14,630

Figure 4a displays injury attendances of people aged 50 years and over to Cumbria EDs by Lower Super Output Area (LSOA). The LSOAs with the highest number of attendances were Copeland 002B (338) and Carlisle 013B (272), as displayed in table 12.

FIGURE 4a: Attendances to Cumbria EDs of Cumbria residents aged 50 years and over by LSOA of residence (overlaid by Local Authority boundaries), April 2011 to March 2014

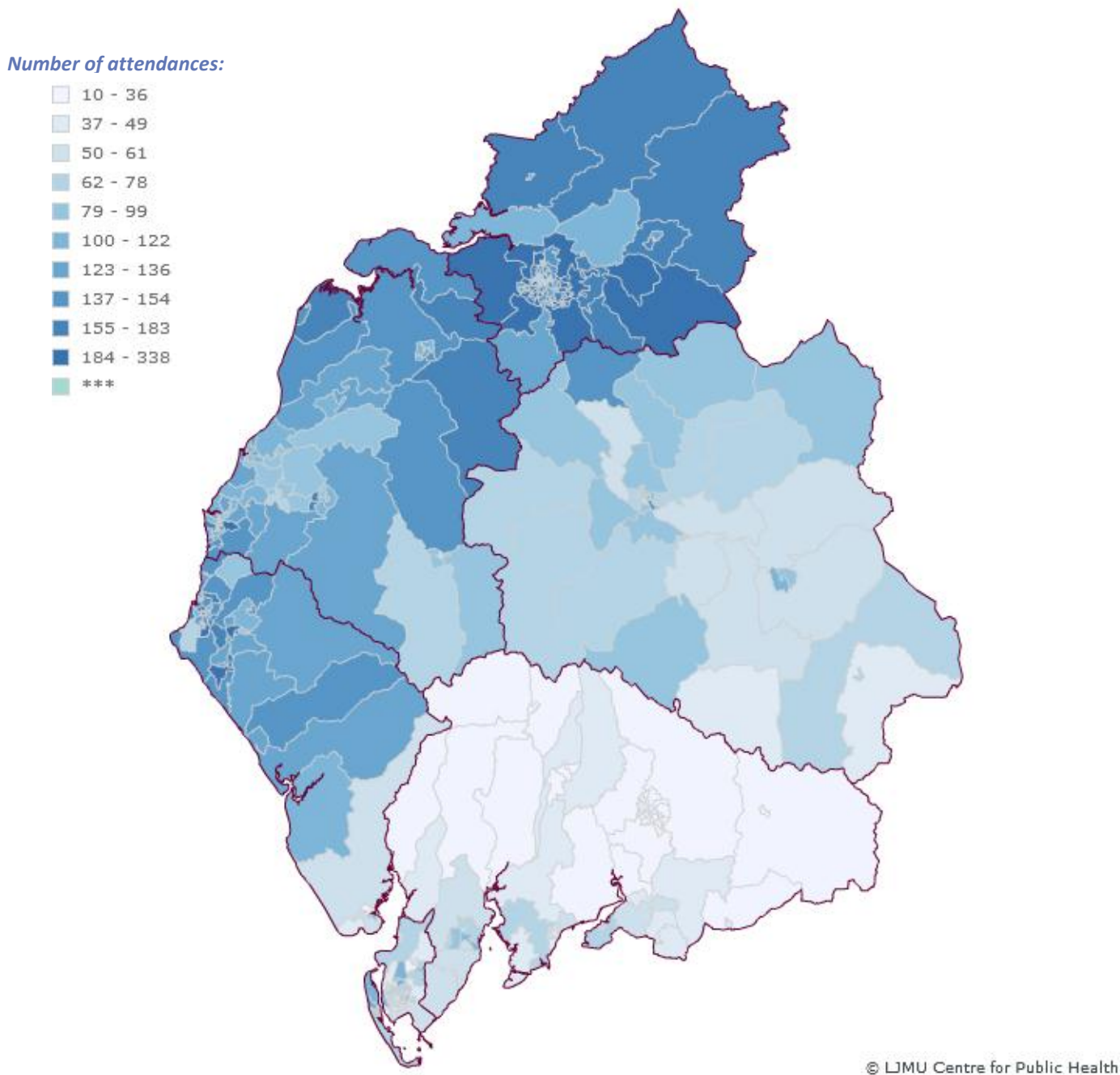


TABLE 12: Attendances to Cumbria EDs of people aged 50 years and over: top 5 LSOAs of residence, April 2011 to March 2014

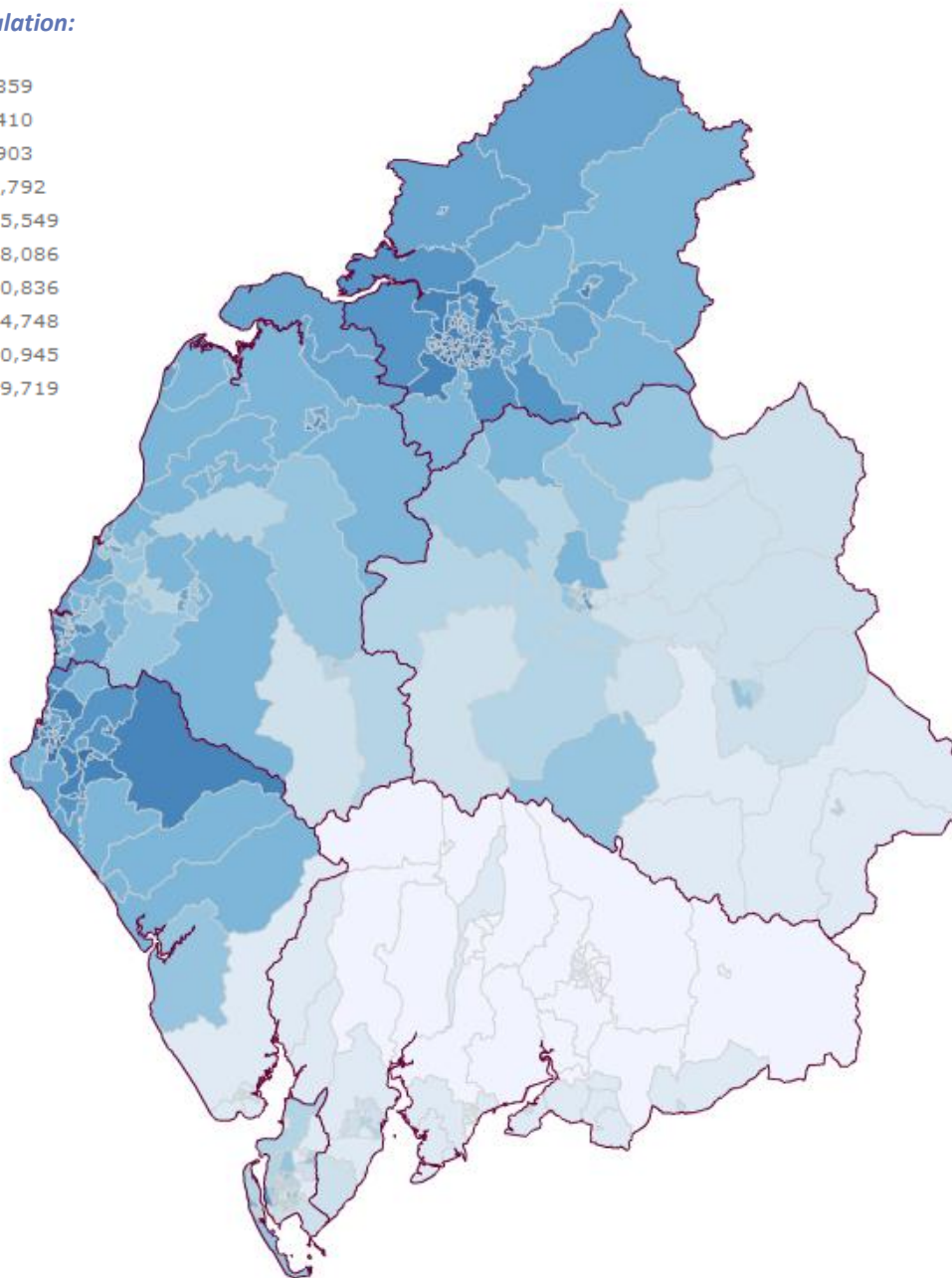
LSOA code	LSOA name	Number
E01019280	Copeland 002B	338
E01019213	Carlisle 013B	272
E01019218	Carlisle 008D	265
E01019231	Carlisle 009D	265
E01019296	Copeland 005E	256

Figure 4b displays the rates of ED attendances per 100,000 population¹⁷ of people aged 50 years and over by Lower Super Output Area (LSOA). The LSOAs with the highest rates of attendance were Carlisle 008D (49,719 attendances per 100,000 population) and Carlisle 008A (43,527 attendances per 100,000 population).

FIGURE 4b: Rates of attendance to Cumbria EDs of Cumbria residents aged 50 years and over by LSOA of residence (overlaid by Local Authority boundaries), April 2011 to March 2014

Rate of attendance per 100,000 population:

- 1,883 - 4,359
- 4,360 - 7,410
- 7,411 - 9,903
- 9,904 - 12,792
- 12,793 - 15,549
- 15,550 - 18,086
- 18,087 - 20,836
- 20,837 - 24,748
- 24,749 - 30,945
- 30,946 - 49,719

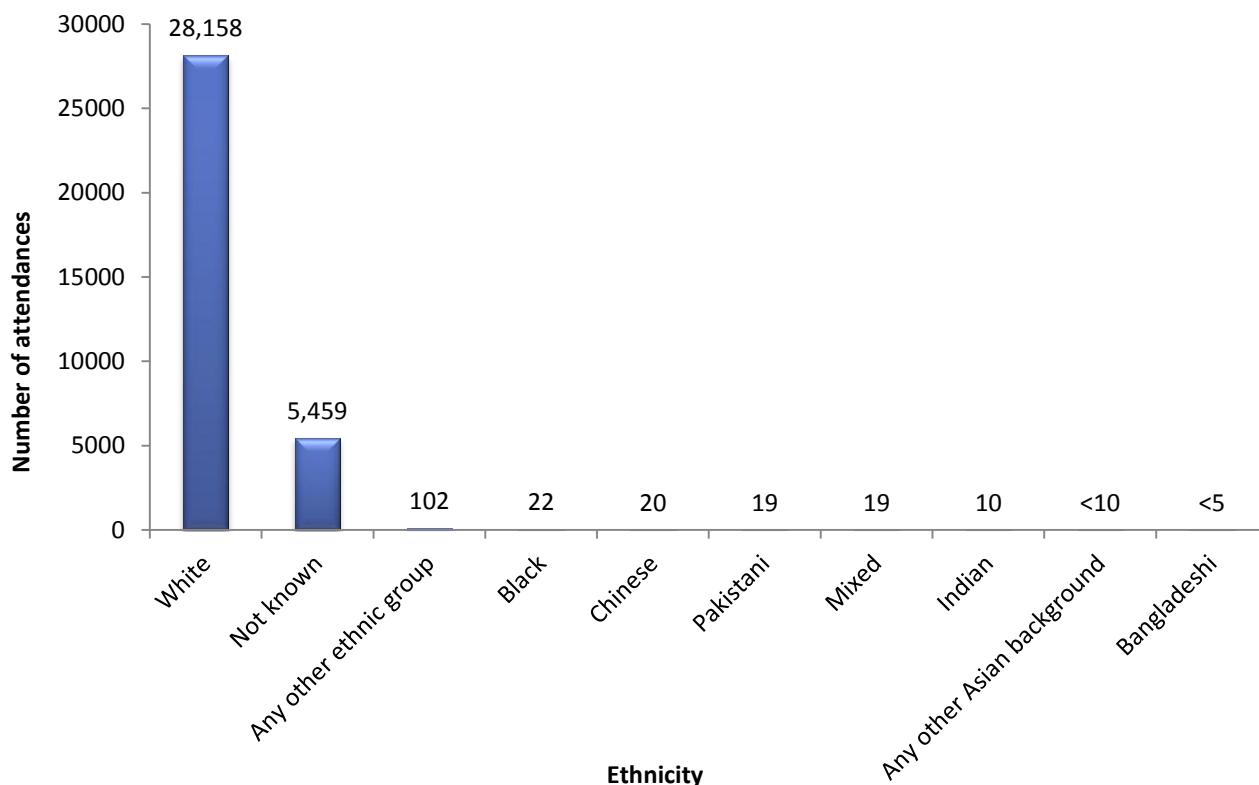


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¹⁷ Using mid-2013 ONS population estimates.

Figure 5 shows attendances of people aged 50 years or over by ethnicity; the majority of attendees were white (28,158; 83%). There was also a relatively high proportion of people for whom ethnicity was not recorded (5,459; 16%).

FIGURE 5: Attendances to Cumbria EDs of people aged 50 years and over by ethnicity, April 2011 to March 2014



WHAT IS THE LEVEL OF NEED AND GAPS?

Injuries among older people place a disproportionate burden on EDs and healthcare services. Consideration of peak attendance times at EDs and high frequency ambulance call outs provides an indication of when the risk of injury is highest and when the need for prevention or intervention is greatest. The following tables and charts indicate the level of risk and need by displaying the frequencies of ED attendances and ambulance call outs by month, day of the week and time of day. Information relating to disposal method is also presented to indicate the variation in outcomes by age group.

DATE AND TIME OF EMERGENCY DEPARTMENT ATTENDANCES

Figure 6 displays the average daily attendances to Cumbria EDs by month and year. Injury attendances for people age 50 years and over was generally consistent throughout each financial year; however, there was a substantial jump in injury attendances (25 to 37 attendances per day) between January and March 2013. This increase was maintained throughout the following financial year with an average daily rate of 39 attendances per day, compared to daily rates of 28 in 2012/13 and 25 in 2011/12. The month with the highest number of injury attendances was July 2013 with 45 average attendances per day.

