

Injury Surveillance in the North West of England

»TIIG«

TIIG Lancashire Themed Report

Injuries in older people across Lancashire April 2012 to March 2015

April 2016

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The population of the UK is ageing and this brings new challenges for health and social care services. The majority of injuries among older people are falls, which in addition to causing physical suffering can also leave older people socially isolated and experiencing poor wellbeing. This report provides detailed information about attendances at Emergency Departments due to injuries among older people across the county of Lancashire, which will be of use to localities in planning preventative measures to reduce injuries in older people.



Blackpool has the highest rate in Lancashire of Emergency Department attendances due to injuries in older people, and also has the highest level of deprivation in the county, and so I welcome the report's suggestion that further work is carried out to explore the relationship between deprivation and injuries in older people.

A handwritten signature in black ink, appearing to read 'A. Rajpura', with a long, sweeping horizontal line underneath.

Dr Arif Rajpura

Director of Public Health, Blackpool Council

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KEY FINDINGS

- There were 151,240 injury attendances made by people aged 60 years and over to emergency departments (EDs) across Lancashire between April 2012 and March 2015 (including attendances made by Lancashire residents to Southport and Formby District General Hospital in Merseyside); 141,625 (93.6%) were residents of Lancashire.
- The number of attendances between 2012/13 and 2013/14 decreased by 1.2%. However, they increased by 0.9% between 2013/14 and 2014/15.
- Over half (53.8%) of attendances made by older people were to Blackpool Victoria Hospital, followed by 19.9% to Royal Blackburn Hospital.
- A quarter (25.4%) of attendances by people aged 60 years and over were residents of Blackpool unitary authority (UA), followed by 16.4% from Wyre and 12.6% from Fylde local authorities (LAs).
- Unintentional injuries (falls, other injury, road traffic collisions [RTCs] and sports injury) comprised 99.6% of the total number of attendances made by older Lancashire residents. Blackpool had the highest number (35,924 attendances) and rate (98,654 per 100,000 population) of unintentional injuries. The 10 lower super output areas (LSOAs) with the highest rates of unintentional and intentional injury attendances by people aged 60 years and over were in Blackpool unitary authority.
- The majority (84.7%) of attendances over the three year period were for other injuries, while falls accounted for 13.2%; however, it should be noted that only Lancashire Teaching Hospitals NHS Foundation Trust (Chorley and South Ribble Hospital and Royal Preston Hospital) categorise falls as a specific injury group.
- There were more female than male attendances (56.8% compared to 43.2%); these proportions could be due to unequal life expectancy (18.7 years for males and 21.1 years for females at the age of 65 years in England; Office for National Statistics, 2015c).
- People aged between 60 and 69 years accounted for the largest proportion of injury attendances (31.0%), followed by 29.7% and 29.3% of 70 to 79 year olds and 80 to 89 year olds respectively. These proportions are likely owing to Lancashire's population decreasing as age increases. When looking at rates per 100 population by age group and gender, rates were highest for people aged 90 years and over (111 per 100 population).
- Where ethnicity was recorded and/or stated, the vast majority (99.1%) were white.
- In terms of source of referral to the ED, 54.8% of attendees self-referred, while 33.8% were referred by the emergency services. By injury group, deliberate self-harm (DSH) and other injury had the highest proportions referred to the ED by the emergency services (56.0% and 55.0% respectively).
- In terms of arrival mode to the ED, 54.1% arrived by ambulance and 34.7% arrived by private transport. By injury group, 75.8% of DSH attendees arrived by ambulance. More than half of attendees presenting due to other injury and falls also arrived by ambulance (54.4% and 53.8% respectively).
- Over three-quarters (77.6%) of incidents occurred at home, and by injury group, DSH had the highest proportion of injuries sustained at home (86.4%), followed by other injuries (80.5%) and falls (70.4%).
- In terms of disposal method, 41.0% were discharged with no follow-up treatment required, 33.6% were admitted to hospital and 22.7% were referred for follow-up treatment. By injury group, the highest proportion of attendees admitted

to hospital were for injuries sustained by DSH (48.1%); RTCs and assaults had the highest proportions discharged with no follow-up treatment required (61.6% and 59.2% respectively); and, sports injuries had the largest proportion referred for follow-up treatment (39.8%), followed by falls (31.8%).

- In terms of North West Ambulance Service (NWAS) data, there were a total of 56,719 injury-related ambulance call outs in Lancashire for people aged 60 years and over between April 2012 and March 2015; the number of call outs increased by 0.2% between 2012/13 and 2013/14, but then decreased by 12.5% between 2013/14 and 2014/15; the areas with the highest number of call outs were Blackpool (12.2%) and Lancaster (10.6%); 60.9% of call outs were for females; 40.2% were for older people aged between 80 and 89 years, followed by 24.7% aged between 70 and 79 years; the majority (85.7%) of call outs for older people were due to falls.
- There were 18,636 fall-related injury attendances to Chorley and South Ribble Hospital and Royal Preston Hospital made by Lancashire residents aged 60 years and over between April 2012 and March 2015; females accounted for 65.7% of attendances; 34.7% fall attendees were aged between 80 and 89 years; rates per 100 population were highest for people aged 90 years and over (average rate of 75 per 100 resident population of Chorley, Preston and South Ribble LAs). Over the same three year period, there were 48,602 ambulance call outs due to injuries sustained from a fall; 61.7% were female; 42.2% were aged between 80 and 89 years.

The UK population is ageing; life expectancy at older ages is the highest it has ever been (Public Health England, 2016). There are now over 14.9 million people in the UK aged 60 years and over (Office for National Statistics, 2015a). The proportion of those aged 65 years and over increased from 13.8% (11.1 million) to 17.7% (over 11.4 million) between 1974 and 2014, and is projected to increase by a further 6.8% by 2044 (Office for National Statistics, 2015b). This is because of improvements in mortality rates, the post-war baby boom of 1946/47 and the baby boom of the 1960s (Office for National Statistics, 2012).

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 England, life expectancy at the age of 65 is 18.7 years for males and 21.1 years for females (Office for National Statistics, 2015c). Levels of deprivation and health outcomes for older people vary across Lancashire's local authority (LA) areas; males in South Ribble and females in Ribble Valley have the longest life expectancy across Lancashire at 65 years, compared to males in Blackpool and females in Burnley who have the shortest life expectancy (Office for National Statistics, 2015c). 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.

As a consequence of the ageing population, the UK faces new social and economic challenges which create the need for health and social care policies to be reconsidered. The King's Fund (2016) claims the ageing population may lead to increased costs due to the following factors: costs of health and social care substantially greater for older people; increasing number of hospital admissions for older people; projections suggesting a high proportion of older people will be living alone and require formal care; and, projections suggesting the number of older people with care needs will rise by more than 60% over the next two decades. A key aim of health and social care providers is to invest in local prevention services which offer advice, support and interventions to help healthy older people to live long and independent lives, help injured or unwell older people to regain independence and prevent or delay the onset of further health problems or injuries (Department of Health, 2009).

Falls comprise the majority of injuries among older people (Department of Health, 2001), can cause bone fractures (particularly of the hip) and head traumas, and can increase the risk of early death (Centers for Disease Control and Prevention, 2016). 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 (Department of Health, 2009a). The consequences of falls are not just physical; the fear of subsequent falls can severely limit daily activities, and patients may also experience social isolation and depression due to loss of mobility and an increase in dependency (Department of Health, 2001). In 2015, an estimated 3.6 million people aged 65 years and over were living alone in the UK (Office for National Statistics, 2015d). Older people living alone face particular risks; research published in 2012 found 32% of 500 older people living alone had experienced a fall in the past year compared to 22% of those who did not live alone (WRVS, 2012). Falls place a burden on health and care services; ambulance call outs, accident and emergency attendances, in-patient treatments for fractures and other trauma, rehabilitation and long term follow-up care (Department of Health, 2009b). Falls alone cost the National Health Service (NHS) in England £2.3 billion a year (National Institute for Health and Care Excellence, 2013) and the direct cost of a hip fracture is estimated to be £10,000 before the cost of social care (Department of Health, 2009a).

A key challenge faced by local governments and public services in the UK is to improve the safeguarding of health and wellbeing of older people. The avoidance of preventable injuries, particularly falls, is an important component of the successful safeguarding of health and wellbeing, which can help facilitate the integration and celebration of senior citizens.

Using data collected by the emergency departments (EDs) across Lancashire, this Trauma and Injury Intelligence Group (TIIG) Themed Report presents the findings of analysis on injuries sustained by older people across Lancashire between April 2012 and March 2015. While older people are usually categorised as those aged 65 years and over, this report considers those aged 60 years and older, as agreed with local partners. This report contextualises and provides analysis of ED data by calculating rates for geographic areas using population estimates. It also provides 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 preventing injuries and enabling older people to live happy, healthy and independent lives.

AREA DESCRIPTION

Situated in the North West of England, Lancashire is made up of 14 LAs, two of which are unitary authorities (UAs). According to mid-2014 population estimates, Lancashire’s total population is 1.47 million people, with just under one-quarter (24.9%) aged 60 years and over (Office for National Statistics, 2015a). Lancashire has a slightly larger proportion of older people when compared to the North West, England and the UK.

Table 1. Number and proportion of people aged 60 years and over for Lancashire, North West, England and UK¹

Area	60+ population	Total population	Proportion of population 60+
Lancashire	366,925	1,471,979	24.9%
North West	1,678,796	7,132,991	23.5%
England	12,451,639	54,316,618	22.9%
United Kingdom	14,918,349	64,596,752	23.1%

Table 2 displays the population of the LAs across Lancashire by age group. Blackburn with Darwen UA has the highest total population (n=146,743), while Wyre and Fylde have the highest proportions of people aged 60 years and over (33.0% and 32.8% respectively). Overall population decreases as age group increases; for example, there were 174,743 people aged between 60 and 69 years compared to 12,782 people aged 90 years and over in Lancashire.

Table 2. Lancashire residents aged 60 years and over by LA and age group, with total population and proportion of total population¹

LA	60-69	70-79	80-89	90+	60+ population	Total population	Proportion of population 60+
Blackburn with Darwen	14,111	8,648	4,258	799	27,816	146,743	19.0%
Blackpool	16,738	12,042	6,262	1,372	36,414	140,501	25.9%
Burnley	10,243	6,374	3,134	758	20,509	87,291	23.5%
Chorley	14,065	8,831	3,905	856	27,657	111,607	24.8%
Fylde	11,044	8,300	4,813	1,078	25,235	77,042	32.8%
Hyndburn	9,117	5,945	2,877	597	18,536	80,208	23.1%
Lancaster	16,212	11,503	6,150	1,361	35,226	141,277	24.9%
Pendle	10,620	6,462	3,340	736	21,158	89,840	23.6%
Preston	12,749	8,633	4,634	933	26,949	140,452	19.2%
Ribble Valley	7,938	5,408	2,805	603	16,754	58,091	28.8%
Rosendale	8,506	4,836	2,373	532	16,247	69,168	23.5%
South Ribble	13,645	9,366	4,491	903	28,405	109,077	26.0%
West Lancashire	14,326	10,221	4,670	923	30,140	111,940	26.9%
Wyre	15,429	12,472	6,647	1,331	35,879	108,742	33.0%
Lancashire	174,743	119,041	60,359	12,782	366,925	1,471,979	24.9%

¹ Mid-2014 population estimates (Office for National Statistics, 2015a).

DEPRIVATION IN LANCASHIRE

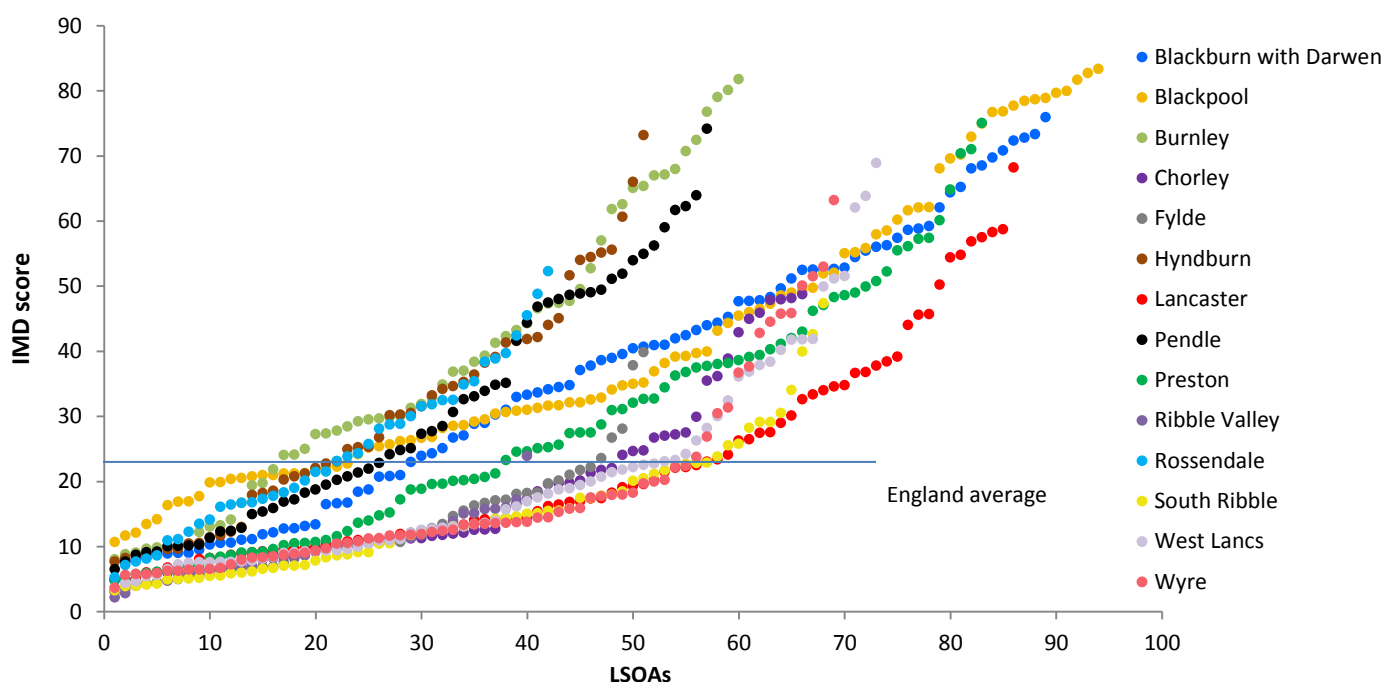
Within Lancashire there is substantial variation in terms of deprivation. Using the 2015 Indices of Multiple Deprivation (IMD; Department for Communities and Local Government, 2015), the mean score ranged from 9.9 in Ribble Valley to 42.7 in Blackpool (table 3). With five out of 10 most deprived lower super output areas (LSOAs) in England being in Blackpool, it has the second and third most deprived LSOAs in England. In comparison, Ribble Valley has LSOAs ranked 32,676 and 32,627 out of 32,844.