FIGURE 6: Average daily attendances to Cumbria EDs of people aged 50 years and over by month and year, April 2011 to March 2014

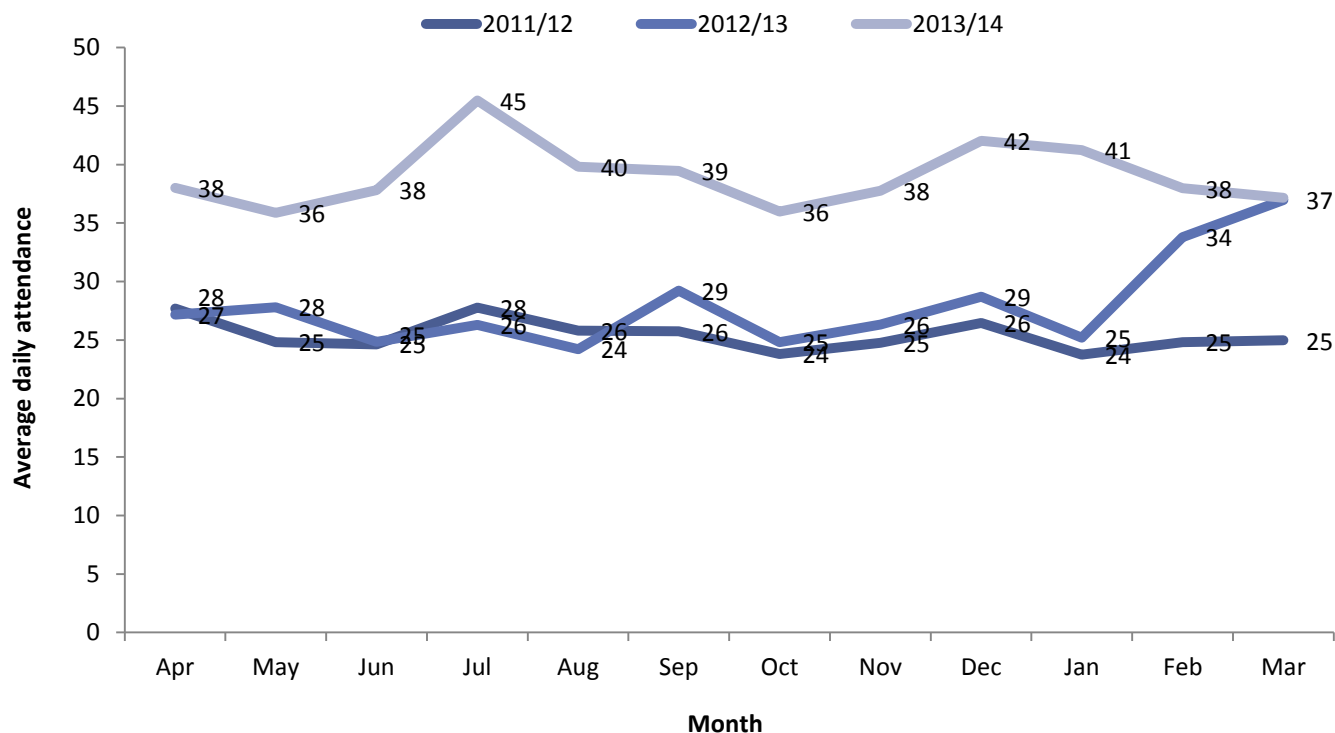


Figure 7 displays total ED attendances and ambulance call outs by day of the week. In terms of ED data, Mondays (5,799) had the highest number of injury attendances for people aged 50 years and over and Sundays (4,286) had the lowest. In terms of ambulance data, the highest number of call outs for people aged 50 years and over occurred on Saturdays (3,203), followed by Fridays (3,108).

FIGURE 7: Total attendances to Cumbria EDs and ambulance call outs for people aged 50 years and over by day of the week, April 2011 to March 2014

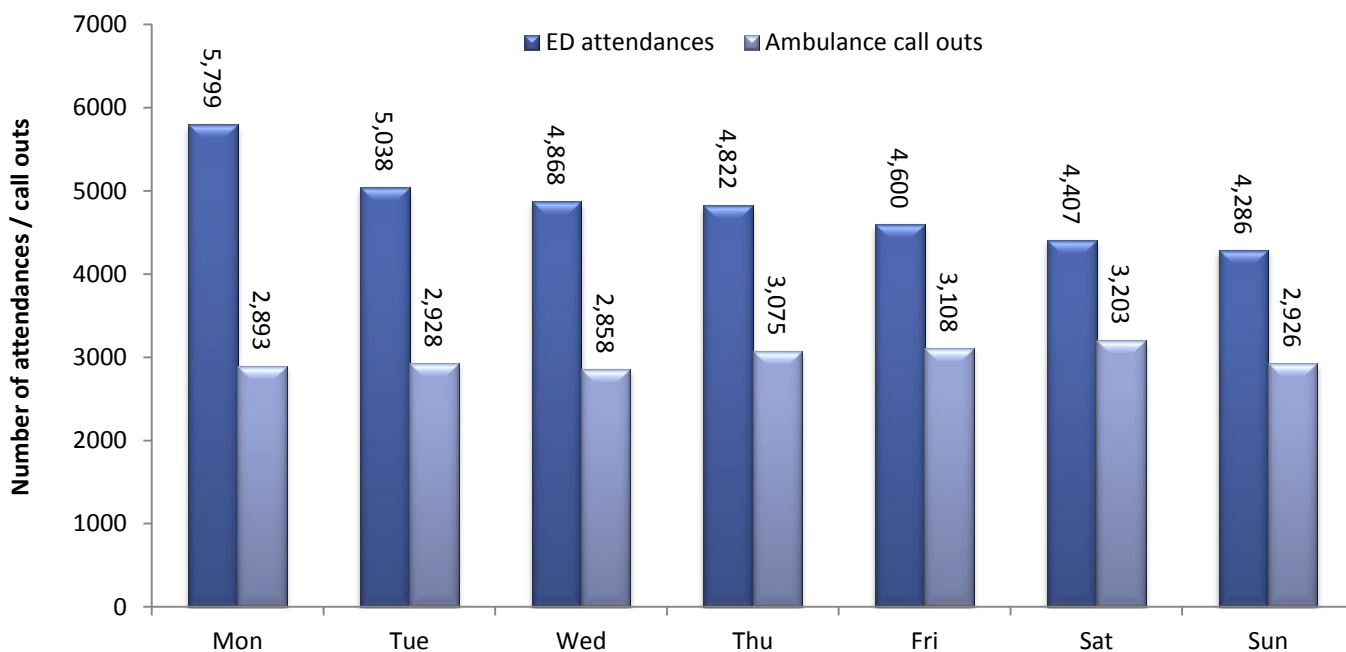
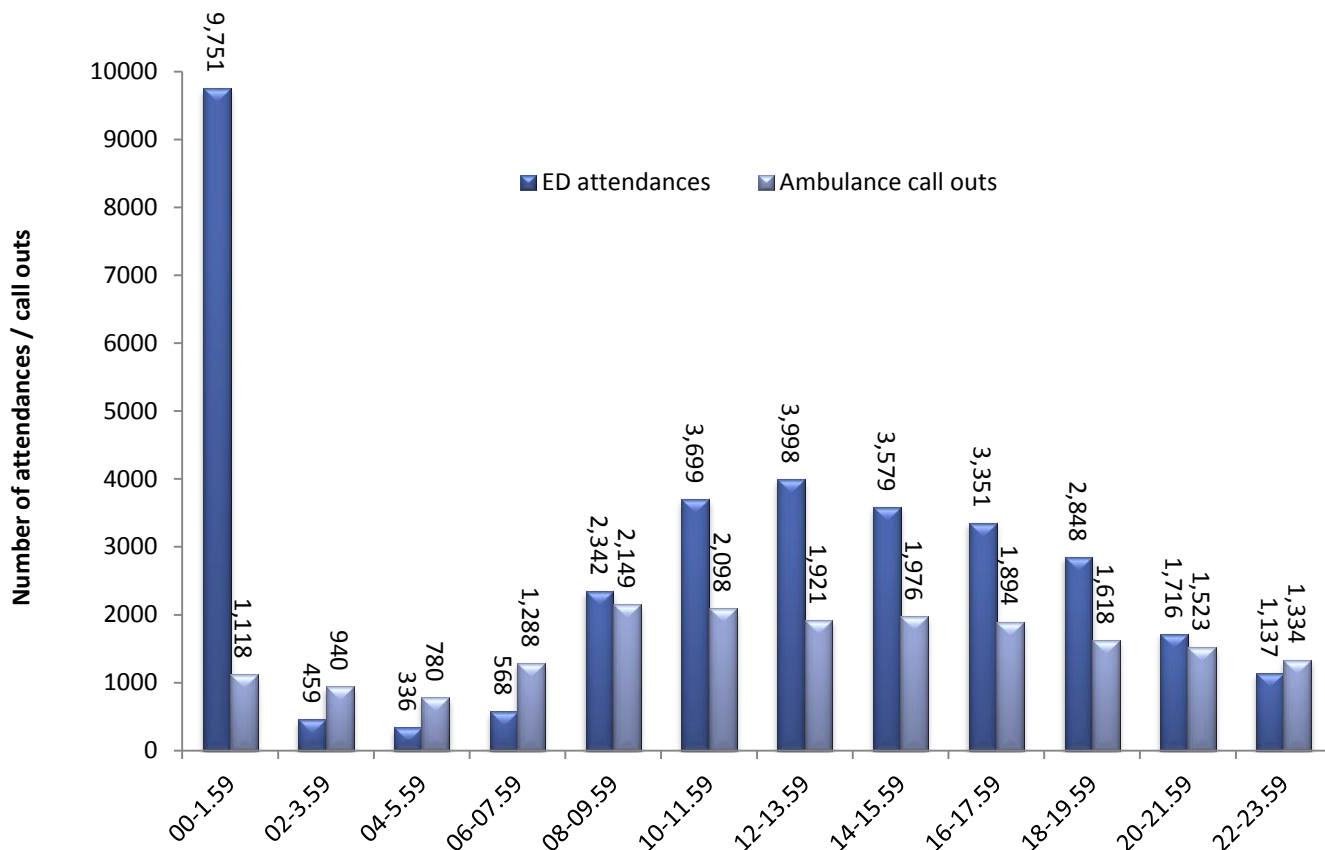


Figure 8 displays total ED attendances and ambulance call outs by time of day. The most frequent injury attendances for people aged 50 years and over occurred between the hours of 00:00 and 01:59 (9,751). This was substantially higher than any other time group¹⁸. The most frequent ambulance call outs occurred between the hours of 08:00 and 17:59, where each two hour time group accounted for over 1,800 call outs.

FIGURE 8: Total attendances to Cumbria EDs and ambulance call outs for people aged 50 years and over by time group, April 2011 and March 2014



ANALYSIS OF EMERGENCY DEPARTMENT DATA

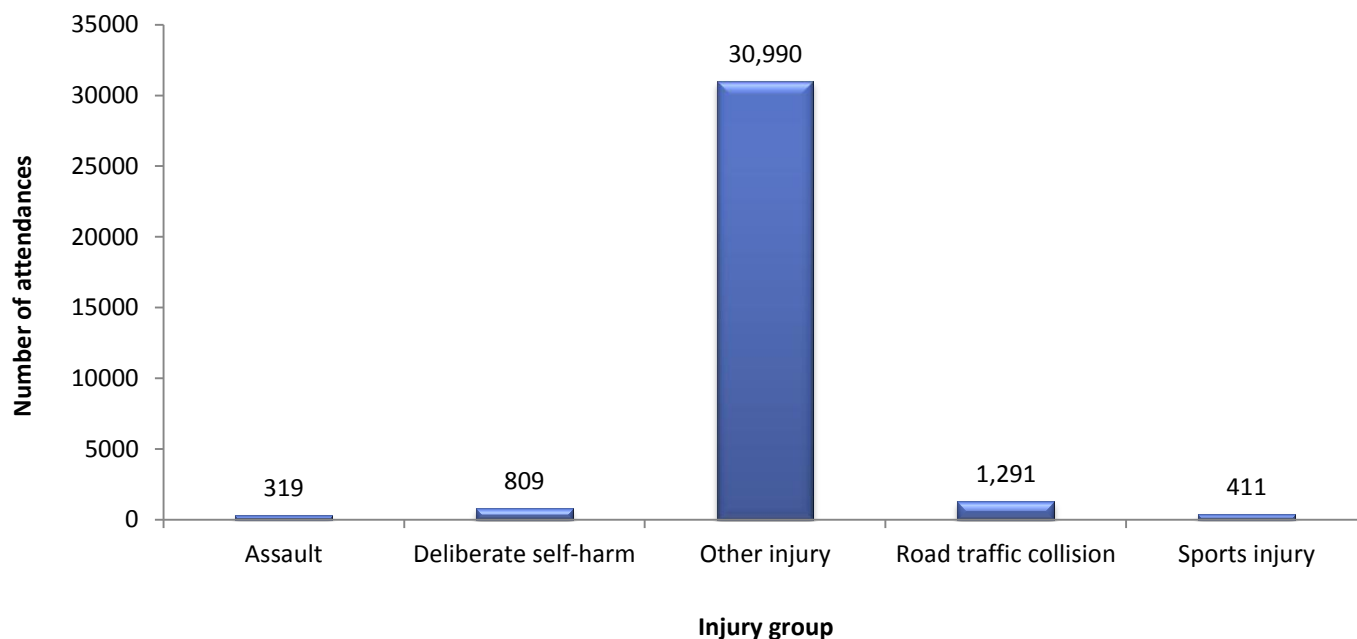
This following section analyses ED data in more detail, including a breakdown of injury group, incident location, source of referral, arrival mode and disposal method for people aged 50 years and over in Cumbria.

INJURY GROUP

The majority (92%) of injuries were recorded as ‘other injury’, 4% were road traffic collisions, 2% were recorded as deliberate self-harm, and 1% each was recorded as sports injuries, and assaults (figure 9). The majority of assault attendances were males (71%), and just under half (47%) of attendances for road traffic collisions were by people aged between 50 and 59 years.

¹⁸ See appendix 2 for further analyses of attendance time.

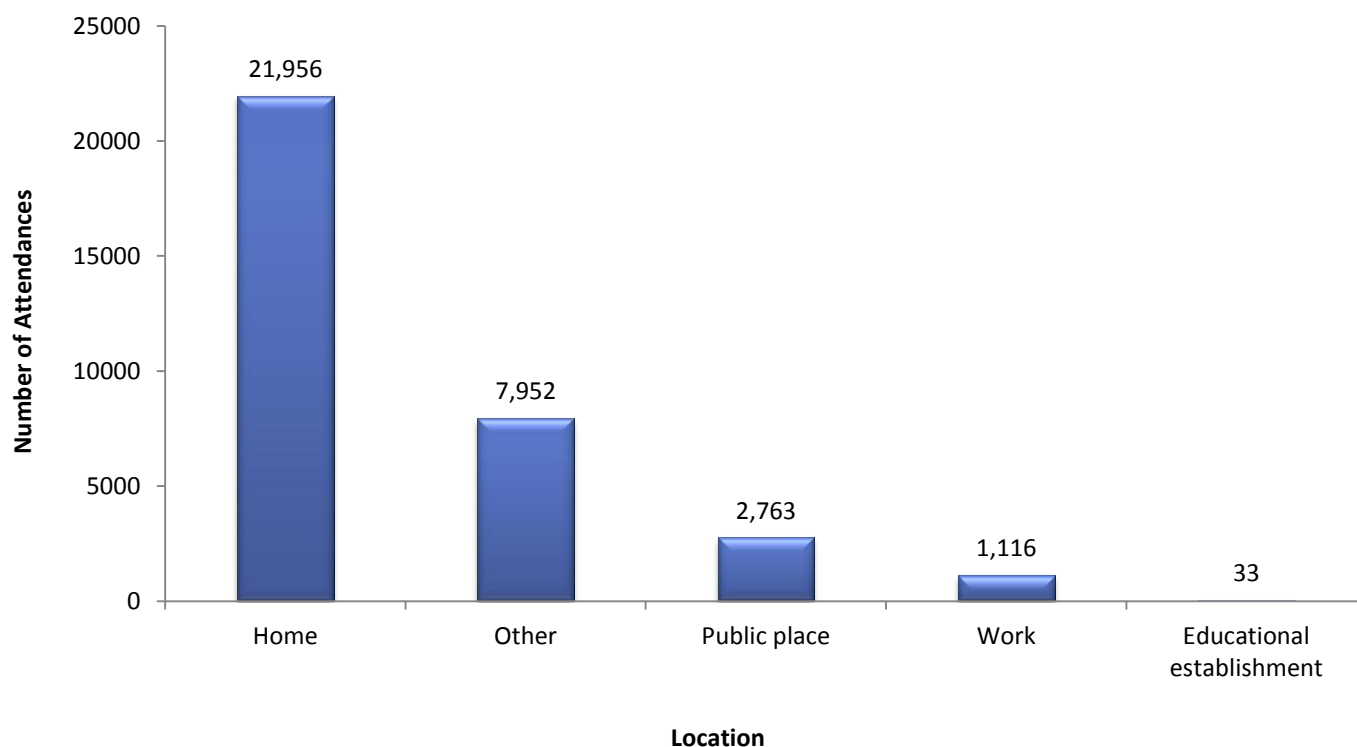
FIGURE 9: Attendances to Cumbria EDs of people aged 50 years and over by injury group, April 2011 to March 2014



INCIDENT LOCATION

Figure 10 displays the incident location for injury attendances by Cumbria residents aged 50 years or over. Sixty-five percent of injuries occurred in the home (21,956); there was an increase in the proportion of injuries which occurred in the home as attendees got older (50% of 50-59 year olds, 58% of 60-69 year olds, 70% of 70-79 year olds, 80% of 80-89 year olds, and 88% of 90+ year olds).

FIGURE 10: Attendances to Cumbria EDs of people aged 50 years and over by location of injury, April 2011 to March 2014



Case Study 1: Violence in older people

TIIG data distinguishes between intentional and unintentional injuries. Within the Cumbria data, unintentional injuries are classified as road traffic collisions, sports injuries, firework injuries and other injuries. Assaults and deliberate self-harm are classified as intentional injuries; however, a proportion of intentional injuries may be recorded as 'other injuries'.

Between April 2011 and March 2014, there were 319 assault attendances to a Cumbria EDs (including Royal Lancaster Infirmary) by Cumbria residents aged 50 years and over. Of these, 71% (228) were male, 74% (236) were aged between 50 and 59 years of age, and 26% were aged 60 or over (84). Over half of attendances (162; 51%) were made by males aged between 50 and 59 years. The highest proportion of attendances was from Carlisle LA (147; 46%) and the largest proportions attended Cumberland Infirmary (167; 52%) and West Cumberland hospital (128; 40%). As enhanced information was not collected, which provides information regarding the details of an assault, it was not possible to ascertain:

- 1) Who the perpetrator was;
- 2) Where the violence occurred; and,
- 3) How the violence occurred (e.g. whether alcohol was consumed and what weapon type was used).

Therefore, it was not possible to distinguish whether an attendance was a potentially isolated assault, domestic violence or elder abuse from e.g. a family member or carer. The Crown Prosecution Service in their Crimes against Older People Prosecution policy categorise crimes against older people into distinct groupings and report that there are a complex range of crimes that older people may experience. These include:

- 1) Abuse or neglect of older people where a relationship or expectation of trust occurs, e.g. family member;
- 2) Crimes linked to an older person's potential vulnerability, e.g. mugging of older people.

Enhanced data collection, including details of the perpetrator, relationship to the perpetrator, whether the attendee had been assaulted by the perpetrator before, the type of assault and the location of assault, would help to build a detailed profile of the nature of the violence which occurred.

As an example from an ED in the North West of England of how enhanced data such can be used: Between April 2013 and March 2014, 9% of assault attendees were aged 50 years or over and of these 67% were aged between 50 and 59 years, and 68% were male. In 54% of cases the perpetrator was somebody other than a stranger (e.g. friend, partner or family member). In these cases, 19% had been assaulted by the same person before and 36% of incidents took place in the home.

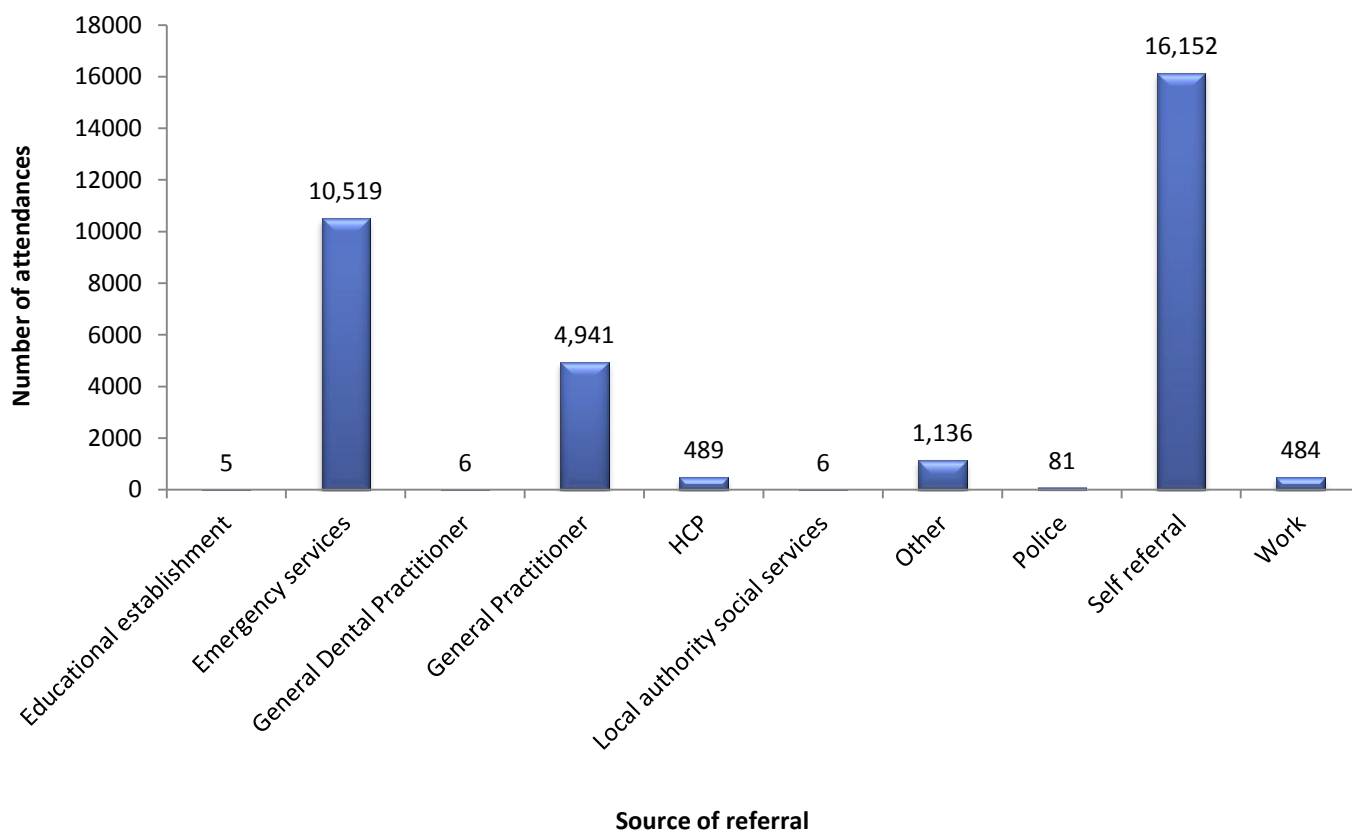
This information allows TIIG to build up a profile of the nature of the assault and potentially able to identify whether an attendance was an isolated incident or was part of sustained elder abuse.

Source: The Crown Prosecution Service: Crime against Older People – CPH Prosecution Policy. Accessed 02/04/2015 from http://www.cps.gov.uk/publications/prosecution/older_people.html

SOURCE OF REFERRAL

Figure 11 displays referral sources to Cumbria EDs for people aged 50 years and over; the highest proportion (48%) of attendees were self-referred. The proportion of attendees who self-referred decreased with increasing age group (from 64% of 50-59 year olds, to 17% of people aged 90 years and over). Referrals by the emergency services increased with increasing age groups (from 18% of 50-59 year olds, to 61% of people aged 90 years and over).

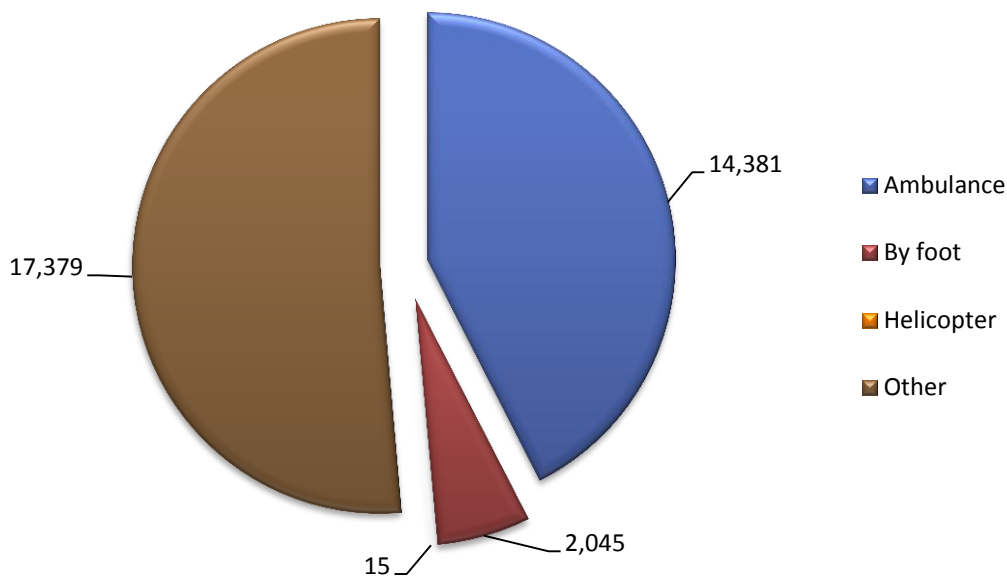
FIGURE 11: Attendances to Cumbria EDs of people aged 50 years and over by source of referral, April 2011 to March 2014



ARRIVAL MODE

Figure 12 displays arrival mode to Cumbria EDs by people age 50 years or older. The majority (51%) of patients arrived by 'other' arrival modes; four in ten attendees arrived by ambulance (14,381; 43%).

FIGURE 12: Attendances to Cumbria EDs of people aged 50 years and over by arrival mode, April 2011 to March 2014



PATIENT DISPOSAL

Figure 13 shows the disposal method of people aged 50 years and over from Cumbria EDs. Close to four in ten (39%) attendees were discharged while 32% were admitted into hospital.

FIGURE 13: Attendances to Cumbria EDs of people aged 50 years and over by method of disposal, April 2011 to March 2014¹⁹

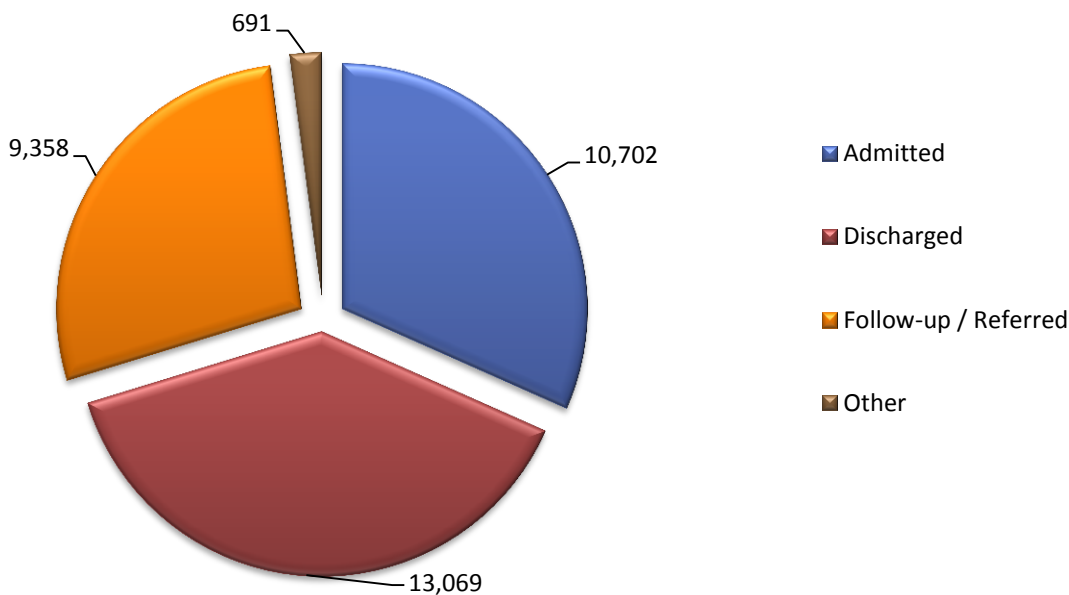


Table 13 displays patient disposal method by age group, which can be used to indicate the variation in outcomes for people of different ages and the impact injuries among older people have on healthcare services. In total, just under two-fifths (13,069; 39%) of people aged 50 years and over were discharged without any follow-up treatment, just under one-third (10,702; 32%)

¹⁹ 'Other' disposal method in this figure include: died in department; left department before being treated; left department having refused treatment; and, other disposal.

were admitted to hospital, and 28% (9,358) were referred for follow up treatment. Among 80 to 89 year olds and people aged 90 years or over, 48% and 54% respectively were admitted to hospital while 29% and 28% were discharged with no follow up treatment required. A reverse of this trend is found among younger age groups; for example among 50 to 59 year olds, just under half (49%) were discharged with no follow up treatment required and 17% were admitted to hospital²⁰.