Table 3. Deprivation score ranges and means for LAs across Lancashire (where higher scores indicate increasing levels of deprivation), 2015

LA	60+ population	IMD score range	IMD score average	LSOAs (N)
Blackburn with Darwen	27,816	4.1 - 81.9	34	91
Blackpool	36,414	12.1 - 88.5	43	94
Burnley	20,509	7.1 - 82.3	36	60
Chorley	27,657	2.9 - 49.7	17	66
Fylde	25,235	3.5 - 49.8	15	51
Hyndburn	18,536	6.7 - 66.1	32	52
Lancaster	35,226	4.3 - 76.5	24	89
Pendle	21,158	6.8 - 64.1	29	57
Preston	26,949	4.1 - 66.8	27	86
Ribble Valley	16,754	1.8 - 26.5	10	40
Rosendale	16,247	4.6 - 51.1	24	43
South Ribble	28,405	2.5 - 5.05	14	70
West Lancashire	30,140	3.5 - 68.8	20	73
Wyre	35,879	4.8 - 71.0	21	69
Lancashire	366,925	1.8 - 88.5	26	941

Figure 1 shows scores for each LSOA in Lancashire, with the England average depicted.

Figure 1. Deprivation scores for each LSOA in Lancashire by LA, with England average, 2015



EMERGENCY DEPARTMENT DATA

EMERGENCY DEPARTMENTS IN LANCASHIRE

Lancashire has six EDs that primarily serve residents of the county (table 4). These are Royal Blackburn Hospital (which includes data collected by Burnley General Hospital Urgent Care Centre), Blackpool Victoria Hospital, Chorley and South Ribble Hospital, Royal Preston Hospital, Ormskirk and District General Hospital and Royal Lancaster Infirmary. Attendances made by Lancashire residents to Southport and Formby District General Hospital in Merseyside are also included as a substantial number of Lancashire residents, particularly those residing in West Lancashire LA, attend this ED.

Table 4. Lancashire emergency departments

NHS trust	Hospital	ED/UCC ²
East Lancashire Hospitals NHS Trust	Royal Blackburn Hospital	ED
	Burnley General Hospital	UCC
Blackpool Teaching Hospitals NHS Foundation Trust	Blackpool Victoria Hospital	ED
Lancashire Teaching Hospitals NHS Foundation Trust	Chorley and South Ribble Hospital	ED
	Royal Preston Hospital	ED
Southport and Ormskirk Hospitals NHS Trust	Ormskirk and District General Hospital	ED
	Southport and Formby District General Hospital ³	ED
University Hospitals of Morecambe Bay NHS Foundation Trust	Royal Lancaster Infirmary	ED

DATA ITEMS

Table 5 displays injury groups collected by each ED. Assaults, deliberate self-harm (DSH), firework injuries, other injuries, road traffic collisions (RTCs) and sports injuries are categorised by all EDs; falls are only categorised by Lancashire Teaching Hospitals NHS Foundation Trust (Royal Preston Hospital and Chorley and South Ribble Hospital).

Table 5. Injury group data items collected by EDs in Lancashire

ED	Assault	DSH	Falls	Firework injuries	Other injury	RTCs	Sports injuries
Blackpool Victoria Hospital	Y	Y	-	Y	Y	Y	Y
Chorley and South Ribble Hospital	Y	Y	Y	Y	Y	Y	Y
Ormskirk and District General Hospital	Y	Y	-	Y	Y	Y	Y
Royal Blackburn Hospital	Y	Y	-	Y	Y	Y	Y
Royal Lancaster Infirmary	Y	Y	-	Y	Y	Y	Y
Royal Preston Hospital	Y	Y	Y	Y	Y	Y	Y
Southport and Formby District General Hospital	Y	Y	-	Y	Y	Y	Y

² ED = Emergency Department; UCC = Urgent Care Centre. For the purpose of this report, 'EDs' refer to all hospitals, whether ED and/or UCC services are provided.

³ Only Lancashire residents attending this hospital are included in the analysis of this report.

DATA OVERVIEW

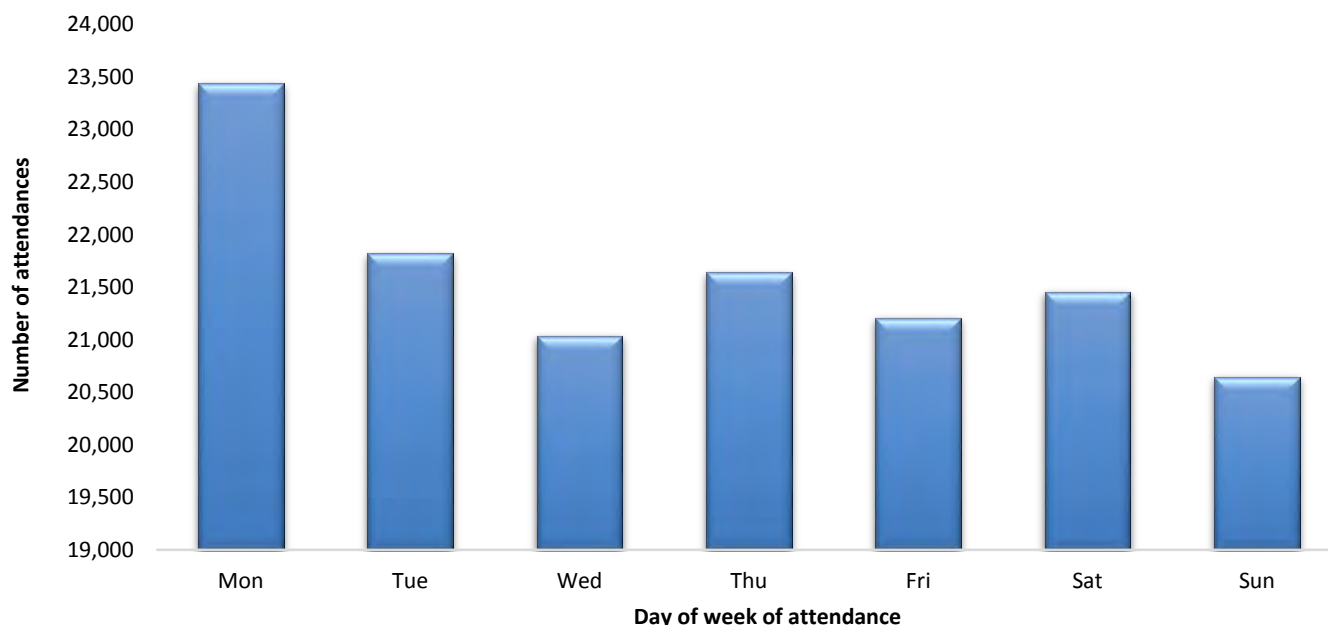
Between April 2012 and March 2015, a total of 151,240 injury attendances to Lancashire EDs were made by those aged 60 and years and over (table 6). The number of attendances between 2012/13 and 2013/14 decreased by 1.2%, however, they increased by 0.9% between 2013/14 and 2014/15. Over the three year period, the months with the highest number of attendances, calculated as a daily average, was June, July and December 2014 (148 per day), compared to January 2015, the month with the fewest (124 per day).

Table 6. Number of injury attendances made by older people by month and financial year, April 2012 to March 2015

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/13	4,147	4,342	4,078	4,360	4,521	4,136	4,340	4,059	4,505	4,144	3,784	4,251	50,667
2013/14	4,227	4,177	4,206	4,551	4,240	4,234	4,189	3,993	4,297	4,075	3,697	4,173	50,059
2014/15	4,117	4,460	4,446	4,573	4,382	4,304	4,053	3,884	4,583	3,858	3,624	4,230	50,514
Total	12,491	12,979	12,730	13,484	13,143	12,674	12,582	11,936	13,385	12,077	11,105	12,654	151,240

The largest number of injury attendances made by older people to Lancashire's EDs was on a Monday (n=23,438), compared to Sunday, the day with the fewest (n=20,648; figure 2).

Figure 2. Number of injury attendances made by older people by day of week of attendance, April 2012 to March 2015



As figure 3 shows, attendances made by older people were generally during the day, peaking between 10:00 and 11:59 (n=23,995) before gradually decreasing.

Figure 3. Number of injury attendances made by older people by time group of attendance, April 2012 to March 2015

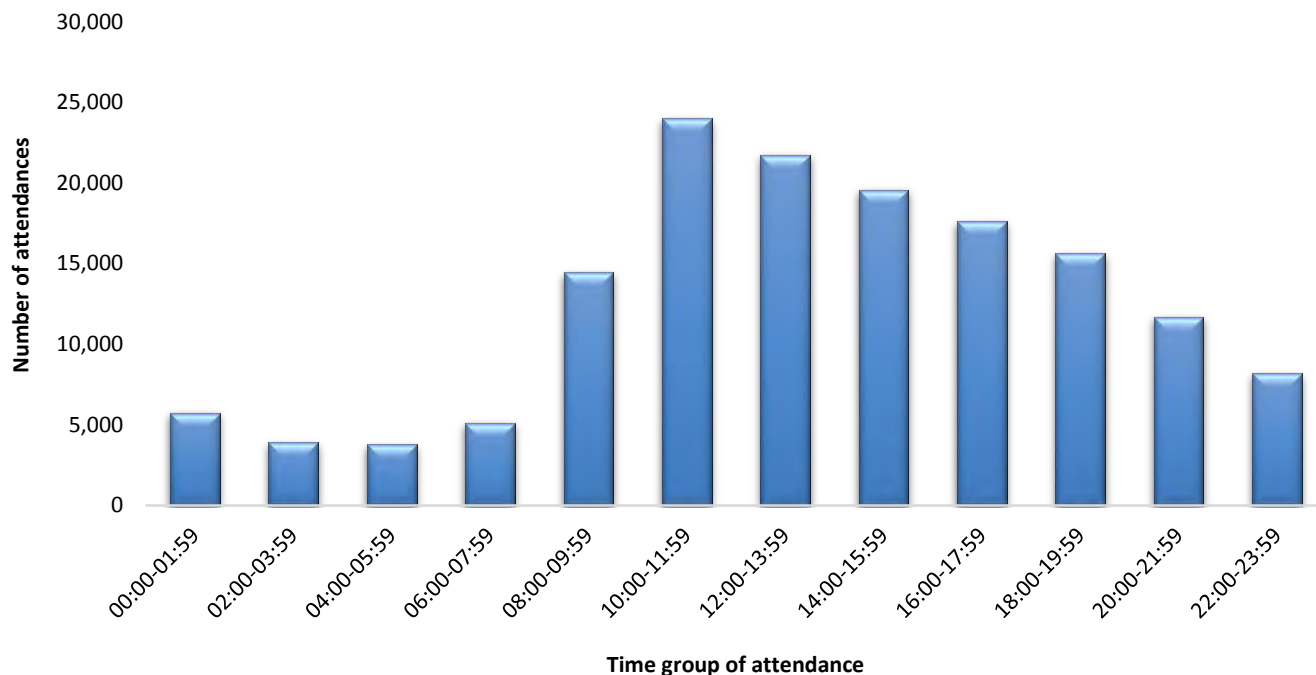


Table 7 presents injury attendances made by those aged 60 years and over by ED. Over half (53.8%) of attendances made by older people were to Blackpool Victoria Hospital followed by 19.9% to Royal Blackburn Hospital.

Table 7. Number of injury attendances made by older people by ED, April 2012 to March 2015

ED	N	%
Blackpool Victoria Hospital	81,410	53.8%
Royal Blackburn Hospital	30,097	19.9%
Royal Preston Hospital	15,798	10.4%
Chorley and South Ribble Hospital	12,504	8.3%
Royal Lancaster Infirmary	8,254	5.5%
Southport and Formby District General Hospital ⁴	3,177	2.1%
Total	151,240	100.0%

⁴ Due to low numbers (<5), the number of attendances to Ormskirk and District General Hospital have been included in the figure for Southport and Formby District General Hospital. Ormskirk and District General Hospital is a paediatric hospital therefore any attendances to the hospital may have been recorded in error by the trust’s patient management system.

DEMOGRAPHICS

Of the total 151,240 ED injury attendances made by people aged 60 years and over, 141,625 (93.6%) were made by residents of Lancashire; attendances by non-Lancashire residents will be excluded from the remainder of this report. Table 8 displays attendances to each ED by LA. One-quarter (25.4%) of those aged 60 years and over were made by residents of Blackpool UA, followed by 16.4% from Wyre and 12.6% from Fylde LAs.