TABLE 13: Attendances to Cumbria EDs of people aged 50 years and over by patient disposal and year, April 2011 to March 2014

Patient disposal	50-59		60-69		70-79		80-89		90+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Admitted	1,674	17	1,752	23	2,439	36	3,452	48	1,385	54	10,702	32
Discharged	4,796	49	3,119	42	2,337	35	2,112	29	705	28	13,069	39
Follow-up/referred	3,008	31	2,497	33	1,872	28	1,537	21	444	17	9,358	28
Other	319	3	152	2	104	2	95	1	21	1	691	2
Total	9,797		7,520		6,752		7,196		2,555		33,820	100

Case Study 2: Deliberate self-harm and older people

On average one person a week dies in Cumbria as a result of suicide. Self-harm is often classed as a risk factor for suicide and the older the victim of self-harm, the higher the risk of subsequent suicide (Dennis and Owens, 2012). A review of 78 suicides across Cumbria found that 42% of individuals had a history of self-harm (Brown 2014). Whilst self-harm and suicide are less common in older age groups, Cumbria has a higher rate of suicide compared to England for those aged 70 years and over (Brown 2014). In addition to self-harm, other risk factors for suicide include marital change, such as getting married, being widowed or getting divorced; this risk is particularly elevated in older people due to potentially high levels of social isolation and low levels of social support (Dennis and Owens, 2012). The same research reported that there is a need for specialist assessment and care for older people who have self-harmed and that attendances at EDs are likely to be the best way of indicating those at the highest risk of suicide.

Using TIIG data, between April 2011 and March 2014, there were 809 deliberate self-harm attendances to a Cumbria hospital (including Royal Lancaster Infirmary) made by Cumbria residents aged 50 and over. There were slightly more male (423; 52%) than female (386; 48%) attendances and 73% were aged between 50 and 59 years of age. Only 8% (66) attendances were by those aged 70 years and over. The largest number of attendances came from Carlisle LA (316; 39%) and most attended either Cumberland Infirmary (435; 52%) or West Cumberland hospital (266; 32%). The majority of deliberate self-harm attendances occurred while the patient was at home (677; 84%).

The data collected by Cumbria EDs and shared with TIIG can be used to identify older people who have self-harmed and may be at risk of suicide. It is difficult to determine from the ED data whether these attendances did receive specialist care following their attendance but over half (424; 52%) were admitted into hospital and 187 (23%) were referred to another health care provider; only 16% (128) were discharged without further treatment. Using ED data it is possible to begin identifying those individuals at elevated risk of deliberate self-harm and such information can be used to target specialist services more effectively.

Sources: Brown, R. (2014). *Avoidable Mortality in Cumbria: A Case File Review of 78 Suicides*. Accessed 02/04/2015 from:

<http://www.cph.org.uk/wp-content/uploads/2014/10/Avoidable-Mortality-in-Cumbria-A-Case-File-Review-of-78-Suicides-REBrown.pdf>; and,

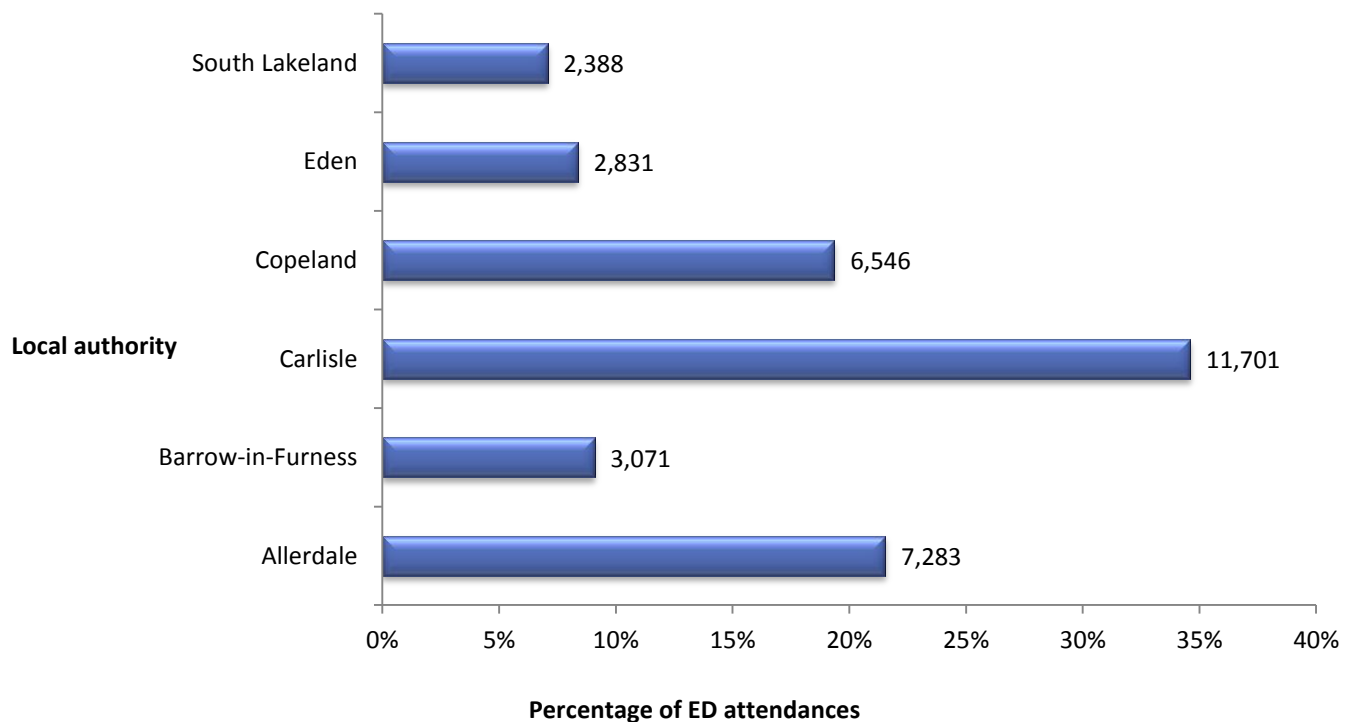
Dennis, M.S., & Owens, D.W. (2012). *Self-harm in older people: a clear need for specialist assessment and care. The British Journal of Psychiatry, 200, 356-58.*

²⁰ See appendix 3 for further analyses of patient disposal.

AREA OF RESIDENCY

Figure 14 presents attendances of people aged 50 years or over to Cumbria EDs by area of residency. Over a third (35%) of attendees were resident in Carlisle, 22% were resident in Allerdale, and 19% were resident in Copeland. The remaining three LAs each accounted for less than 10% of the total attendees.

FIGURE 14: Attendances to Cumbria EDs of people aged 50 years and over by area of residency, April 2011 to March 2014



ANALYSIS OF NORTH WEST AMBULANCE SERVICE DATA

AMBULANCE CALL OUTS

Between April 2011 and March 2014 there was a total of 18,636 ambulance call outs for people aged 50 years or over in Cumbria. Figure 15 displays NWS data by year; similar to ED attendance data, NWS data also show an increase in call outs for this age range between 2011/12 (5,473) and 2013/14 (6,643).

FIGURE 15: Ambulance call-outs for people aged 50 years and over by year, April 2011 to March 2014

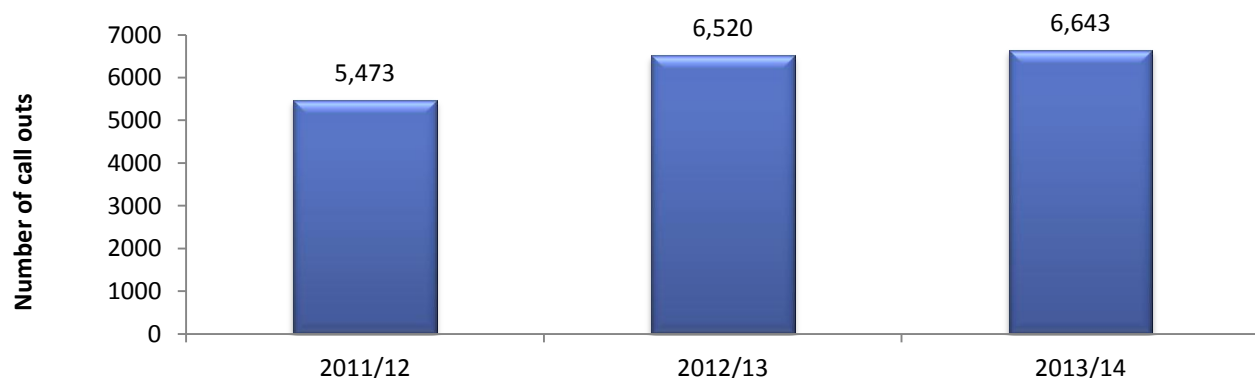


Table 14 shows ambulance call outs by LA. Residents of South Lakeland comprised the highest proportion (26%) of ambulance call outs, followed by Carlisle (19%) and Allerdale (17%).

TABLE 14: Ambulance call outs for people aged 50 years and over by Local Authority, April 2011 to March 2014

Local Authority	Number	%
South Lakeland	4,903	26%
Carlisle	3,456	19%
Allerdale	3,134	17%
Barrow-in-Furness	3,045	16%
Copeland	2,350	13%
Eden	1,748	10%
Total	18,636	100%

TRANSFER DESCRIPTION

The highest proportion (41%) of ambulance call outs either did not require treatment or were not taken to a Cumbria ED for treatment. Of call outs which resulted in an ED attendance (10,923 of 18,636 call outs); Cumberland Infirmary received the most patients (37%), while West Cumberland received the least (23%; table 15).

TABLE 15: Ambulance call outs for people aged 50 years and over by ED attended, April 2011 to March 2014

ED transferred to	Number	%
Cumberland Infirmary	4,015	37
Furness General Hospital	2,953	27
West Cumberland Hospital	2,553	23
Royal Lancaster Infirmary	1,402	13
Total	10,923	100

Table 16 displays ambulance call outs by transfer description and age group. The age range which comprised the most call outs were people aged 80 to 89 years (34%). In terms of age groups, Cumberland Infirmary received the highest proportion of 50 to 59 year olds (19%) and, along with West Cumberland, the highest proportion of 60 to 69 year olds (15%). West Cumberland received the highest proportion of 70 to 79 year olds (22%), and Royal Lancaster received the highest proportion of 80 to 89 year olds and people aged 90 years or over (36% and 17% respectively).

Table 16: Ambulance call outs in Cumbria of people aged 50 years and over by transfer ED and age group, April 2011 to March 2014

Hospital		50-59	60-69	70-79	80-89	90+	Total	Percent
Cumberland Infirmary	N	769	620	802	1,299	525	4,005	21
	%	19	15	20	32	13	100	
Furness General Hospital	N	485	392	598	971	507	2,953	16
	%	16	13	20	33	17	100	
West Cumberland Hospital	N	468	391	559	820	315	2,553	14
	%	18	15	22	32	12	100	
Royal Lancaster Infirmary	N	204	188	272	498	237	1,399	8
	%	15	13	19	36	17	100	
Other	N	804	1,013	1,652	2,838	1,405	7,712	41
	%	10	13	21	37	18	100	
Total	N	2,731	2,606	3,884	6,426	2,989	18,636	100
	%	15	14	21	34	16	100	

Figure 16 displays ambulance call outs for people aged 50 years and over; as shown falls accounted for the vast majority of call outs (16,430 of 18,623).

Figure 16: Ambulance call outs in Cumbria for people aged 50 years by injury group, April 2011 to March 2014

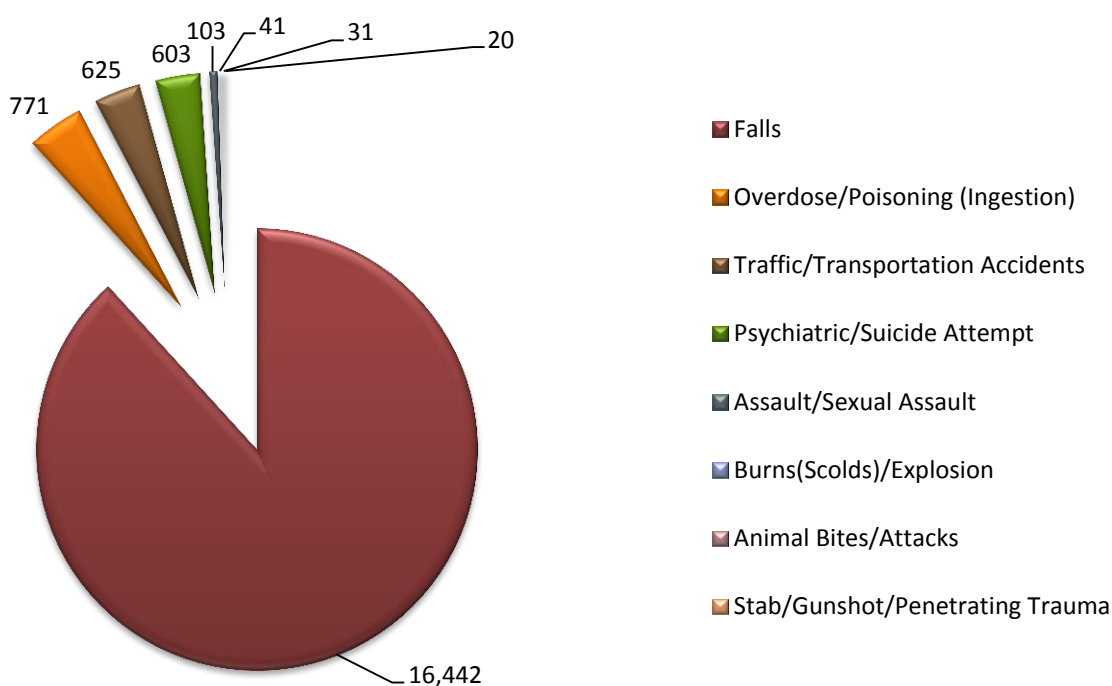


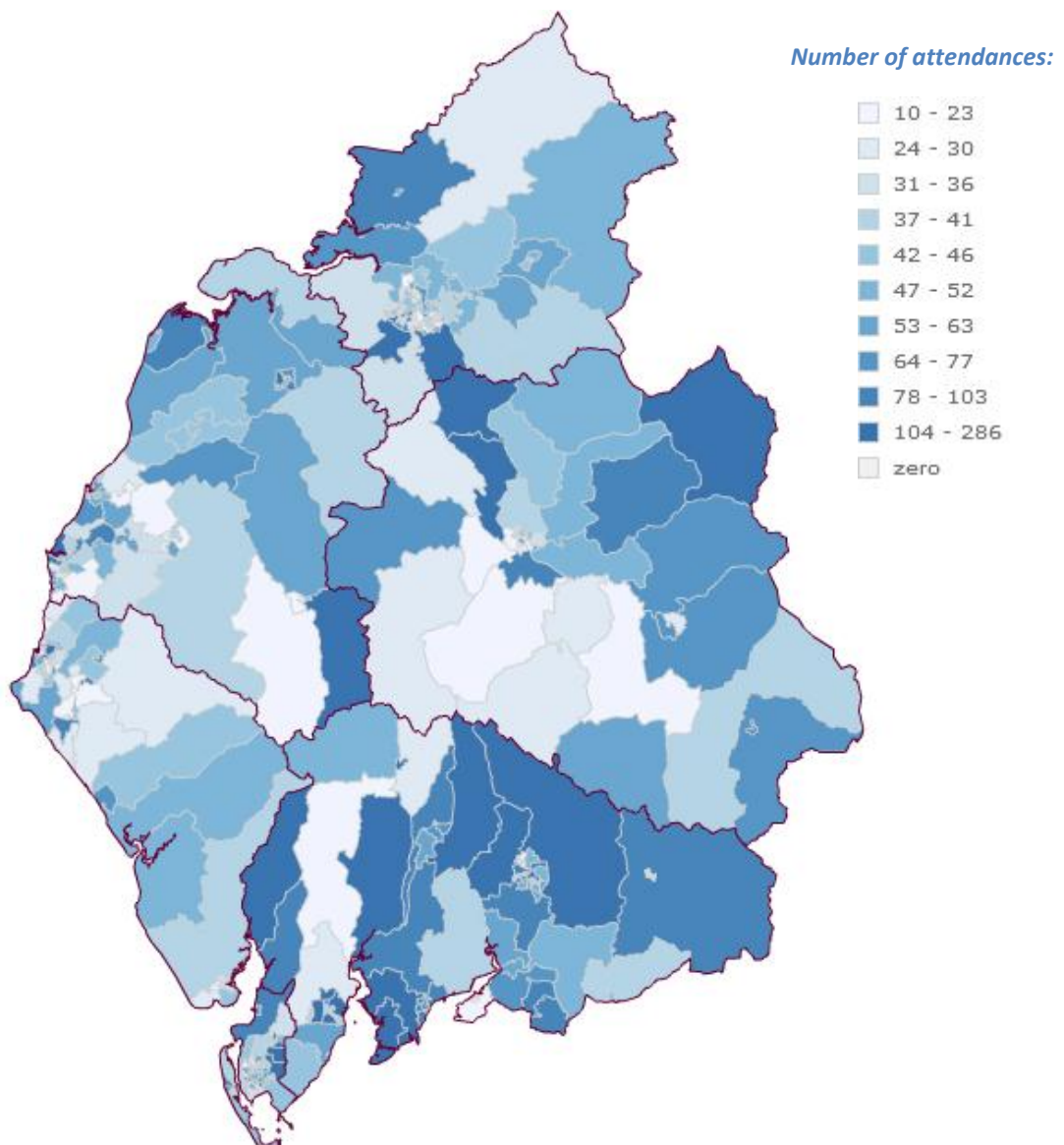
Table 17 displays ambulance call outs by injury group and age group. Falls accounted for 88% of all call outs for people aged 50 years and over and accounted for an increasing proportion of call outs for increasing age groups (from 56% of call outs for 50 to 59 year olds, to 99% of call outs for people aged 90 years and over).

Table 17: Ambulance call outs in Cumbria for people aged 50 years and over by injury and age group, April 2011 to March 2014

Injury group	50-59		60-69		70-79		80-89		90+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Falls	1,537	56	2,137	82	3,587	92	6,223	97	2,958	99	16,442	88
Overdose/ poisoning	497	18	140	5	74	2	49	1	11	0	771	4
Road Traffic accidents	235	9	<170	6	141	4	77	1	***	0	625	3
Psychiatric/suicide attempt	360	13	109	4	64	2	62	1	8	0	603	3
Assault/sexual assault	71	3	20	1	8	0	***	0	***	0	103	1
Burns/scolds	9	0	13	0	5	0	9	0	5	0	41	0
Animal bites/attacks	10	0	11	0	***	0	<10	0	***	0	31	0
Stab/gunshot	12	0	<10	0	***	0	0	0	0	0	20	0
Total	2,731		2,606		3,884		6,426		2,989		18,636	

Figure 17 displays ambulance call out location for people aged 50 years and over by LSOA, overlaid by LA boundaries.

Figure 17: Ambulance call outs in Cumbria of people aged 50 years and over by LSOA, April 2011 to March 2014



The final sections of this report presents attendance data for people aged 50 years or over for each LA in Cumbria. Data are broken down by age and gender; injury group and injury type of admitted patients; disposal method and, attendances by LSOA²¹.

ALLERDALE

Residents of Allerdale LA comprised 22% of total ED attendances; of which, 57% were female and 43% were male. In terms of age, 28% of attendees were aged 50 to 59 years, while 8% of attendees were aged 90 years and over (table 18).

TABLE 18: Total ED attendances by Allerdale residents aged 50 years and over by gender and age group, April 2011 to March 2014

Age group	Female		Male		Total	
	N	%	N	%	N	%
50-59	969	13	1,083	15	2,052	28
60-69	812	11	812	11	1,624	22
70-79	919	13	580	8	1,499	21
80-89	1,058	15	495	7	1,553	21
90+	406	6	149	2	555	8
Total	4,164	57	3,119	43	7,283	100

Of the total ED attendances by Allerdale residents, 97% were for unintentional injuries and 3% were for intentional injuries. Of intentional injuries, 3% of total attendances were for deliberate self-harm and 1% were for assaults²². Of unintentional injuries, 92% of attendances were classed as other injury (the vast majority of which were likely to be falls), 4% were for road traffic collisions and 1% were for sports injuries (table 19).

TABLE 19: Total ED attendances by Allerdale residents aged 50 years and over by injury group, April 2011 to March 2014

Injury group		2011/12	2012/13	2013/14	Total	Percent	Percent
Intentional injuries	Assault	18	22	29	69	1%	3%
	Deliberate self-harm	51	69	63	183	3%	
	Other injury	1,855	2,153	2,687	6,695	92%	
Unintentional injuries	Road traffic collision	99	102	93	294	4%	97%
	Sport injury	17	12	13	42	1%	
Total injuries		2,040	2,358	2,885	7,283	100%	100%

In terms of disposal method, 40% of Allerdale residents were discharged with no follow up treatment and 32% were admitted into hospital (table 20). Attendees from older age groups were more likely to be admitted into hospital than those from younger age groups (15% among 50 to 59 year olds, compared to 57% of people aged 90 years and over). Of admitted patients from Allerdale LA, the majority presented with unintentional injuries (2,207; 95%); of which, 98% (2,163) were categorised as ‘other injury’. Three-fifths (60%) of admitted patients were females, of which 37% (519) were aged between 80 and 89 years.

²¹ A full list of the number, crude rate and confidence intervals for attendances from each LSOA is available upon request.

²² Due to rounding, percentages do not always equal the total for combined groups.

TABLE 20: Total ED attendances by Allerdale residents aged 50 years and over by disposal method and age group, April 2011 to March 2014

Age group	50-59	60-69	70-79	80-89	90+	Total	Percent
Admitted	316	379	536	780	314	2,325	32
Discharged	1,084	727	524	462	132	2,929	40
Follow-up / Referred	606	490	424	<305	<110	1,930	27
Other²³	46	28	15	<10	***	99	1
Total	2,052	1,624	1,499	1,553	555	7,283	100

Table 21 displays the five LSOAs in Allerdale which accounted for the most injury attendances to Cumbria EDs, and figure 18 displays injury attendances by LSOA for Allerdale residents aged 50 years and over.

TABLE 21: Top five Allerdale LSOAs: Injury attendances of residents aged 50 years and over by ED, April 2011 to March 2014

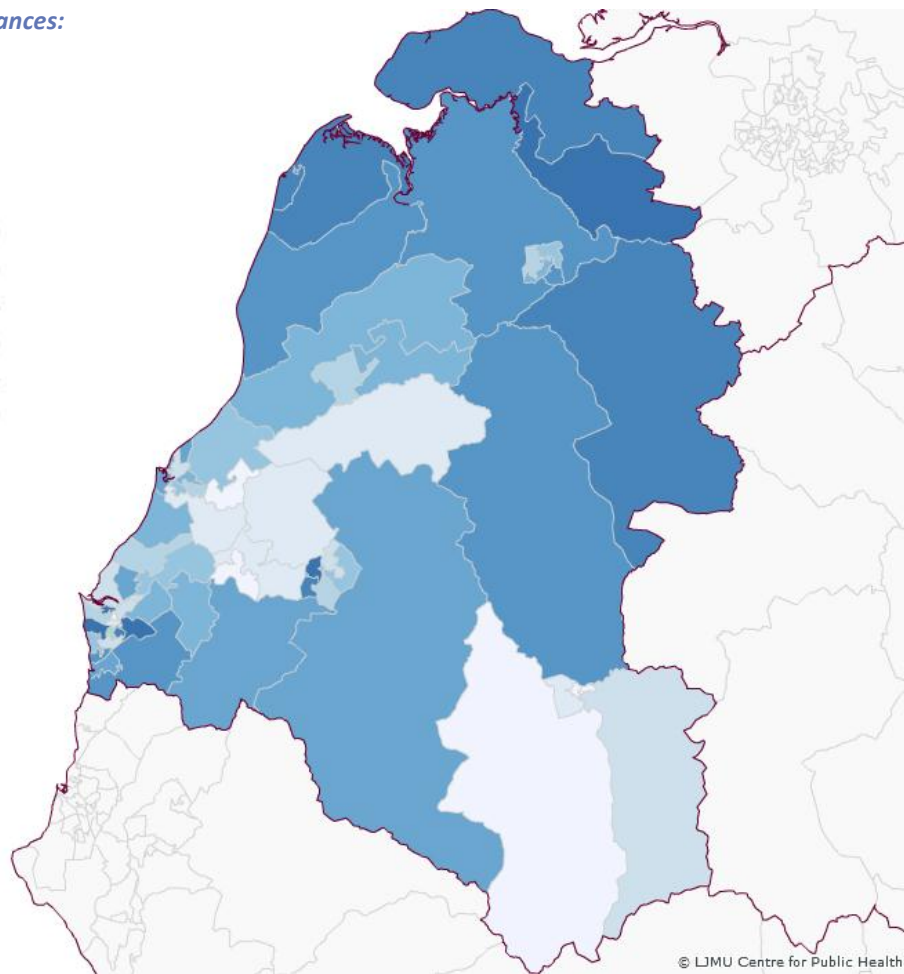
LSOA code	LSOA name	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary	Total
E01019119	Allerdale 010E	13	0	0	187	200
E01019113	Allerdale 009C	5	0	0	172	177
E01019121	Allerdale 009E	9	0	0	166	175
E01019088	Allerdale 006D	<20	0	***	156	172
E01019130	Allerdale 002C	165	0	0	0	165

²³ 'Other' disposal method in the following tables include: died in department; left department before being treated; left department having refused treatment; and, other.

FIGURE 18: Total ED attendances by Allerdale residents aged 50 years and over by LSOA of residence, April 2011 to March 2014

Number of attendances:

- 56 - 80
- 81 - 95
- 96 - 103
- 104 - 111
- 112 - 120
- 121 - 130
- 131 - 136
- 137 - 148
- 149 - 164
- 165 - 200
- ***



BARROW-IN-FURNESS

Residents of Barrow-in-Furness LA comprised 9% of total ED attendances; of which, 53% were female and 47% were male. In terms of age, 32% of attendees were aged 50 to 59 years, while 6% of attendees were aged 90 years and over (table 22).

TABLE 22: Total ED attendances by Barrow-in-Furness residents aged 50 years and over by gender and age group, April 2011 to March 2014

Age group	Female		Male		Total	
	N	%	N	%	N	%
50-59	473	15	511	17	984	32
60-69	361	12	370	12	731	24
70-79	340	11	311	10	651	21
80-89	325	11	199	6	524	17
90+	136	4	45	1	181	6
Total	1,635	53	1,436	47	3,071	100

Of the total ED attendances by Barrow-in-Furness residents, 97% were for unintentional injuries and 3% were for intentional injuries. Of intentional injuries, 3% of attendances were for deliberate self-harm and less than 1% was for assaults. Of unintentional injuries, 85% of attendances were classed as other injury (a substantial proportion of which were likely to be falls), 8% were for road traffic collisions and 4% were for sports injuries (table 23).