As expected, attendees generally presented at the ED located within or closest to their LA/UA of residence. Almost all (99.7%) Blackpool residents attended Blackpool Victoria Hospital, 97.3% of Preston residents attended Royal Preston Hospital, 97.0% of Blackburn with Darwen residents attended Royal Blackburn Hospital, 96.8% of Lancaster residents attended Royal Lancaster Infirmary, 88.1% of Chorley residents attended Chorley and South Ribble Hospital, and 52.4% and 45.2% of South Ribble residents attended Chorley and South Ribble Hospital and Royal Preston Hospital respectively. Those resident in Burnley (98.6%), Pendle (97.9%), Rossendale (96.7%), Hyndburn (96.3%) and Ribble Valley (70.2%) attended their closest ED, Royal Blackburn Hospital. Residents of Fylde and Wyre generally attended Blackpool Victoria Hospital (95.9% and 94.1% respectively), and 93.1% of West Lancashire residents attended Southport and Formby District General Hospital in Merseyside.

Table 8. Number of injury attendances made by older people by ED and LA of residence, April 2012 to March 2015^{5,6}

ED	Blackburn with Darwen	Blackpool	Burnley	Chorley	Fylde	Hyndburn	Lancaster	Pendle	Preston	Ribble Valley	Rosendale	South Ribble	West Lancashire	Wyre	Lancashire
Blackpool Victoria Hospital	110	35,894	67	57	17,119	77	108	85	138	44	44	95	27	21,828	75,693
Chorley and South Ribble Hospital	37	8	***	7,366	<15	***	6	***	54	17	***	4,139	92	15	11,754
Royal Blackburn Hospital	7,181	12	8,323	43	12	3,399	12	6,115	16	1,955	2,219	66	11	16	29,380
Royal Lancaster Infirmary	<15	11	***	14	15	9	5,639	<10	15	6	5	11	15	664	6,427
Royal Preston Hospital	55	73	42	847	693	40	52	39	8,267	756	24	3,566	85	656	15,195
Southport and Formby District General Hospital	***	6	***	30	***	***	7	0	7	5	***	15	3,090	5	3,176
Total	7,400	36,004	8,438	8,357	17,853	3,530	5,824	6,248	8,497	2,783	2,295	7,892	3,320	23,184	141,625

⁵ There were no attendances made to Ormskirk and District General Hospital by Lancashire residents aged 60 years and over. It should be noted that this is a paediatric hospital.

⁶ For all tables throughout this report, numbers less than five have been suppressed (with ***) in line with patient confidentiality. If there is only one number less than five in a category then a second number has been suppressed to prevent back calculations from totals (e.g. <15).

Figure 4 presents the number of injury attendances made by those aged 60 years and over by LSOA of residence, overlaid by LA boundaries. The map shows there were more attendances made by residents of Blackpool UA and Fylde and Wyre LAs.

Figure 4. Number of injury attendances made by older people by LSOA of residence, overlaid by LA boundaries, April 2012 to March 2015

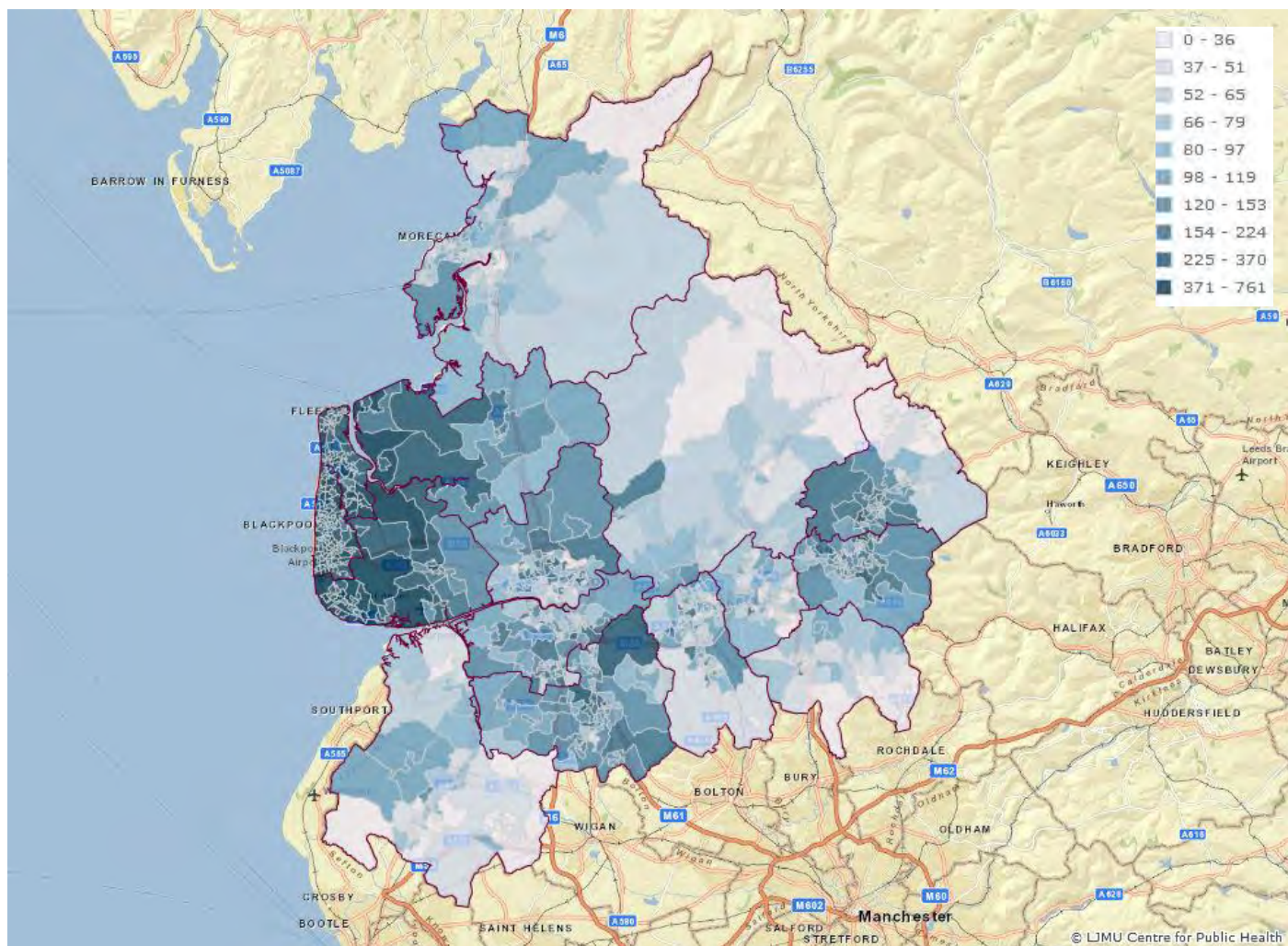


Table 9 shows a breakdown of unintentional (falls, other injury, RTCs and sports injury) and intentional (assault and DSH) injuries. Figures are presented as the number of attendances and the rate per 100,000 population by LA of residence. Blackpool had the highest number (35,924 attendances) and rate (98,654 per 100,000 population) of unintentional injuries, whereas Rossendale had the lowest number (2,284 attendances) and West Lancashire had the lowest rate (10,790 per 100,000 population). For intentional injuries, Blackpool had the highest number (80 attendances) and Blackburn with Darwen had the highest rate (255 per 100,000 population), while Ribble Valley had the lowest number (8 attendances) and rate (48 per 100,000 population).

Table 9. Number and rate (per 100,000 population) of injury attendances made by older people by injury type and LA of residence, April 2012 to March 2015

LA	60+ population	Unintentional injuries		Intentional injuries	
		Number	Rate	Number	Rate
Blackburn with Darwen	27,816	7,329	26,348	71	255
Blackpool	36,414	35,924	98,654	80	220
Burnley	20,509	8,408	40,997	30	146
Chorley	27,657	8,314	30,061	43	155
Fylde	25,235	17,827	70,644	26	103
Hyndburn	18,536	3,507	18,920	23	124
Lancaster	35,226	5,793	16,445	31	88
Pendle	21,158	6,225	29,421	23	109
Preston	26,949	8,439	31,315	58	215
Ribble Valley	16,754	2,775	16,563	8	48
Rossendale	16,247	2,284	14,058	11	68
South Ribble	28,405	7,869	27,703	23	81
West Lancashire	30,140	3,252	10,790	68	226
Wyre	35,879	23,161	64,553	23	64
Lancashire	366,925	141,107	38,457	518	141

When looking at attendance rates by LSOA of residence, the ten highest rates were in Blackpool UA (table 10); as shown, the top three were Blackpool 010C (1,673 per 1,000 population), Blackpool 008E (1,563 per 1,000 population) and Blackpool 007C (1,545 per 1,000 population).

Table 10. Top ten LSOAs for attendance rates made by older people per 1,000 population, April 2012 to March 2015⁷

LSOA name	LSOA code	60+ population	Number	Rate
Blackpool 010C	E01012735	388	649	1673
Blackpool 008E	E01012684	288	450	1563
Blackpool 007C	E01012721	299	462	1545
Blackpool 010A	E01012673	220	322	1464
Blackpool 008D	E01012682	292	422	1445
Blackpool 017C	E01012752	438	626	1429
Blackpool 007A	E01012707	299	406	1358
Blackpool 008A	E01012678	157	213	1357
Blackpool 010D	E01012736	342	451	1319
Blackpool 006C	E01012748	432	564	1306
Lancashire		366,925	141,625	386

⁷ Rates by LSOA for each LA is available upon request.

Figure 5 shows the rate of ED injury attendances per 1,000 population for older Lancashire residents by LSOA of residence. The map shows rates were highest in Blackpool UA, followed by Fylde and Wyre LAs.

Figure 5. Rate of injury attendances made by older people by LSOA of residence per 1,000 population, overlaid by LA boundaries, April 2012 to March 2015

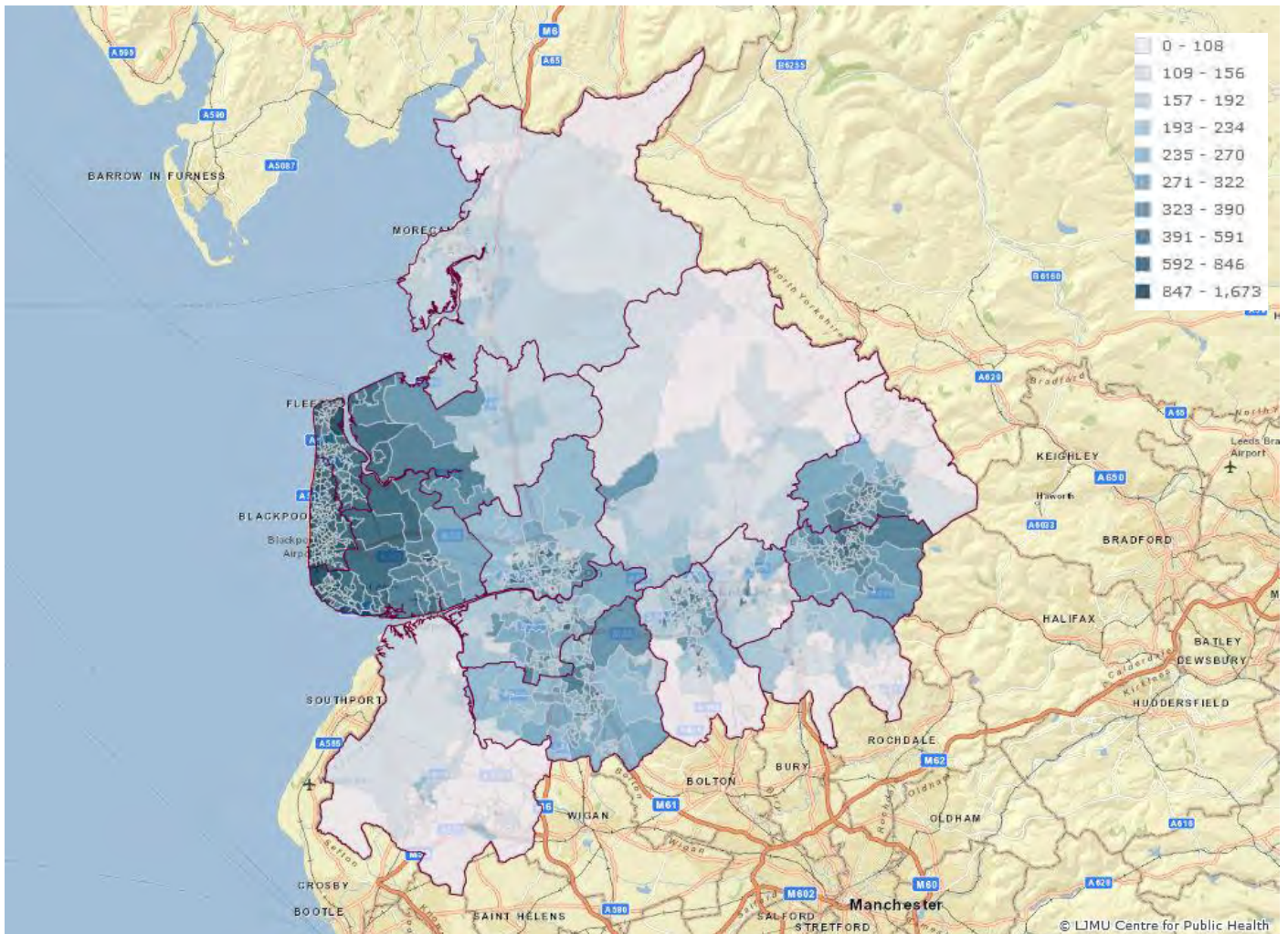


Table 11 presents the number of ED attendances made by residents of Lancashire aged 60 years and over by LA of residence, age group and gender. There were more females than males presenting to an ED in Lancashire between 2012/13 and 2014/15 (females=80,447; 56.8%). This could be due to unequal life expectancy; in England, life expectancy at the age of 65 is 18.7 years for males and 21.1 years for females (Office for National Statistics, 2015c). People aged between 60 and 69 years accounted for the largest proportion of injury attendances (31.0%), followed by 29.7% and 29.3% of 70 to 79 year olds and 80 to 89 year olds respectively. These proportions are likely owing to Lancashire's population decreasing as age group increases; for example, there were 174,743 people aged between 60 and 69 years compared to 12,782 people aged 90 years and over in Lancashire. The number of male attendees decreased as the age group increased, a similar pattern to that of population figures; however, the number of attendances made by females increased by age group, until reaching 90 years and over when they decreased.

Table 11. Number of injury attendances made by older people by LA of residence, age group and gender, April 2012 to March 2015^{8,9}

LA	60-69		70-79		80-89		90+	
	M	F	M	F	M	F	M	F
Blackburn with Darwen	1,485	1,550	870	1,181	567	1,177	131	439
Blackpool	5,757	5,001	5,875	5,505	4,340	6,150	990	2,386
Burnley	1,629	1,684	1,125	1,405	696	1,276	157	466
Chorley	1,333	1,626	1,053	1,342	727	1,497	145	634
Fylde	2,265	2,034	2,348	2,763	2,498	3,723	711	1,509
Hyndburn	593	605	406	573	349	616	100	288
Lancaster	879	1,109	676	1,065	520	1,040	143	392
Pendle	1,376	1,322	827	908	543	839	111	322
Preston	1,218	1,319	1,010	1,353	912	1,705	246	733
Ribble Valley	421	477	280	466	256	560	66	257
Rossendale	401	440	278	318	212	399	50	197
South Ribble	1,131	1,414	896	1,308	851	1,476	188	628
West Lancashire	416	461	358	565	403	658	86	373
Wyre	2,909	3,060	3,431	3,834	3,193	4,335	737	1,684
Lancashire	21,813	22,102	19,433	22,586	16,067	25,451	3,861	10,308

To further explore these figures, table 12 presents the data as rates per 100 population. Even though the number of attendances were lowest for people aged 90 years and over, the rates per 100 population were highest for this age group (111 per 100 population). Comparing gender across the LA areas, generally there were slightly higher rates of females per 100 population, except for Blackpool UA which had higher rates for males across all age groups, and Fylde and Wyre LAs to a lesser extent, where rates were higher for males for some age groups. Overall, rates were highest for males and females aged 90 years and over in Blackpool UA (281 and 234 per 100 population respectively).

⁸ There were <5 records where the gender was unknown; these have been omitted from the table.

⁹ There was a proportion of records with large ages recorded which is likely due to a coding issue with the EDs' patient management systems (144 records which state the patient is aged 110 years or over); these records have been included in the analyses.

Table 12. Rate of injury attendances made by older people by LA of residence, age group and gender per 100 population, April 2012 to March 2015¹⁰

LA	60-69		70-79		80-89		90+	
	M	F	M	F	M	F	M	F
Blackburn with Darwen	21	22	21	26	34	45	58	76
Blackpool	69	59	104	86	175	162	281	234
Burnley	32	32	37	42	57	67	81	83
Chorley	19	23	25	30	46	64	65	100
Fylde	42	36	61	62	131	128	229	196
Hyndburn	13	13	14	18	31	36	57	68
Lancaster	11	13	12	18	21	28	36	41
Pendle	26	25	27	27	41	42	50	63
Preston	19	21	25	29	47	63	94	109
Ribble Valley	11	12	11	16	22	34	42	58
Rosendale	9	10	12	13	23	27	33	52
South Ribble	17	20	20	27	46	56	72	98
West Lancashire	6	6	7	11	21	24	35	55
Wyre	39	39	58	58	117	111	202	174
Lancashire	25	25	34	36	66	70	109	112
Gender combined	25		35		69		111	

The majority (84.7%) of attendances made by older people during the three year period were for other injuries (table 13). Of the specified injury groups, falls accounted for the largest proportion (13.2%). It should be noted that only Lancashire Teaching Hospitals NHS Foundation Trust (Chorley and South Ribble Hospital and Royal Preston Hospital) categorise falls as an injury group; the other trusts capture fall-related injuries within the other injury umbrella. The data, therefore, do not show an accurate representation of the proportion of fall-related injury attendances to the EDs across Lancashire.

Males aged between 60 and 69 years accounted for the largest proportion of assault-related injuries (44.6%); 60 to 69 year olds comprised of three in five (60.0%) DSH attendances (34.1% were male and 25.9% were female); nearly one-quarter (23.2%) of fall-related injury attendees were females aged between 80 and 89, followed by females aged between 70 and 79 years and between 60 and 69 years (16.9% and 15.0% respectively); for RTCs, three in ten (30.6%) were males aged between 60 and 69 years; and nearly two-fifths (38.8%) of sports injuries were sustained by 60 to 69 year old males.

¹⁰ There were <5 records where the gender was unknown; these have been omitted from the gender breakdown but included in the gender combined total.

Table 13. Number of injury attendances made by older people by injury group, age group and gender, April 2012 to March 2015^{11,12}

Injury group	60-69		70-79		80-89		90+		Total	
	M	F	M	F	M	F	M	F	N	%
Assault	171	65	63	30	12	24	6	11	383	0.3%
DSH	46	35	11	15	15	5	<10	***	135	0.1%
Fall	1,671	2,788	2,008	3,152	2,146	4,315	567	1,987	18,636	13.2%
Other injury	19,119	18,602	16,966	19,024	13,726	20,966	3,261	8,282	119,947	84.7%
RTC	649	511	329	317	154	122	19	18	2,119	1.5%
Sports injury	157	101	56	48	14	19	***	<10	405	0.3%
Total	21,813	22,102	19,433	22,586	16,067	25,451	3,861	10,308	141,625	100.0%

Looking at the rate of attendances per 1,000 population by injury group, age group and gender, rates were highest for fall-related injuries by females aged 90 years and over (1,022 per 1,000 population), followed by other injuries sustained by males and females aged 90 years and over (921 and 896 per 1,000 population respectively; table 14).

Table 14. Rate of injury attendances made by older people by injury group, age group and gender per 1,000 population, April 2012 to March 2015^{13,14}

Injury group	60-69		70-79		80-89		90+	
	M	F	M	F	M	F	M	F
Assault	2	1	1	0	0	1	2	1
DSH	1	0	0	0	1	0	1	0
Fall	83	137	157	224	402	561	759	1,022
Other injury	222	210	300	304	567	580	921	896
RTC	8	6	6	5	6	3	5	2
Sports injury	2	1	1	1	1	1	1	1
Total	253	250	344	361	663	704	1091	1115
Gender combined	251		353		688		1109	

Where ethnicity was recorded and/or stated, the vast majority (99.1%) of attendances made by older people to the EDs across Lancashire were white (table 15). Ethnicity is not recorded by East Lancashire Hospitals NHS Trust and Southport and Ormskirk Hospitals NHS Trust. Where data are collected, ethnicity was not stated or the patient was not asked in 10.5% of records, and data were missing from 2.0% of records.

Table 15. Number of injury attendances made by older people by ethnicity, April 2012 to March 2015

Asian	Black	Chinese	Mixed	Other	White	Total
568	106	30	44	95	94,903	95,746

¹¹ There were <5 records where the gender was unknown; these have been included in the injury group totals.

¹² Due to small numbers of firework injuries (n=5), these have been included in the 'Other injury' category throughout the report.

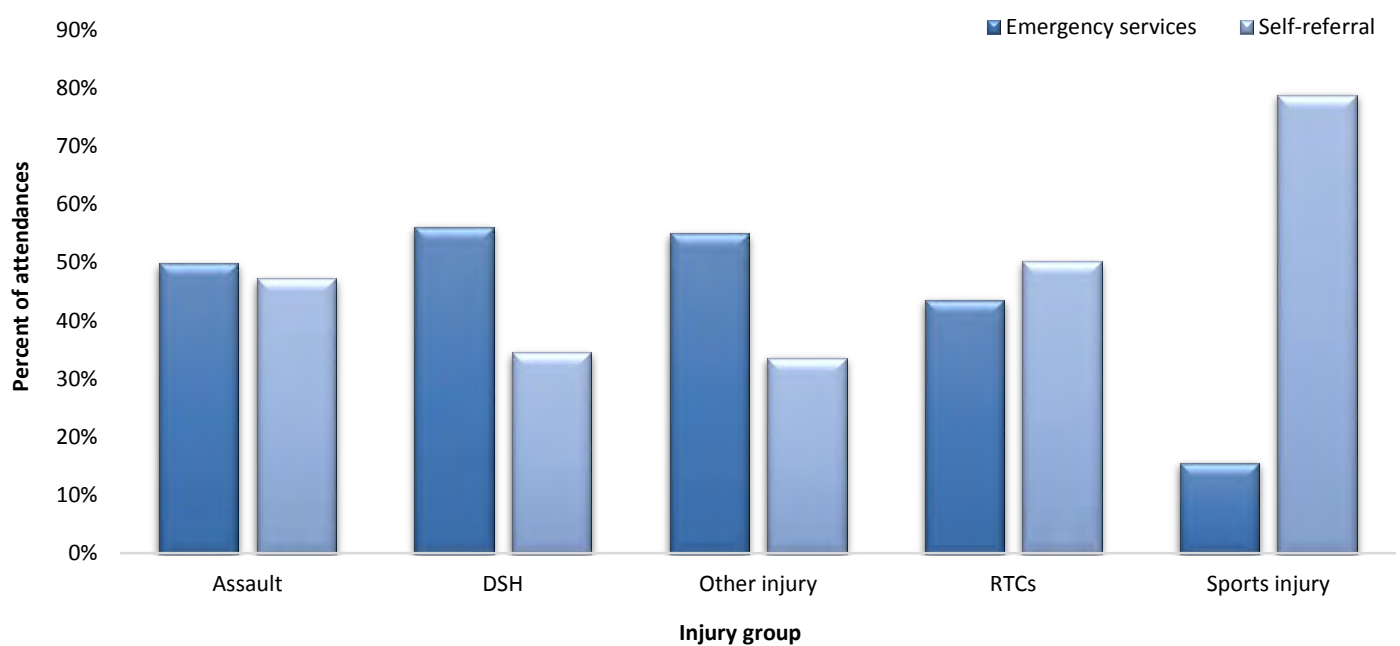
¹³ There were <5 records where the gender was unknown; these have been omitted from the gender breakdown but included in the gender combined total.

¹⁴ Due to falls only being recorded by Lancashire Teaching Hospitals NHS Foundation Trust, rates for this injury group have been calculated by attendances made by residents of and populations for Chorley, Preston and South Ribble LAs only. Rates for the gender combined total include attendances made by all Lancashire residents and populations for all LAs across Lancashire.

The following charts show selected referral sources, arrival modes, incident locations and disposal methods by injury group¹⁵. Data were selected to highlight key differences and inform community partners in commissioning or improving targeted interventions.

Figure 6 presents the percentages of older residents of Lancashire referred by the emergency services or self-referred for each injury group. Overall, 54.8% of older people were referred by the emergency services and 33.8% self-referred. DSH and other injury and had the highest proportions referred by the emergency services (56.0% and 55.0% respectively) while sports injuries had the lowest (15.5%).

Figure 6. Injury attendances made by older people by referral source (emergency services vs self-referral) and injury group, April 2012 to March 2015¹⁶



Drive Safely for Longer

The Lancashire Partnership for Road Safety offers a free course, Drive Safely for Longer, to drivers aged 65 years and over in Lancashire. The course is tailor-made and delivered as a two hour practical driving session and one hour follow-up session three months later. The aim of Drive Safely for Longer is to enhance practical driving skills and help older people stay mobile by continuing to drive safely for as long as possible (Lancashire Partnership for Road Safety, 2016).

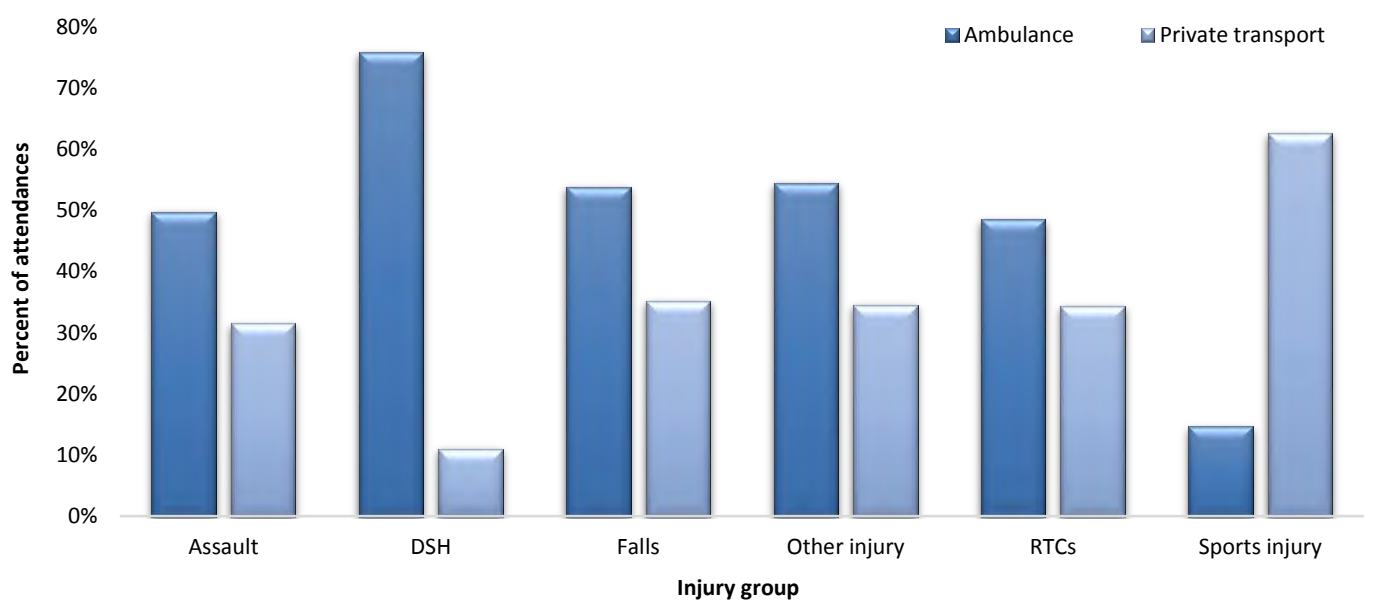
TIIG data reports 2,119 attendances made by older Lancashire residents between April 2012 and March 2015 for injuries sustained by RTCs (though type of road user is not specified), of which, over half (54.3%) were male (n=1,151) and over half (54.7%) of older people were aged between 60 and 69 years (n=1,160), followed by three in ten (30.5%) aged between 70 and 79 years (n=646).