TABLE 23: Total ED attendances by Barrow-in-Furness residents by injury group, April 2011 to March 2014

Injury group		2011/12	2012/13	2013/14	Total	Percent	Percent
Intentional injuries	Assault	15	0	0	15	0%	3%
	Deliberate self-harm	22	30	41	93	3%	
	Other injury	623	574	1414	2,611	85%	
Unintentional injuries	Road traffic collision	75	80	84	239	8%	97%
	Sport injury	75	29	9	113	4%	
Total injuries		810	713	1,548	3,071	100%	100%

In terms of disposal method, 29% of Barrow-in-Furness residents were discharged with no follow up treatment and 27% were admitted to hospital (table 24). Attendees from older age groups were more likely to be admitted to hospital than those from younger age groups (33% among 70 to 79 year olds, compared to 40% of 80 to 89 year olds). Of admitted patients from Barrow-in-Furness LA, the majority presented with unintentional injuries (759; 93%), of which, 92% (699) were categorised as 'other injury'. Of admitted patients for unintentional injuries, 55% (419) were females, of which 34% (134) were aged between 80 and 89 years.

TABLE 24: Total ED attendances by Barrow-in-Furness residents aged 50 years and over by disposal method and age group, April 2011 to March 2014

Age group	50-59	60-69	70-79	80-89	90+	Total	Percent
Admitted	167	141	214	211	83	816	27
Discharged	343	237	167	<110	<50	894	29
Follow-up / Referred	447	337	256	199	56	1,295	42
Other ²⁴	27	16	14	<10	***	66	2
Total	984	731	651	524	181	3,071	100

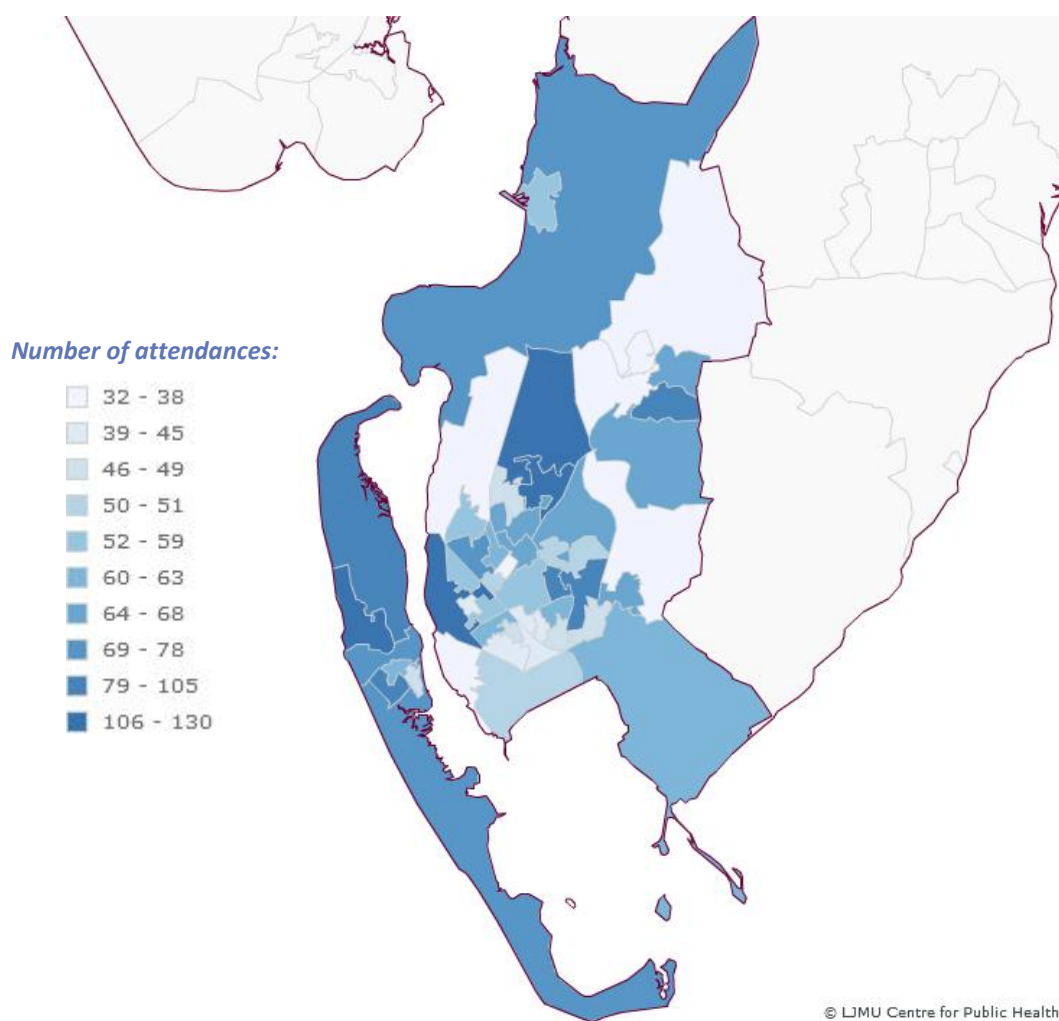
Table 25 displays the five LSOAs in Barrow-in-Furness which accounted for the most injury attendances to Cumbria EDs, and figure 19 displays injury attendances by LSOA for Barrow-in-Furness residents aged 50 years and over.

²⁴ 'Other' disposal method in the following tables include: died in department; left department before being treated; left department having refused treatment; and, other.

TABLE 25: Top five Barrow-in-Furness LSOAs: Injury attendances of residents aged 50 years and over by ED, April 2011 to March 2014

LSOA code	LSOA name	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary	Total
E01033160	Barrow-in-Furness 009F	0	130	0	0	130
E01019155	Barrow-in-Furness 003D	0	122	0	0	122
E01019156	Barrow-in-Furness 004A	***	<121	***	0	121
E01019154	Barrow-in-Furness 003C	0	108	0	0	108
E01019180	Barrow-in-Furness 009A	0	105	0	0	105

FIGURE 19: Total ED attendances by Barrow-in-Furness residents aged 50 years and over by LSOA of residence, April 2011 to March 2014



CARLISLE

Residents of Carlisle LA comprised 35% of total ED attendances; of which, 57% were female and 43% were male. In terms of age, 30% of attendees were aged 50 to 59 years, while 7% of attendees were aged 90 years and over (table 26).

TABLE 26: Total ED attendances by Carlisle residents aged 50 years and over by gender and age group, April 2011 to March 2014

Age group	Female		Male		Total	
	N	%	N	%	N	%
50-59	1,707	15	1,747	15	3,454	30
60-69	1,305	11	1,207	10	2,512	21
70-79	1,372	12	896	8	2,268	19
80-89	1,674	14	896	8	2,570	22
90+	645	6	252	2	897	8
Total	6,703	57	4,998	43	11,701	100

Of the total ED attendances by Carlisle residents, 96% were for unintentional injuries and 4% were for intentional injuries. Of intentional injuries, 3% of total attendances were for deliberate self-harm and 1% were for assaults. Of unintentional injuries, 93% of attendances were classed as other injury (the vast majority of which were likely to be falls), 2% were for road traffic collisions and 1% were for sports injuries (table 27).

TABLE 27: Total ED attendances by Carlisle residents by injury group, April 2011 to March 2014

Injury group		2011/12	2012/13	2013/14	Total	Percent	Percent
Intentional injuries	Assault	48	53	46	147	1%	4%
	Deliberate self-harm	79	102	135	316	3%	
	Other injury	2,871	3,370	4,674	10,915	93%	
Unintentional injuries	Road traffic collision	84	80	81	245	2%	96%
	Sport injury	23	19	36	78	1%	
Total injuries		3,105	3,624	4,972	11,701	100%	100%

In terms of disposal method, 40% of Carlisle residents were discharged with no follow up treatment and 31% were admitted to hospital (table 28). Attendees from older age groups were more likely to be admitted to hospital than those from younger age groups (36% among 70 to 79 year olds, compared to 47% of 80 to 89 year olds). Of admitted patients from Carlisle LA, the majority presented with unintentional injuries (3,498; 96%), of which 99% (3,460) were categorised as 'other injury'.

TABLE 28: Total ED attendances by Carlisle residents aged 50 years and over by disposal method and age group, April 2011 to March 2014

Age group	50-59	60-69	70-79	80-89	90+	Total	Percent
Admitted	605	587	807	1,199	454	3,652	31
Discharged	1,761	1,050	831	787	283	4,712	40
Follow-up / Referred	923	816	584	533	151	3,007	26
Other²⁵	165	59	46	51	9	330	3
Total	3,454	2,512	2,268	2570	897	11,701	100

Table 29 displays the five LSOAs in Carlisle which accounted for the most injury attendances to Cumbria EDs, and figure 20 displays injury attendances by LSOA for Carlisle residents aged 50 years and over.

TABLE 29: Top five Carlisle LSOAs: Injury attendances of residents aged 50 years and over by ED, April 2011 to March 2014

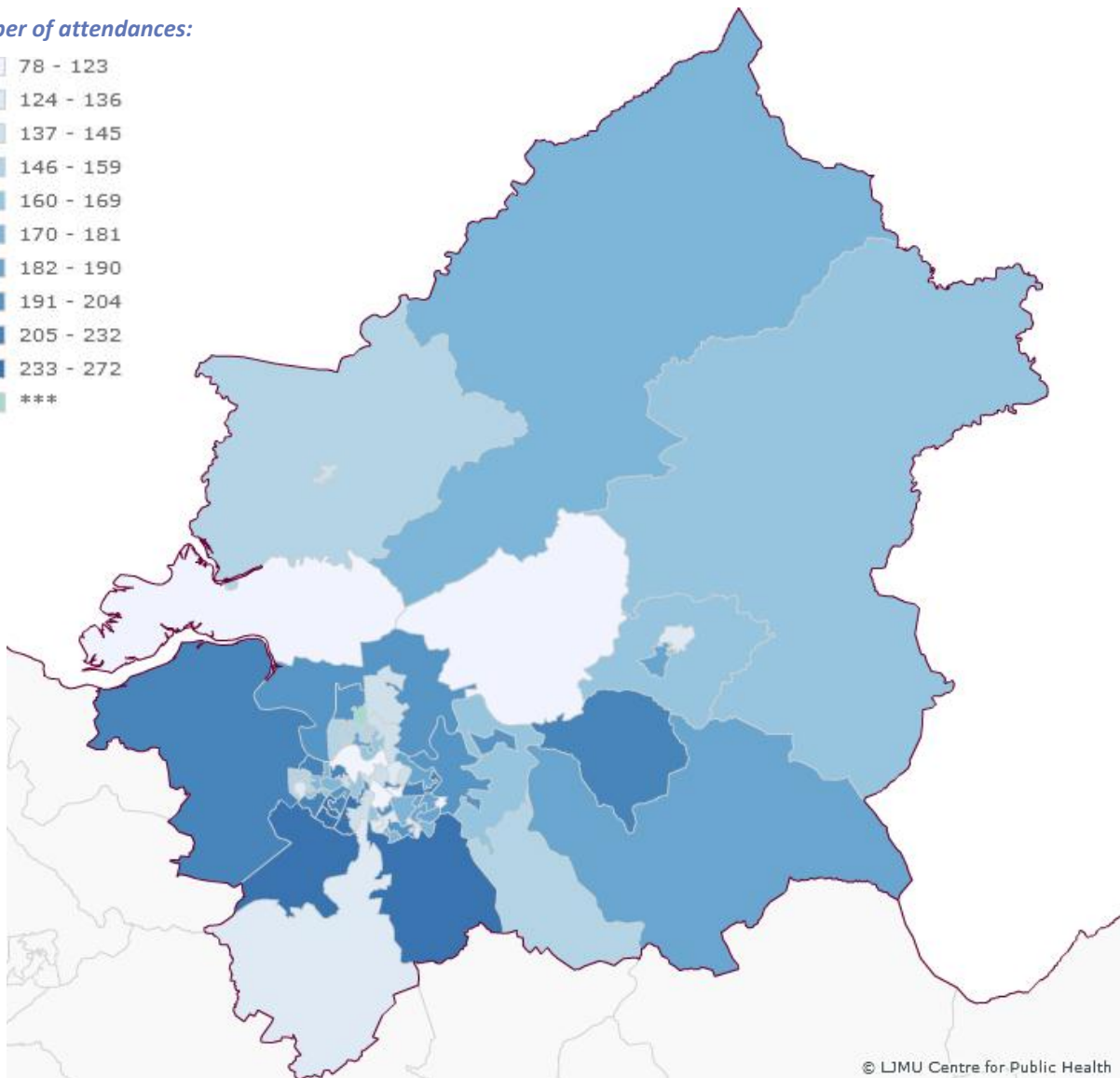
LSOA code	LSOA name	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary	Total
E01019213	Carlisle 013B	<272	0	***	0	272
E01019218	Carlisle 008D	265	0	0	0	265
E01019231	Carlisle 009D	265	0	0	0	265
E01019214	Carlisle 013C	<250	0	0	***	250
E01019195	Carlisle 005B	<245	0	0	***	240

²⁵ 'Other' disposal method in the following tables include: died in department; left department before being treated; left department having refused treatment; and, other.

FIGURE 20: Total ED attendances by Carlisle residents aged 50 years and over by LSOA of residence, April 2011 to March 2014

Number of attendances:

- 78 - 123
- 124 - 136
- 137 - 145
- 146 - 159
- 160 - 169
- 170 - 181
- 182 - 190
- 191 - 204
- 205 - 232
- 233 - 272
- ***



COPELAND

Residents of Copeland LA comprised 19% of total ED attendances; of which, 57% were female and 43% were male. In terms of age, 33% of attendees were aged 50 to 59 years, while 6% of attendees were aged 90 years and over (table 30).

TABLE 30: Total ED attendances by Copeland residents aged 50 years and over by gender and age group, April 2011 to March 2014

Age group	Female		Male		Total	
	N	%	N	%	N	%
50-59	1,071	16	1,069	16	2,140	33
60-69	830	13	726	11	1,556	24
70-79	749	11	518	8	1,267	19
80-89	777	12	432	7	1,209	18
90+	286	4	88	1	374	6
Total	3,713	57	2,833	43	6,546	100

Of the total ED attendances by Copeland residents, 97% were for unintentional injuries and 3% were for intentional injuries. Of intentional injuries, 2% of attendances were for deliberate self-harm and 1% were for assaults. Of unintentional injuries, 92% of attendances were classed as other injury (the vast majority of which were likely to be falls), 4% were for road traffic collisions and 1% were for sports injuries (table 31).