¹⁵ See Appendices 1-4 for full data tables.

¹⁶ There were 30,271 records where referral source was not recorded. It should be noted that Lancashire Teaching Hospitals NHS Foundation Trust does not record referral source. As this is the only trust in Lancashire to categorise falls, this injury group has not been included in the chart.

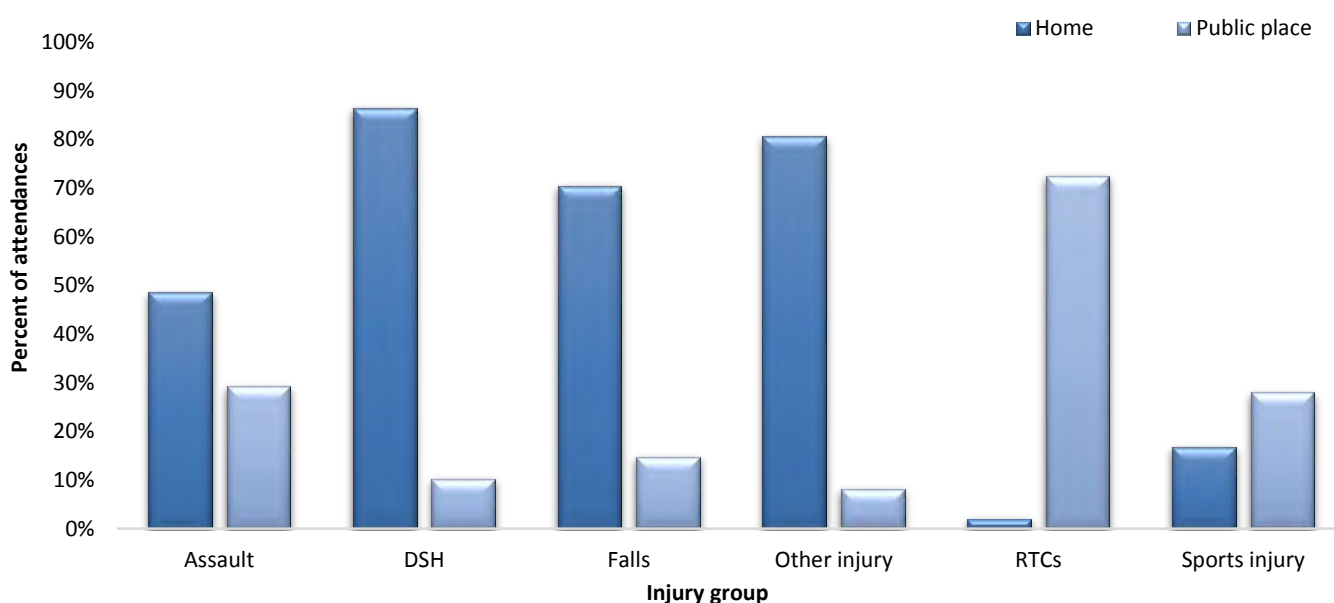
Shown in figure 7 are the percentages for older people arriving at the ED by ambulance or private transport. On the whole, 54.1% arrived at the ED by ambulance and over one-third (34.7%) arrived by private transport. A high proportion of DSH attendees arrived at the ED by ambulance (75.8%), while more than half of attendees with injuries sustained from other injury and falls also arrived by ambulance (54.4% and 53.8% respectively), compared to just 14.6% sports-related injury attendances.

Figure 7. Injury attendances made by older people by arrival mode (ambulance vs private transport) and injury group, April 2012 to March 2015¹⁷



Over three-quarters (77.6%) of incidents occurred at home and 10.2% occurred in a public place. Figure 8 presents the percentages of older residents of Lancashire who sustained injuries at home or in a public place. DSH had the highest proportion of injuries which occurred at home (86.4%), followed by other injury (80.5%) and falls (70.4%). Additionally, almost half (48.5%) of assaults occurred in the home.

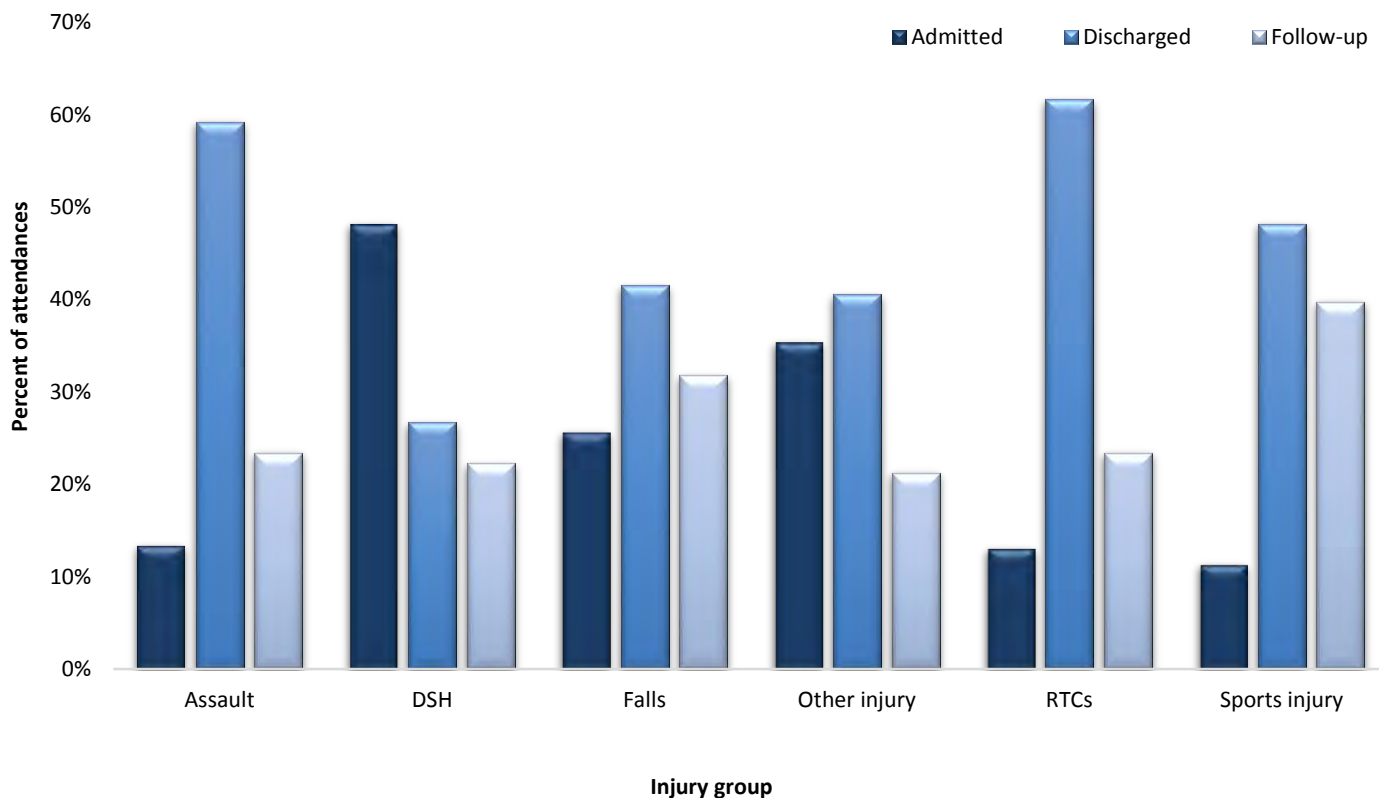
Figure 8. Injury attendances made by older people by incident location (home vs public place) and injury group, April 2012 to March 2015¹⁸



¹⁷ There were 4,125 records where arrival mode was not recorded.

The percentages of older people admitted, discharged or referred for follow-up treatment for each injury group is shown in figure 9. Overall, 41.0% were discharged with no follow-up treatment required, 33.6% were admitted to hospital and 22.7% were referred for follow-up treatment. The injury group with the highest proportion of older people admitted to hospital was DSH (48.1%); RTCs and assaults had the highest proportions discharged with no follow-up treatment required (61.6% and 59.2% respectively); and sports injuries had the largest proportion referred for follow-up treatment (39.8%), followed by falls (31.8%).

Figure 9. Injury attendances made by older people by disposal method (admitted vs discharged vs follow-up) and injury group April 2012 to March 2015¹⁹



¹⁸ There were 29,334 records where incident location was not recorded. It should be noted that East Lancashire Hospitals NHS Trust only started to record incident location in December 2013.

¹⁹ There were 640 records where the disposal method was not recorded.

This section of the report provides an overview of North West Ambulance Service (NWAS) data between April 2012 and March 2015. Data here are based on the location of where the ambulance was called out to rather than patient address and it may not necessarily be the location of where the incident took place. A number of records may relate to non-Lancashire residents and for this reason rates have not been calculated. It should also be noted that a large proportion of records are missing patients' age; therefore the number of call outs for those aged 60 years and over is inaccurate, though figures will still provide a useful resource to local partners working in injury prevention among older people.

DATA OVERVIEW

Between April 2012 and March 2015 there were a total of 56,719 injury-related ambulance call outs in Lancashire to those aged 60 years and over. The number of call outs increased by 0.2% between 2012/13 and 2013/14, but then decreased by 12.5% between 2013/14 and 2014/15 (table 16). This decrease in call outs is incongruent with ED attendance data, though it should be noted that the completion of patients' age varies and could therefore skew figures.

Table 16. Number of injury call outs to older people by month and financial year, April 2012 to March 2015

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/13	1,617	1,727	1,523	1,597	1,728	1,655	1,678	1,633	1,699	1,651	1,564	1,637	19,709
2013/14	1,644	1,691	1,656	1,647	1,657	1,681	1,669	1,656	1,724	1,668	1,448	1,599	19,740
2014/15	1,430	1,456	1,383	1,461	1,649	1,409	1,432	1,417	1,507	1,434	1,224	1,468	17,270
Total	4,691	4,874	4,562	4,705	5,034	4,745	4,779	4,706	4,930	4,753	4,236	4,704	56,719

The largest number of call outs for older people in Lancashire were seen on a Thursday (n=8,289), compared to Sunday, the day with the fewest (n=7,730), while call outs peaked between 08:00 and 09:59 and then gradually decreased²⁰.

²⁰ See Appendix 5 for data table.

The areas with the largest number of call outs were Blackpool (n=6,935; 12.2%) and Lancaster (n=6,017; 10.6%; figure 10).

Figure 10. Number of injury call outs to older people by LA of call out location, April 2012 to March 2015

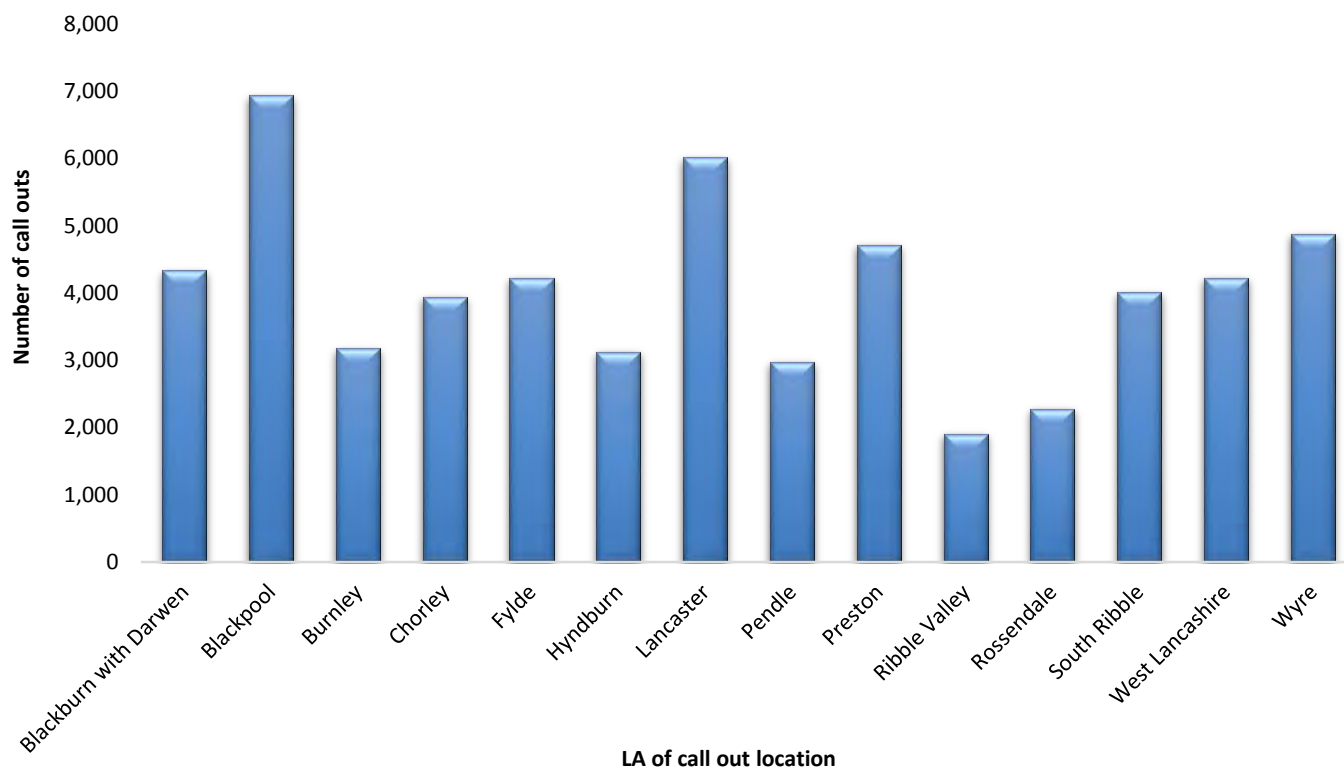


Table 17 presents the number of injury-related ambulance call outs across Lancashire for people aged 60 years and over by call out reason, age group and gender. Between 2012/13 and 2014/15, three in five (60.9%) call outs were for females (n=34,562). Those aged between 80 and 89 years accounted for the largest proportion of injury-related call outs (40.2%), followed by a quarter (24.7%) aged between 70 and 79 years.

Over the three year period, the majority (85.7%) of ambulance call outs for older people were due to falls. Traumatic injuries accounted for 5.8% of call outs, followed by psychiatric/suicide attempt (2.5%), traffic/transportation accidents (1.9%) and overdose/poisoning (1.7%).

Males aged between 60 and 69 years accounted for the largest proportion of assault/sexual assault call outs (35.3%); 80 to 89 year old females comprised one-quarter (24.8%) of call outs for choking incidents; the number of call outs for females hugely increases for those aged between 80 and 89 years, accounting for over one-quarter (26.9%) of fall-related injury call outs, with call outs to that age group accounting for 42.2% of call outs due to fall overall; over half (53.1%) of call outs for overdose/poisoning were aged between 60 and 69 years; 43.5% of call outs due to psychiatric/suicide attempt were aged between 60 and 69 years; 60 to 69 year old males accounted for 25.4% of traffic/transportation accidents; and, females aged between 80 and 89 years comprised of 24.7% of traumatic injuries.

Table 17. Number of injury call outs to older people by call out reason, age group and gender, April 2012 to March 2015²¹

Call out reason	60-69		70-79		80-89		90+		Total	
	M	F	M	F	M	F	M	F	n	%
Allergies/envenomation - sting/bite	62	91	56	83	36	84	9	29	450	0.8%
Animal bites/attacks	13	17	6	13	***	***	***	***	55	0.1%
Assault/sexual assault	61	18	28	21	10	20	6	9	173	0.3%
Burns (scalds)/explosion	16	17	14	12	15	24	***	<15	113	0.2%
Choking	61	56	74	58	64	129	13	65	520	0.9%
Drowning (near)/diving accident	12	***	***	***	***	***	0	0	24	0.0%
Electrocution/lightning	***	***	0	0	0	***	0	***	8	0.0%
Eye problems/injuries	<10	***	6	6	***	7	0	6	35	0.1%
Falls	3,204	3,139	5,420	6,329	7,443	13,064	2,542	7,451	48,602	85.7%
Overdose/poisoning (ingestion)	214	284	100	128	55	107	16	33	937	1.7%
Psychiatric/suicide attempt	332	283	190	183	154	190	37	44	1,413	2.5%
Stab/gunshot/penetrating trauma	16	***	***	***	5	***	0	***	29	0.1%
Traffic/transportation accidents	271	172	205	181	116	99	13	12	1,069	1.9%
Traumatic injuries (specific)	385	334	368	506	364	813	113	407	3,291	5.8%
Total	4,656	4,419	6,470	7,525	8,269	14,546	2,750	8,072	56,719	100.0%

²¹ There were 12 records where the gender was unknown; these have been included in the injury group totals.

FALLS IN OLDER PEOPLE

Fall-related injuries are the leading cause of death among older people (Department of Health, 2009a). Between April 2012 and March 2015, falls accounted for 13.2% ED injury attendances sustained by Lancashire residents aged 60 years and over. However, only Lancashire Teaching Hospitals NHS Foundation Trust (Chorley and South Ribble Hospital and Royal Preston Hospital) categorise falls as a specific injury group; the other trusts record fall-related injuries as “other injury”. When looking at attendances made to Chorley and South Ribble Hospital and Royal Preston Hospital, almost seven in ten (69.2%) were due to falls. NWAS data show the majority (85.7%) of ambulance call outs to older people across Lancashire were due to injuries sustained by a fall. It is therefore likely that there is a substantially larger proportion than 13.2% of older people presenting to EDs across Lancashire with injuries sustained from a fall. The following presents data captured by Lancashire Teaching Hospitals NHS Foundation Trust and NWAS.

EMERGENCY DEPARTMENT DATA

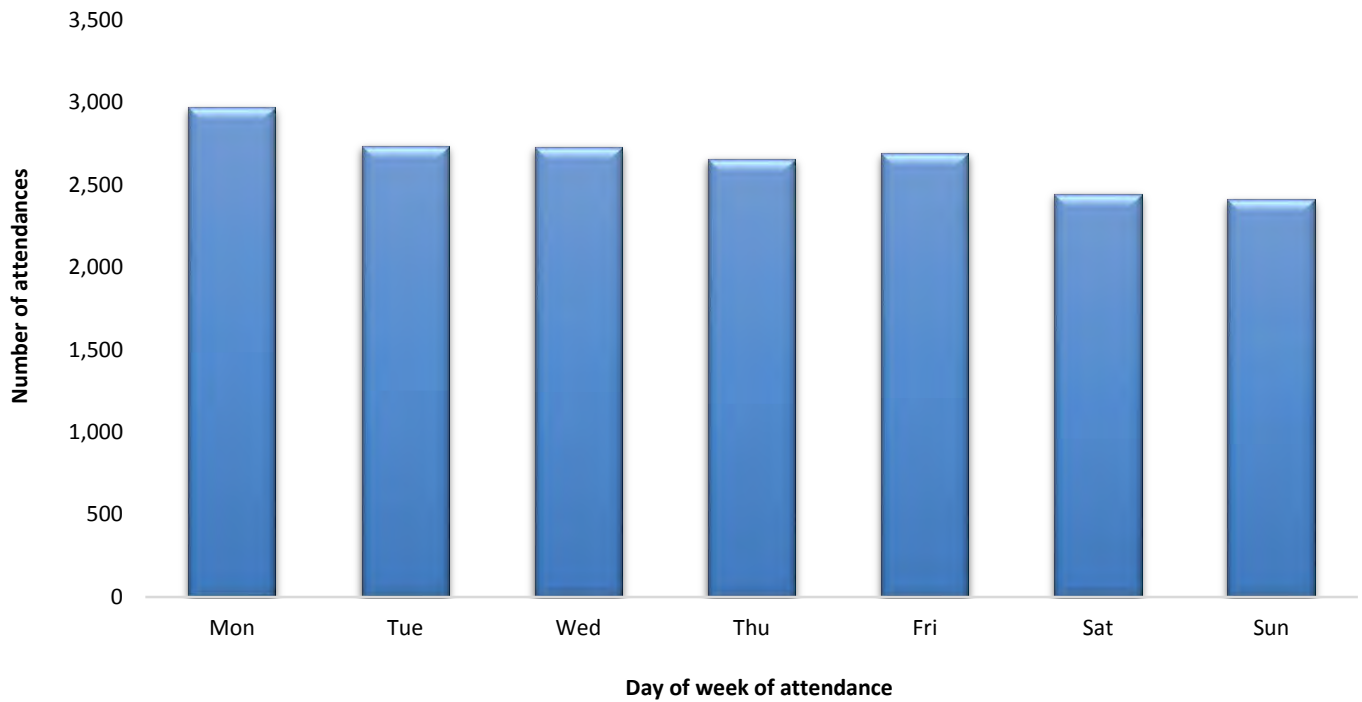
There were 18,636 fall-related injury attendances made by older Lancashire residents to Chorley and South Ribble Hospital and Royal Preston Hospital between April 2012 and March 2015. The number decreased by 1.9% between 2012/13 and 2013/14 but increased by 1.2% between 2013/14 and 2014/15 (table 18). Over the three year period, the months with the highest number of attendances, calculated as a daily average, were October 2012, July 2013 and August 2014 (19 per day).

Table 18. Number of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by month and financial year, April 2012 to March 2015

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/13	489	512	490	539	529	524	580	515	560	543	482	504	6,267
2013/14	462	554	554	599	548	501	515	486	491	463	469	506	6,148
2014/15	513	556	519	540	599	528	502	490	552	479	435	508	6,221
Total	1,464	1,622	1,563	1,678	1,676	1,553	1,597	1,491	1,603	1,485	1,386	1,518	18,636

Numbers of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital were fairly similar across the days of the week, with slightly more on a Monday (n=2,969) and slightly less at the weekend (Saturday=2,446; Sunday=2,410; figure 11).

Figure 11. Number of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by day of week of attendance, April 2012 to March 2015



As seen in figure 12, attendances made by older people for injuries sustained by a fall were generally during the day, peaking between 10:00 and 11:59 (n=3,268) before gradually decreasing.

Figure 12. Number of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by time group of attendance, April 2012 to March 2015

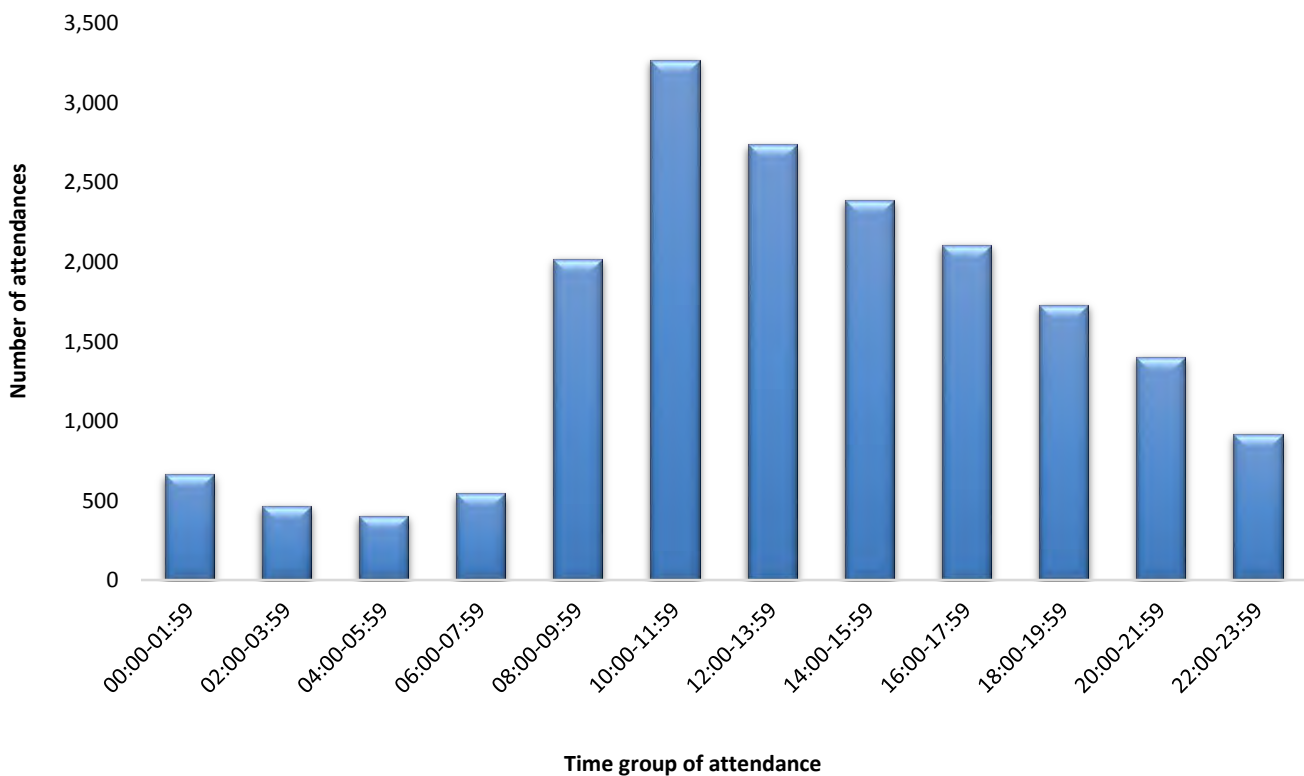


Table 19 shows Preston had a rate of 233 older people per 1,000 population attending Chorley and South Ribble Hospital and Royal Preston Hospital for fall-related injuries, followed by 187 for Chorley residents and 185 for South Ribble. The number and rate of attendances made to these two hospitals from people resident in other LAs across Lancashire have been included in the table for information purposes only and as the data represent fall attendances to one trust only, the total for Lancashire has been omitted.