TABLE 31: Total ED attendances by Copeland residents by injury group, April 2011 to March 2014

Injury group		2011/12	2012/13	2013/14	Total	Percent	Percent
Intentional injuries	Assault	30	22	21	73	1%	3%
	Deliberate self-harm	50	35	44	129	2%	
	Other injury	1,837	1,906	2,257	6,000	92%	
Unintentional injuries	Road traffic collision	93	91	88	272	4%	97%
	Sport injury	29	22	21	72	1%	
Total injuries		2,039	2,076	2,431	6,546	100%	100%

In terms of disposal method, 50% of Copeland residents were discharged with no follow up treatment and 21% were admitted to hospital (table 32). Attendees from younger age groups were more likely to be discharged with no further treatment compared to older age groups (58% of 50 to 59 year olds, compared to 52% of 50 to 59 year olds, 46% of 70 to 79 year olds and 42% of 80 to 89 year olds). Of admitted patients from Copeland LA, the majority presented with unintentional injuries (1,283; 94%), 98% of which (1,254) were categorised as 'other injury'.

TABLE 32: Total ED attendances by Copeland residents aged 50 years and over by disposal method and age group, April 2011 to March 2014

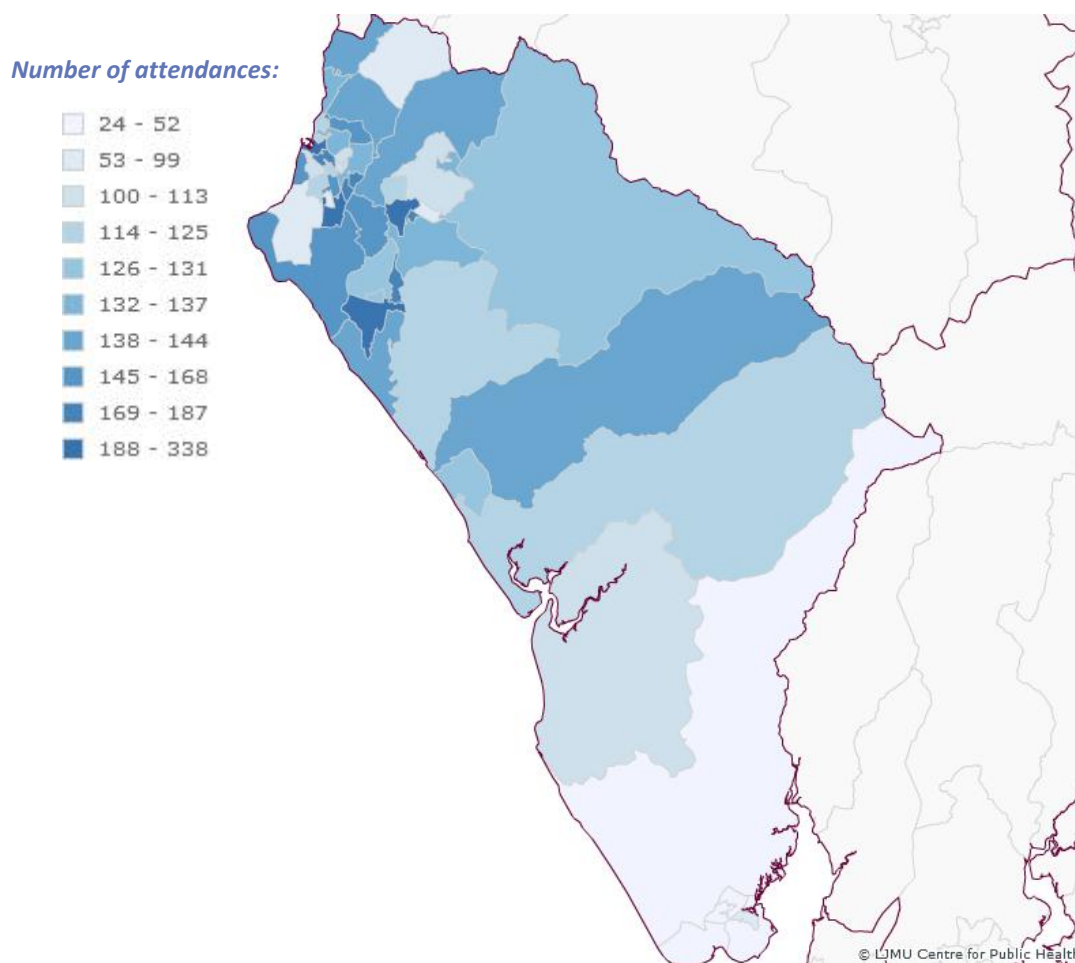
Age group	50-59	60-69	70-79	80-89	90+	Total	Percent
Admitted	225	232	302	431	173	1,363	21
Discharged	1,245	810	588	509	130	3,282	50
Follow-up / Referred	623	491	361	259	64	1,798	27
Other	47	23	16	10	7	103	2
Total	2,140	1,556	1,267	1,209	374	6,546	100

Table 33 displays the five LSOAs in Copeland which accounted for the most injury attendances to Cumbria EDs, and figure 21 displays injury attendances by LSOA for Copeland residents aged 50 years and over.

Table 33: Top five Copeland LSOAs: Injury attendances of residents aged 50 years and over by ED, April 2011 to March 2014

LSOA code	LSOA name	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary	Total
E01019280	Copeland 002B	10	0	0	328	339
E01019296	Copeland 005E	***	***	<255	0	256
E01019275	Copeland 006E	***	0	221	***	226
E01019265	Copeland 004D	***	0	0	<202	202
E01019281	Copeland 002C	***	0	182	***	187

FIGURE 21: Total ED attendances by Copeland residents aged 50 years and over by LSOA of residence, April 2011 to March 2014



EDEN

Residents of Eden LA comprised 8% of total ED attendances; of which, 57% were female and 43% were male. In terms of age, 22% of attendees were aged 50 to 59 years, while 11% of attendees were aged 90 years and over (table 34).

TABLE 34: Total ED attendances by Eden residents aged 50 years and over by gender and age group, April 2011 to March 2014

Age group	Female		Male		Total	
	N	%	N	%	N	%
50-59	285	10	326	12	611	22
60-69	294	10	264	9	558	20
70-79	330	12	273	10	603	21
80-89	482	17	277	10	759	27
90+	217	8	83	3	300	11
Total	1,608	57	1,223	43	2,831	100

Of the total ED attendances by Eden residents, 98% were for unintentional injuries and 2% were for intentional injuries. Of intentional injuries, 2% of attendances were for deliberate self-harm and less than 1% were for assaults. Of unintentional

injuries, 94% of attendances were classed as other injury (the vast majority of which were likely to be falls), 3% were for road traffic collisions and 1% were for sports injuries (table 35).

TABLE 35: Total ED attendances by Eden residents by injury group, April 2011 to March 2014

Injury group		2011/12	2012/13	2013/14	Total	Percent	Percent
Intentional injuries	Assault	***	***	0	7	0%	2%
	Deliberate self-harm	19	18	19	56	2%	
	Other injury	544	728	1,390	2,662	94%	
Unintentional injuries	Road traffic collision	35	30	26	91	3%	98%
	Sport injury	<10	<10	5	15	1%	
Total injuries		607	784	1,440	2,831	100%	100%

In terms of disposal method, 25% of Eden residents were discharged with no follow up treatment and 54% were admitted to hospital (table 20). Attendees from older age groups were more likely to be admitted to hospital than those from younger age groups (44% among 60 to 69 year olds, compared to 59% among 70 to 79 years olds and 64% among 80 to 89 year olds). Of admitted patients from Eden LA, the majority presented with unintentional injuries (1,490; 98%); 98% (1,460) were categorised as 'other injury', of which 56% were female and 44% were male.

TABLE 36: Total ED attendances by Eden residents aged 50 years and over by disposal method and age group, April 2011 to March 2014

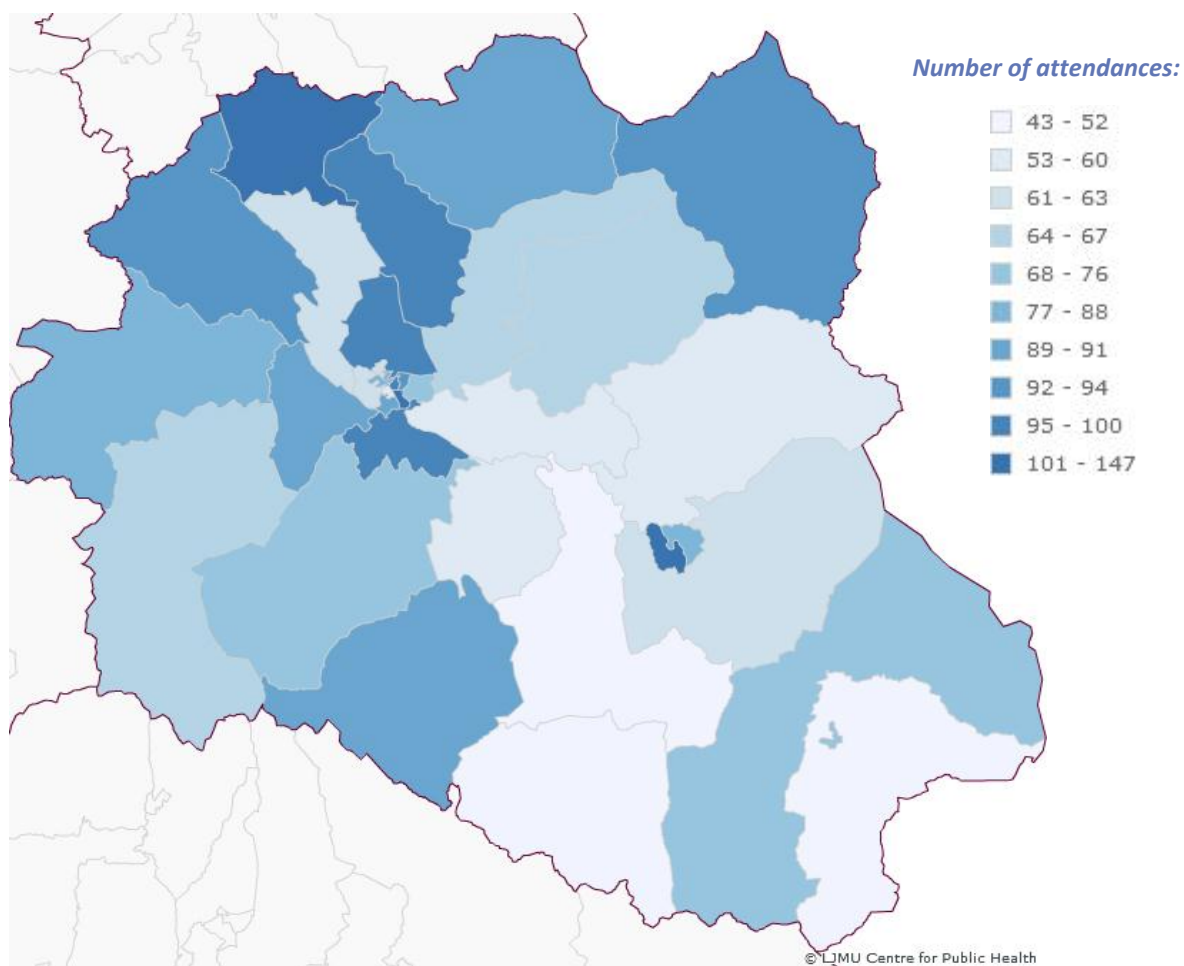
Age group	50-59	60-69	70-79	80-89	90+	Total	Percent
Admitted	231	248	358	487	202	1,526	54
Discharged	195	149	126	153	77	700	25
Follow-up / Referred	167	153	112	110	21	563	20
Other	18	8	7	9	0	42	1
Total	611	558	603	759	300	2,831	100

Table 37 displays the five LSOAs in Eden which accounted for the most injury attendances to Cumbria EDs, and figure 22 displays injury attendances by LSOA for Eden residents aged 50 years and over.

TABLE 37: Top five Eden LSOAs: Injury attendances of residents aged 50 years and over by ED, April 2011 to March 2014

LSOA code	LSOA name	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary	Total
E01019332	Eden 003B	<147	0	0	***	147
E01019315	Eden 002A	142	0	0	0	142
E01019306	Eden 006A	<102	***	0	***	102
E01019327	Eden 003A	99	0	0	0	99
E01019329	Eden 004D	99	0	0	0	99

FIGURE 22: Total ED attendances by Eden residents aged 50 years and over by LSOA of residence, April 2011 to March 2014



SOUTH LAKELAND

Residents of South Lakeland LA comprised 7% of total ED attendances; of which, 57% were female and 43% were male. In terms of age, 23% of attendees were aged 50 to 59 years, while 10% of attendees were aged 90 years and over (table 18).

TABLE 38: Total ED attendances by South Lakeland residents aged 50 years and over by gender and age group, April 2011 to March 2014

Age group	Female		Male		Total	
	N	%	N	%	N	%
50-59	275	12	281	12	556	23
60-69	283	12	256	11	539	23
70-79	254	11	210	9	464	19
80-89	370	15	211	9	581	24
90+	185	8	63	3	248	10
Total	1,367	57	1,021	43	2,388	100

Of the total ED attendances by South Lakeland residents, 98% were for unintentional injuries and 2% were for intentional injuries. Of intentional injuries, 1% of attendances were for deliberate self-harm and less than 1% were for assaults. Of unintentional injuries, 88% of attendances were classed as other injury (the vast majority of which were likely to be falls), 6% were for road traffic collisions and 4% were for sports injuries (table 39).

TABLE 39: Total ED attendances by South Lakeland residents by injury group, April 2011 to March 2014

Injury group		2011/12	2012/13	2013/14	Total	Percent	Percent
Intentional injuries	Assault	***	***	***	8	0%	2%
	Deliberate self-harm	<10	<20	<10	32	1%	
	Other injury (Falls)	596	559	952	2,107	88%	
Unintentional injuries	Road traffic collision	58	46	46	150	6%	98%
	Sport injury	40	40	11	91	4%	
Total injuries		702	666	1,020	2,388	100%	100%

In terms of disposal method, 23% of South Lakeland residents were discharged with no follow up treatment and 43% were admitted to hospital (table 40). Attendees from older age groups were more likely to be admitted to hospital than those from younger age groups (48% among 70 to 79 year olds, compared to 59% among 80 to 89 year olds). Of admitted patients from South Lakeland LA, the majority (98%) presented with unintentional injuries (1001), of which 58% were female and 42% were male.