Table 19. Number and rate (per 1,000 population) of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by LA, April 2012 to March 2015

LA	Population	Number	Rate
Blackburn with Darwen	27,816	51	2
Blackpool	36,414	48	1
Burnley	20,509	31	2
Chorley	27,657	5,157	187
Fylde	25,235	520	21
Hyndburn	18,536	26	1
Lancaster	35,226	31	1
Pendle	21,158	26	1
Preston	26,949	6,274	233
Ribble Valley	16,754	597	36
Rosendale	16,247	21	1
South Ribble	28,405	5,258	185
West Lancashire	30,140	90	3
Wyre	35,879	506	14

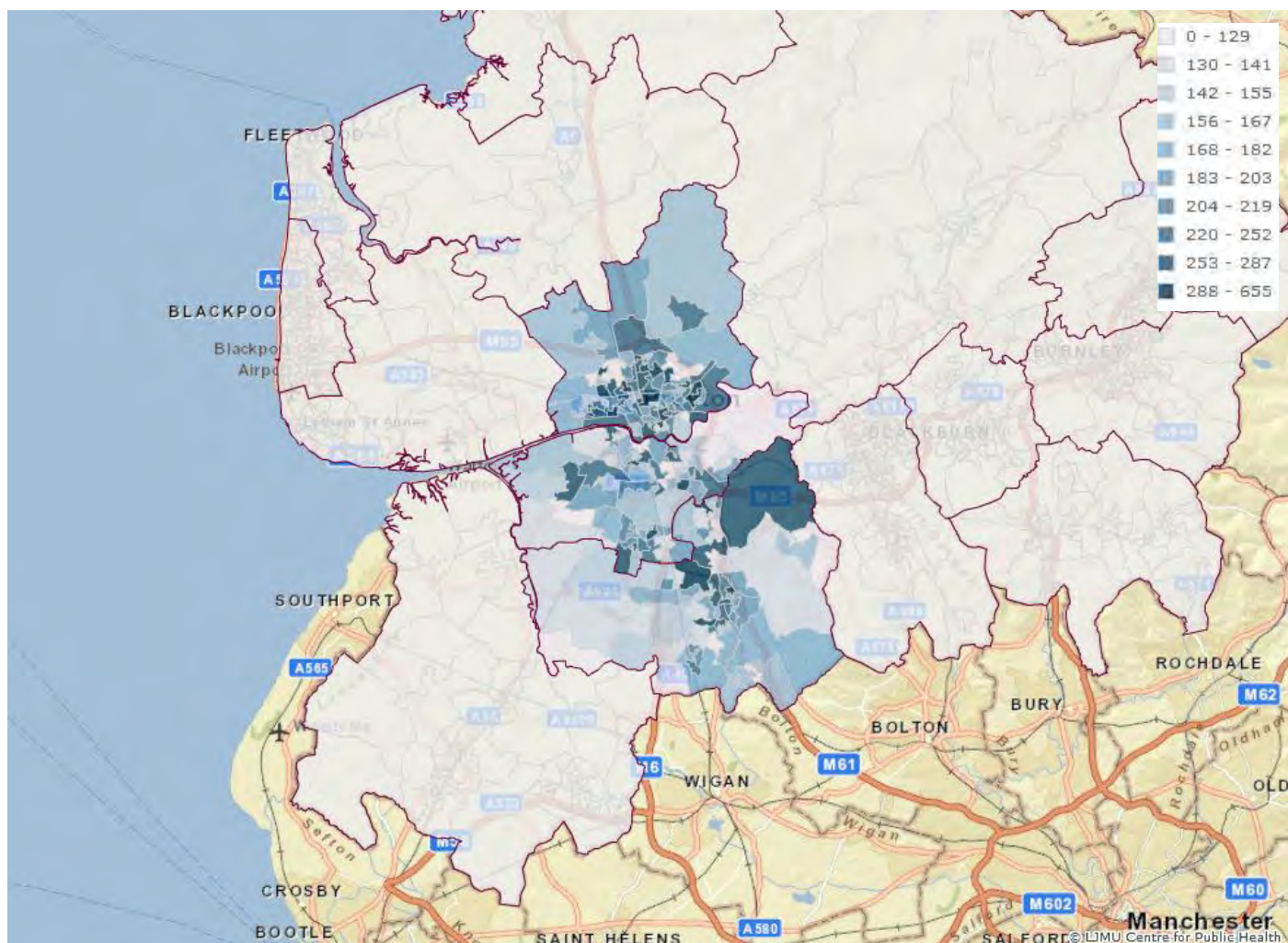
When looking at fall attendance rates by LSOA of residence for Chorley, Preston and South Ribble LAs, the highest rate was in Chorley 006A (655 per 1,000 population; table 20).

Table 20. Top five LSOAs for fall-related injury attendance rates made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital per 1,000 population, April 2012 to March 2015

LSOA name	LSOA code	Population	Number	Rate
Chorley 006A	E01024929	287	188	655
Preston 004D	E01025300	467	259	555
South Ribble 007B	E01025405	412	219	532
Chorley 001B	E01024952	375	198	528
Preston 017G	E01033224	150	78	520

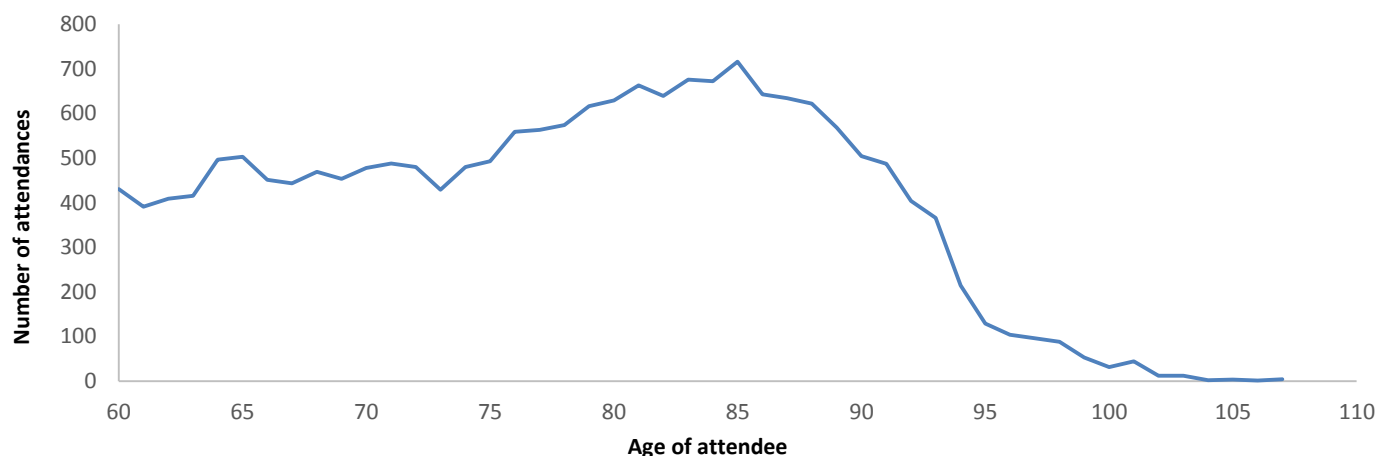
Figure 13 shows the rate of fall-related injury attendances per 1,000 population for older residents of Chorley, Preston and South Ribble LAs only.

Figure 13. Rate of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by LSOA of residence per 1,000 population, overlaid by LA boundaries (Chorley, Preston and South Ribble residents only), April 2012 to March 2015



Females comprised 65.7% of fall attendees among people aged 60 years and over (n=12,242). Of both sexes, over one-third (34.7%) were aged between 80 and 89 years (n=6,462), followed by 27.7% aged between 70 and 79 years and 23.9% aged between 60 and 69 years (n=4,460). Figure 14 shows that generally the number of fall-related injuries increased as age increased up until around 90 years old, when the number started to decrease, which is likely to be due to lower population numbers of people aged 90 years and over.

Figure 14. Number of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by age, April 2012 to March 2015



To further explore the number of attendances and population figures, table 21 presents the rate of fall-related injury attendances to Chorley and South Ribble Hospital and Royal Preston Hospital per 100 population for Chorley, Preston and South Ribble LAs only. Even though the number of attendances for people aged 90 years and over are lower in comparison to the other age groups, the rates per 100 population are higher for this age group (an average rate of 75 per 100 population). Rates were highest for females aged 90 years and over in all three LAs where attendees to Chorley and South Ribble Hospital and Royal Preston Hospital generally reside (Preston = 99 per 100 population; Chorley = 87 per 100 population; South Ribble = 87 per 100 population).

Table 21. Rate of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by LA of residence, age group and gender per 100 population (Chorley, Preston and South Ribble residents only), April 2012 to March 2015

LA	60-69		70-79		80-89		90+	
	M	F	M	F	M	F	M	F
Chorley	6	12	13	19	34	52	56	87
Preston	9	13	18	23	39	54	83	99
South Ribble	7	11	12	19	36	46	64	87
Average gender combined	9		15		41		75	

Where ethnicity was stated, the majority (98.0%) of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital across Lancashire were white (table 22).

Table 22. Number of fall-related injury attendances made by older people to Chorley and South Ribble Hospital and Royal Preston Hospital by ethnicity, April 2012 to March 2015

Asian	Black	Chinese	Mixed	Other	White	Total
295	36	***	16	<20	17,838	18,205

As discussed earlier, over half (53.8%) of fall-related injury attendees arrived by ambulance; 70.4% of falls occurred at home; and, 31.8% were referred for follow-up treatment and 25.6% were admitted to hospital with their injuries²².

²² See Appendices 2-4 for full data tables.

NORTH WEST AMBULANCE SERVICE DATA

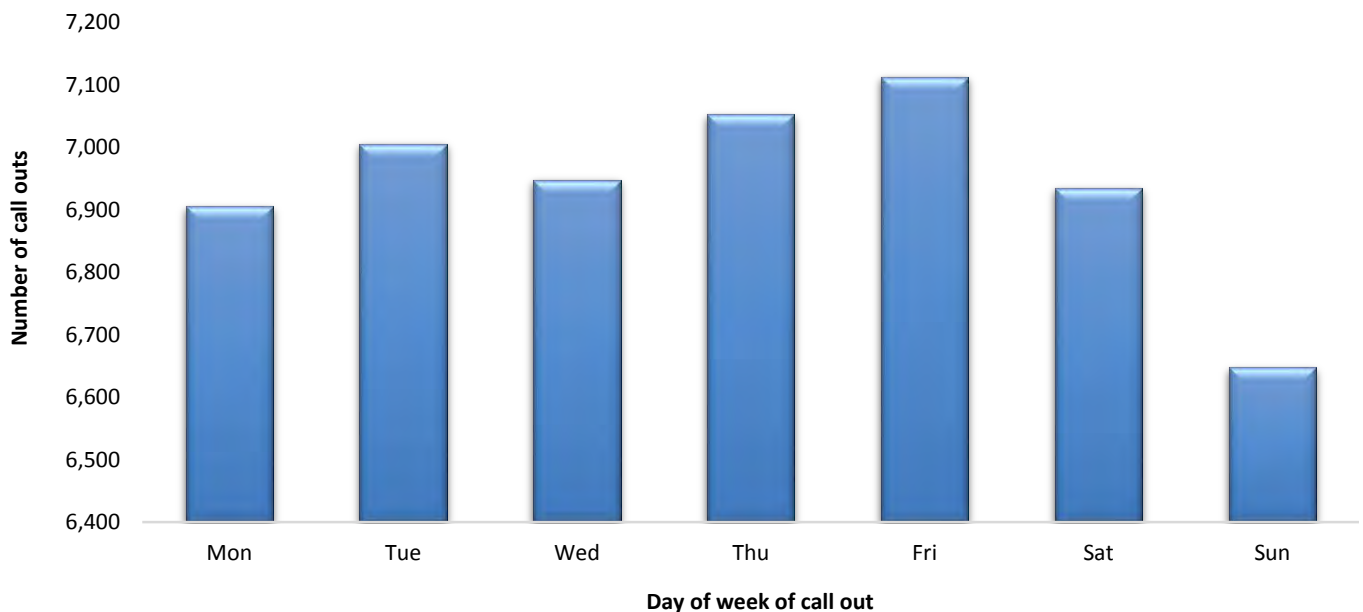
There were 48,602 ambulance call outs due to falls between April 2012 and March 2015. The number of fall-related call outs decreased by 14.7% between 2012/13 and 2014/15. This decrease in call outs is incongruent with ED attendance data, though it should be noted that the completion of patients' age varies and could therefore skew figures. The month with the highest number of call outs, calculated as a daily average, was February 2013 (51 per day), followed by May and August 2012 (49 per day; table 23).

Table 23. Number of fall-related injury call outs for older people by month and financial year, April 2012 to March 2015

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/13	1,394	1,504	1,341	1,371	1,514	1,418	1,450	1,412	1,496	1,358	1,421	1,415	17,094
2013/14	1,418	1,473	1,410	1,408	1,423	1,439	1,408	1,444	1,483	1,221	1,348	1,456	16,931
2014/15	1,194	1,242	1,150	1,222	1,365	1,191	1,204	1,213	1,292	1,246	1,038	1,220	14,577
Total	4,006	4,219	3,901	4,001	4,302	4,048	4,062	4,069	4,271	3,825	3,807	4,091	48,602

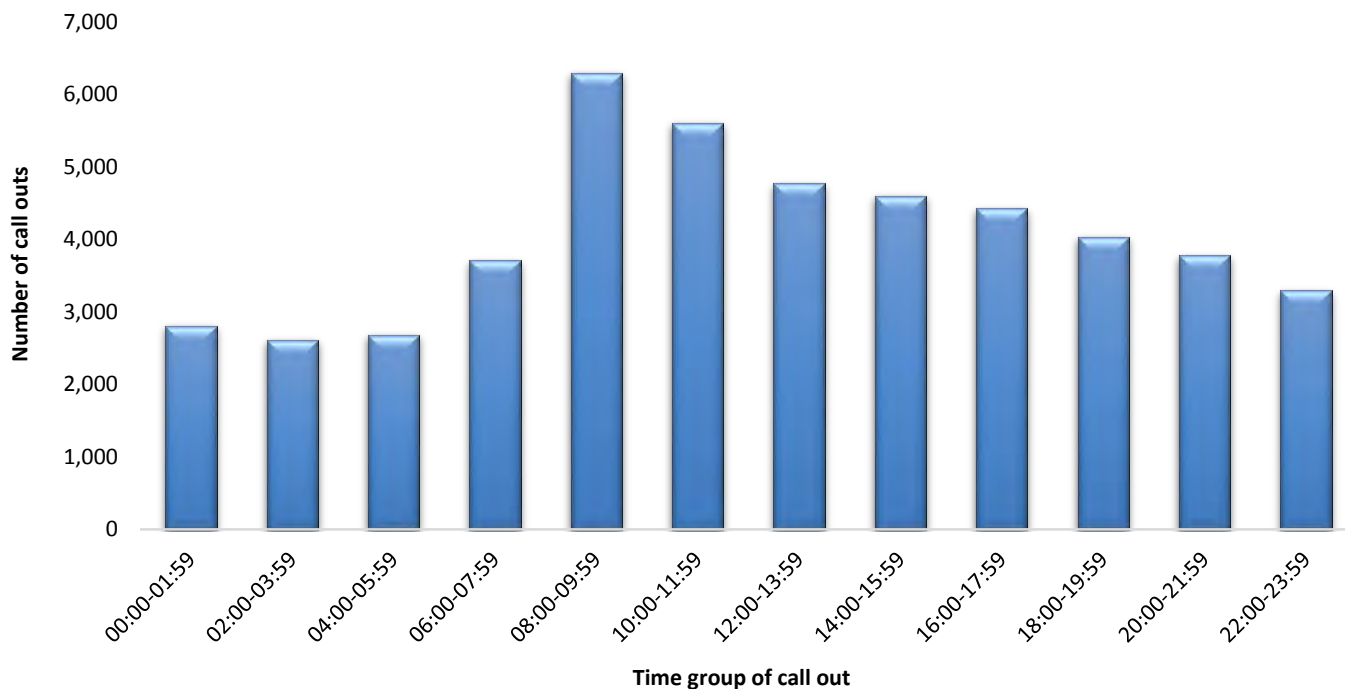
Figure 15 shows slightly more call-outs due to falls on a Friday (n=7,112), compared to 6,647 on a Sunday, the day with the fewest.