TABLE 40: Total ED attendances by South Lakeland residents aged 50 years and over by disposal method and age group, April 2011 to March 2014

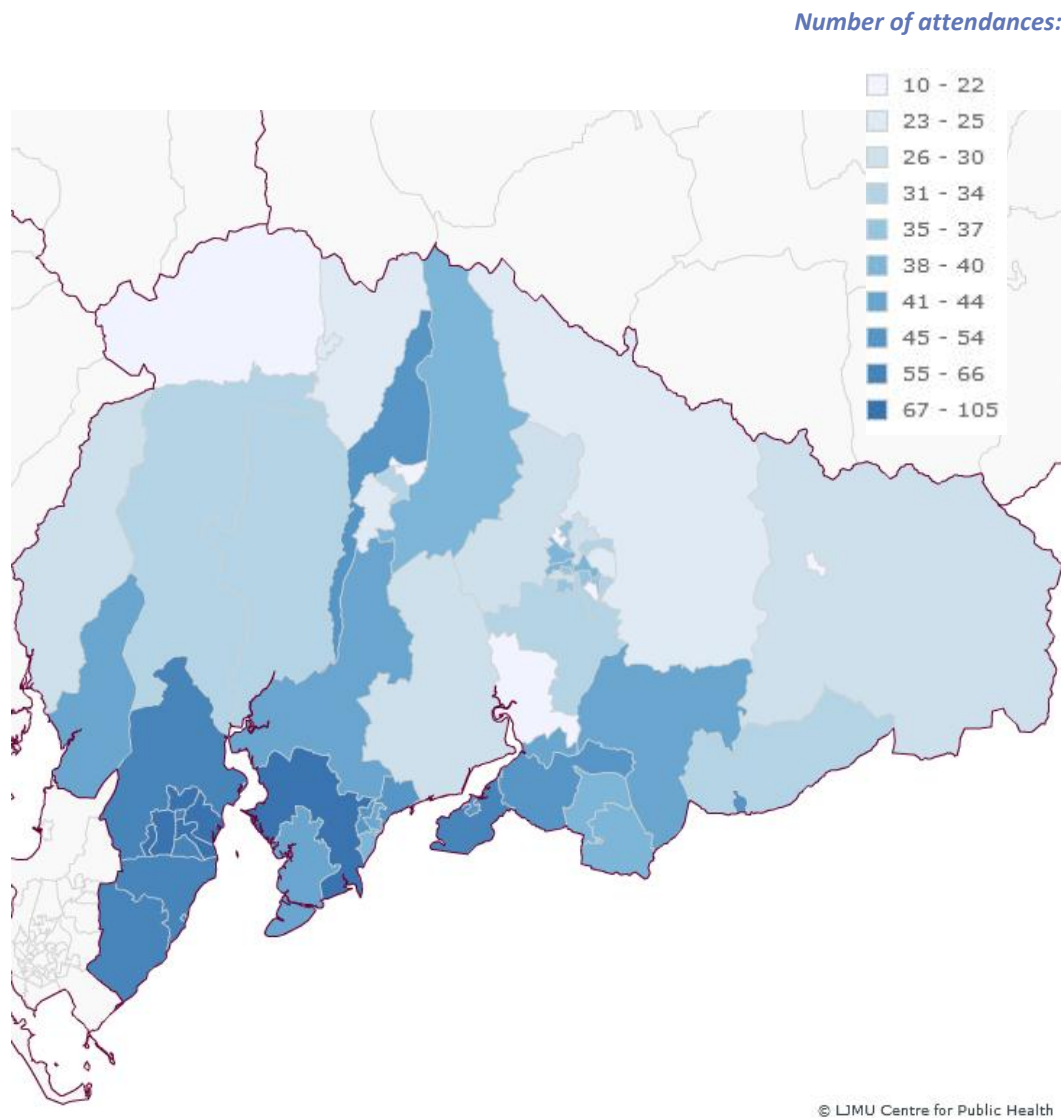
Age group	50-59	60-69	70-79	80-89	90+	Total	Percent
Admitted	130	165	222	344	159	1,020	43
Discharged	168	146	<110	94	<50	552	23
Follow-up / Referred	242	210	135	134	44	765	32
Other	16	18	<10	9	***	51	2
Total	556	539	464	581	248	2,388	100

Table 41 displays the five LSOAs in South Lakeland which accounted for the most injury attendances to Cumbria EDs, and figure 23 displays injury attendances by LSOA for South Lakeland residents aged 50 years and over.

TABLE 41: Top five South Lakeland LSOAs: Injury attendances of residents aged 50 years and over by ED, April 2011 to March 2014

LSOA code	LSOA name	Cumberland Infirmary	Furness General Hospital	West Cumberland Hospital	Royal Lancaster Infirmary	Total
E01019388	South Lakeland 012A	***	<105	0	***	105
E01019393	South Lakeland 014E	0	<87	0	***	87
E01019349	South Lakeland 013A	0	59	0	12	71
E01019389	South Lakeland 012B	0	<71	0	***	71
E01019390	South Lakeland 012C	0	<68	0	***	68

FIGURE 23: Total ED attendances by South Lakeland residents aged 50 years and over by LSOA of residence, April 2011 to March 2014



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RELATED DOCUMENTS AND USEFUL WEBSITES

Action with Communities in Cumbria: <http://www.cumbriaaction.org.uk/>

Age UK: <http://www.ageuk.org.uk/>

Cumbria Life Cycle Project: www.nwpho.org.uk/cumbria/

English Indices of Deprivation: <https://www.gov.uk/government/collections/english-indices-of-deprivation>

Global Age Watch: www.helpage.org/global-agewatch

National Service Framework for Older People: www.gov.uk/government/publications/quality-standards-for-care-services-for-older-people

Prevention package for older people resources:

http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publicationsandstatistics/Publications/dh_103146

Projecting Older People Population Information System: www.poppi.org.uk

United Nations Population Fund – Ageing: www.unfpa.org/ageing

LINKS TO DATA SOURCES

Trauma and Injury Intelligence Group (Centre for Public Health)

An interactive map has been produced by TIIG to accompany this themed report.

Available at: [Interactive Maps | Centre for Public Health](#)

Furthermore, data requests are available by emailing [TIIG](#) or visit the TIIG website for further information: [Trauma and Injury Intelligence Group | Centre for Public Health](#).

Public Health Outcomes Framework (Public Health England)

PHE's data tool provides information on the indicators to measure the outcomes of the PHOF for England. The indicator

Available at: [Public Health Outcomes Framework](#)

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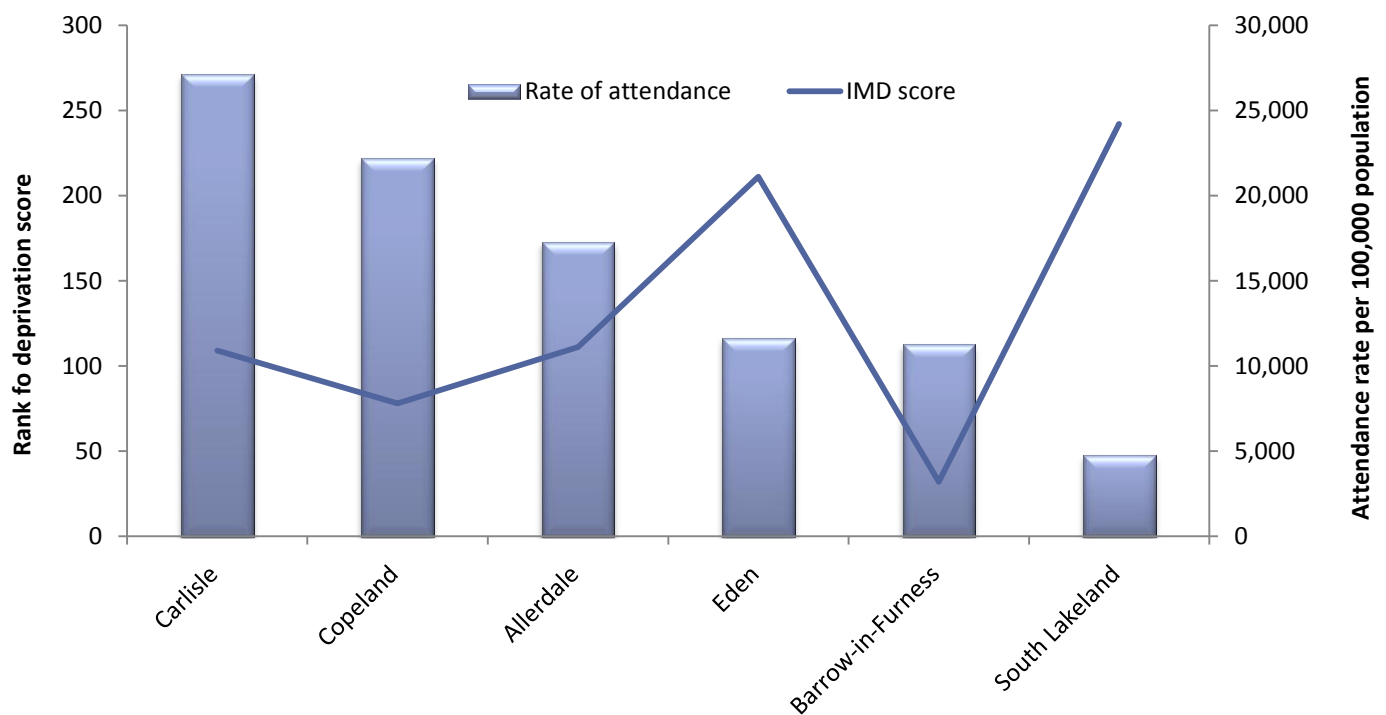
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APPENDIX 1

Appendix 1 displays attendance rates per 100,000 population of Cumbria residents by rank of deprivation score, where higher scores indicate decreasing deprivation. As shown, increasing attendance rates correlate with increasing levels of deprivation, with the exception of Barrow-in-Furness, which has a relatively low rate of ED attendances despite a relatively high level of deprivation.

Appendix 1: Attendance rates per 100,000 population Cumbria residents aged 50 years and over by Local Authority and rank of deprivation score, April 2011 to March 2014



APPENDIX 2

Appendices 2a-d display cross tabulations for ED attendances between 00:00 and 01:59, compared to the average for other time groups combined, by Local Authority, Emergency Department, disposal method and Injury group^{26, 27}. Analyses were run for various other demographic and outcome variables but were not found to be statistically significant. As shown in appendix 2a, residents of Barrow-in-Furness and South Lakeland were substantially less likely to present to an ED between the times of 00:00 and 01:59 than residents of other Local Authorities; consistently, as shown in appendix 2b, there were substantially fewer attendees to Furness General Hospital and Royal Lancaster Infirmary between 00:00 and 01:59. In terms of patient disposal, as shown in appendix 2c, patients were more likely to be discharged from hospital between 00:00 and 01:59 compared to the average for other time groups. Finally, as shown in appendix 2d, patients were substantially more likely to present to Cumbria EDs between 00:00 and 01:59 for assaults and deliberate self-harm compared to the average for other time groups.

²⁶ Please note there were 36 missing cases for these analyses.

²⁷ All trends were found to be statistically significant; for more information about these analyses, please contact tiig@ljamu.ac.uk.

Appendix 2a: Attendances to Cumbria EDs of people aged 50 years and over by Local Authority and time group, April 2011 to March 2014

Local Authority	00:00 – 01:59		02:00 – 23:59		Total
	N	%	N	%	N
Allerdale	2514	35	4756	65	7270
Barrow in Furness	177	6	2894	94	3071
Carlise	3875	33	7814	67	11689
Copeland	2150	33	4388	67	6538
Eden	860	30	1968	70	2828
South Lakeland	153	6	2235	94	2388
Total	9729	29	24055	71	33784

Appendix 2b: Attendances to Cumbria EDs of people aged 50 years and over by Emergency Department and time group, April 2011 to March 2014

Emergency Department	00:00 – 01:59		02:00 – 23:59		Total
	N	%	N	%	N
Cumberland Infirmary	5580	32	11728	68	17308
Furness General Hospital	252	6	4201	94	4453
Royal Lancaster Infirmary	71	6	1208	94	1279
West Cumberland Hospital	3826	36	6918	64	10744
Total	9729	29	24055	71	33784

Appendix 2c: Attendances to Cumbria EDs of people aged 50 years and over by disposal method and time group, April 2011 to March 2014

Disposal method	00:00 – 01:59		02:00 – 23:59		Total
	N	%	N	%	N
Admitted	2711	25	7985	75	10696
Discharged	4296	33	8801	67	13097
Follow up/referred	2524	27	6709	73	9233
Other	198	26	560	74	758
Total	9729	29	24055	71	33784

Appendix 2d: Attendances to Cumbria EDs of people aged 50 years and over by injury group and time group, April 2011 to March 2014

Injury group	00:00 – 01:59		02:00 – 23:59		Total
	N	%	N	%	N
Assault	137	43	182	57	319
Other injury	8912	29	22044	71	30956
Road traffic collision	315	24	975	76	1290
Sports injury	61	15	350	85	411
Deliberate self-harm	304	38	504	62	808
Total	9729	29	24055	71	33784

APPENDIX 3

Appendix 3 displays attendances to Cumbria EDs by disposal method. As shown, patients were most likely to be admitted at Royal Lancaster Infirmary, patients were most likely to be discharged from West Cumberland Hospital and patients were most likely to be referred to follow up services from Furness General Hospital.

Appendix 3: Attendances to Cumbria EDs of people aged 50 years and over by ED and disposal method, April 2011 to March 2014

Emergency Department	Admitted		Discharged		Follow up/referred		Other		Total	
	N	%	N	%	N	%	N	%	N	%
Cumberland Infirmary	6365	37	6298	36	4254	25	407	2	17324	100
Furness General Hospital	1341	30	1199	27	1813	41	100	2	4453	100
Royal Lancaster Infirmary	613	48	295	23	345	27	26	2	1279	100
West Cumberland Hospital	2383	22	5277	49	2946	27	158	1	10764	100
Total	10702	32	13069	39	9358	28	691	2	33820	100