Figure 15. Number of fall-related call outs to older people by day of week of call out, April 2012 to March 2015



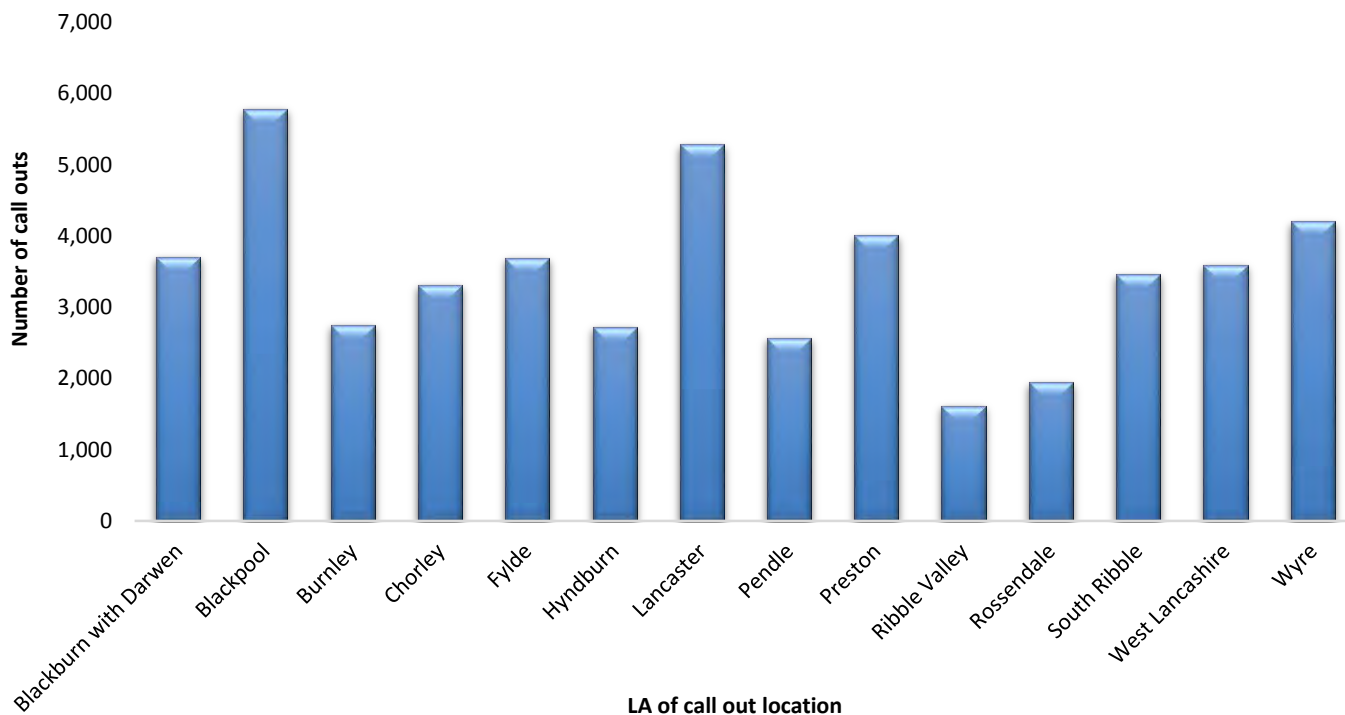
Fall-related call outs were generally during the day, with the number peaking between 08:00 and 09:59 (n=6,293) before steadily decreasing (figure 16).

Figure 16. Number of fall-related call outs to older people by time group of call out, April 2012 to March 2015



The areas with the largest number of call outs for injuries sustained by a fall were Blackpool (n=5,777; 11.9%) and Lancaster (n=5,281; 10.9%; figure 17).

Figure 17. Number of fall-related call outs to older people by LA of call out location, April 2012 to March 2015



Females accounted for 61.7% of fall-related injury call outs among those aged 60 years and over (n=29,983). Of both sexes, over two in five (42.2%) were aged between 80 and 89 years (n=20,513), followed by 24.2% aged between 70 and 79 years (n=11,750) and 20.6% aged 90 years and over (n=9,995).

Multi-factorial falls risk assessment and intervention

Falls are the leading cause of injury-related death among older people (Department of Health, 2009a) and almost a third (30%) of those aged over 65 years who live alone will experience at least one fall a year (National Institute for Health and Care Excellence, 2014).

The National Institute for Health and Care Excellence (2013) recommends a multi-factorial falls risk assessment for older people who present for medical attention due to a fall, report recurrent falls or demonstrate abnormalities of gait and/or balance. The assessment has multiple components with the aim of identifying risk factors for falling, including: vision; medication; gait, balance and mobility; osteoporosis risk; neurological function; cardiovascular status; and, home hazards.

Identifying individual risk allows multi-factorial individualised interventions to be applied appropriately, while promoting independence and improving physical and psychological function (National Institute for Health and Care Excellence, 2013). The multi-factorial approach provides a combination of interventions depending on individual risk, and although results have been inconsistent, they've been shown to reduce numbers of falls, and is particularly effective for those with a history of falls (Wood et al., 2010).

RECOMMENDATIONS

Recommendations presented here are derived from evidence reported in the literature and information presented in this report, including TIIG and NAWAS data. The recommendations have been presented in terms of data collection and quality, and prevention and intervention.

DATA COLLECTION AND QUALITY

ED data collection and sharing is generally excellent in Lancashire; frequent ED meetings and the multi-agency TIIG steering group are areas of particularly good practice. However, there are several areas where data collection and quality may be improved.

- Currently only Lancashire Teaching Hospitals NHS Foundation Trust (Chorley and South Ribble Hospital and Royal Preston Hospital) categorise falls as a specific injury group; the other trusts record fall-related injuries as “other injury”. Mechanisms to enable the other EDs in Lancashire to further categorise unintentional injuries to include falls should be considered which can be achieved through multi-agency meetings and discussions, primarily between the TIIG team and EDs. A potential barrier may be whether the patient management system used by EDs can be easily modified to allow for the categorisation of falls. This may be overcome with cooperative action and by highlighting the importance of such data in informing prevention and intervention strategies.
- Consider similar mechanisms to enable East Lancashire Hospitals NHS Trust and Southport and Ormskirk Hospital Trust to record ethnicity, although accessing additional information from the data warehouse may have a cost implication. Improvements would also be welcomed in the recording of ethnicity at other trusts; of those that do record ethnicity, 10.5% did not have an ethnicity stated or the patient was not asked and data were missing from 2.0% of records.
- Similarly consider mechanisms to enable Lancashire Teaching Hospitals NHS Foundation Trust to record referral source and attendance type (whether first visit or follow-up).

PREVENTION AND INTERVENTION

Reducing intentional and unintentional injuries is a key objective of local councils, public health professionals, service providers and others that make up Community Safety Partnerships (CSPs). EDs can play a central and leading role, not only in providing rich and timely data, but in providing objective and informed recommendations for targeted prevention measures and interventions.

- Consider work to further explore the relationship between deprivation and injuries in older people. Better understanding the cause of this association may inform current service provision and target education and awareness campaigns in areas with high incidents of particular injuries.
- Consider the potential for LAs to use the rates for injury attendances to appraise current level of, and identify any potential gaps in, service provision. Findings may be used to inform needs assessment and commissioning decision making. Also consider work in specific LSOAs which have been flagged for high prevalence of injuries in older people; for example Blackpool O10C.

- Explore variable risk factors in falls, particularly why females were more likely to suffer injuries sustained from a fall when compared to males. A proportion of this discrepancy is likely to be due to the difference in life expectancy (i.e. females live longer 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.
- Consider ways that TIIG data can feed into multifaceted prevention strategies to reduce the risk of falls for older people. Such strategies should consider education, training, creating safer environments, fall-related research and establishing effective policies to reduce risk (World Health Organisation, 2012).

It is understood that EDs are demanding places of work, that staff are frequently operating at and above capacity and that recording information at reception takes valuable time. However, the implementation of these recommendations would be likely to initiate substantial positive change by preventing and reducing injuries among older people of Lancashire.

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Appendix 1. Injury attendances made by older people by referral source and injury group, April 2012 to March 2015^{23,24}

Referral source	Assault	DSH	Other injury	RTCs	Sports injury	Total
Emergency services	116	65	60,250	508	46	60,985
General medical practitioner	***	***	3,819	6	8	3,837
Other	<10	<10	8,649	68	9	8,740
Self-referral	110	40	36,714	585	234	37,683
Work	0	0	109	0	0	109
Total	233	116	109,541	1,167	297	111,354

Appendix 2. Injury attendances made by older people by arrival mode and injury group, April 2012 to March 2015^{25,26}

Arrival mode	Assault	DSH	Falls	Other injury	RTCs	Sports injury	Total
Ambulance	180	97	10,028	63,079	984	59	74,427
By foot	<20	***	161	'Other 4,443	128	47	4,797
Other	18	14	70	3,749	93	21	3,965
Private transport	114	14	6,559	40,034	696	252	47,669
Public transport	<15	***	461	2,799	41	8	3,325
Taxi/dropped off	19	0	1,354	1,841	87	16	3,317
Total	362	128	18,633	115,945	2,029	403	137,500

Appendix 3. Injury attendances made by older people by incident location and injury group, April 2012 to March 2015²⁷

Incident location	Assault	DSH	Falls	Other injury	RTCs	Sports injury	Total
Educational establishment	0	0	6	43	0	0	49
Holiday	***	0	324	147	***	***	479
Home	133	102	13,113	73,691	32	36	87,107
Home - other person's	<10	0	415	170	***	0	595
Hospital	***	0	129	38	***	***	172
Other	<25	***	1,462	8,784	371	26	10,667
Pub/club/bar	8	0	30	13	0	0	51
Public building	***	0	131	40	<10	0	177
Public place	80	12	2,741	7,399	1,128	60	11,420
Public transport	0	***	21	14	***	0	39
Sport	0	0	51	33	0	89	173
Work	20	0	213	1,119	<10	***	1,362
Total	274	118	18,636	91,491	1,557	215	112,291

²³ There were 30,271 records where referral source was not recorded; these have been omitted from the table. It should be noted that Lancashire Teaching Hospitals NHS Foundation Trust does not record referral source. As this is the only trust in Lancashire to categorise falls, this injury group has not been included in the table.

²⁴ 'Other' includes: educational establishment, health care provider: same or other and other.

²⁵ There were 4,125 records where arrival mode was not recorded; these have been omitted from the table.

²⁶ 'Ambulance' includes: helicopter, patient transport ambulance and voluntary ambulance; 'Other' includes: other, police escort and prison escort.

²⁷ There were 29,334 records where incident location was not recorded; these have been omitted from the table. It should be noted that East Lancashire Hospitals NHS Trust only started to record incident location in December 2013.

Appendix 4. Injury attendances made by older people by disposal method and injury group, April 2012 to March 2015^{28,29}

Disposal method	Assault	DSH	Falls	Other injury	RTCs	Sports injury	Total
Admitted	51	65	4,780	42,205	277	46	47,424
Died	0	***	13	87	5	***	106
Discharged	225	36	7,735	48,346	1,305	195	57,842
Follow-up	89	30	5,920	25,291	494	161	31,985
Other	15	***	188	3,383	36	***	3,628
Total	380	135	18,636	119,312	2,117	405	140,985

Appendix 5. Number of injury call outs to older people by day of week and time group of call out, April 2012 to March 2015

Time group	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-01:59	426	437	423	430	461	462	557	3,196
02:00-03:59	412	428	406	446	394	407	436	2,929
04:00-05:59	448	407	400	453	451	421	375	2,955
06:00-07:59	605	590	605	555	604	579	603	4,141
08:00-09:59	1,046	1,066	1,022	1,048	1,037	969	948	7,136
10:00-11:59	969	949	981	999	999	886	843	6,626
12:00-13:59	841	861	872	884	819	791	689	5,757
14:00-15:59	756	851	831	815	791	800	669	5,513
16:00-17:59	781	792	770	774	781	756	715	5,369
18:00-19:59	679	668	707	700	653	678	723	4,808
20:00-21:59	625	620	629	655	640	663	635	4,467
22:00-23:59	530	498	471	530	603	653	537	3,822
Total	8,118	8,167	8,117	8,289	8,233	8,065	7,730	56,719

²⁸ There were 640 records where the disposal method was not recorded; these have been omitted from the table.

²⁹ 'Other' includes: left before treatment, left before triage, left refusing treatment and other.

