



REPORT TO: PERFORMANCE & AUDIT COMMITTEE – 12 SEPTEMBER 2017
REPORT ON: FALLS PERFORMANCE
REPORT BY: CHIEF FINANCE OFFICER
REPORT NO: PAC26-2017

1.0 PURPOSE OF REPORT

The purpose of this report is to provide an in depth analysis of falls related hospital admissions in Dundee and an update regarding the current model of service for people who are at risk of falling in Dundee.

2.0 RECOMMENDATIONS

It is recommended that the Performance & Audit Committee (PAC):

- 2.1 Notes the content of this report including the analysis of falls related hospital admissions outlined in section 4.2 and appendix 1 and risk assessment outlined in section 5.
- 2.2 Notes the current activity to reduce falls related hospital admissions, prevent incidences of falls and support people who have fallen or who are at risk of a fall (section 4.3).
- 2.3 Notes the future priority areas (section 4.4).

3.0 FINANCIAL IMPLICATIONS

None.

4.0 BACKGROUND INFORMATION

- 4.1.1 National Health and Wellbeing Indicator 16 is "Falls rate per 1,000 of >65 population". The focus of this indicator is the number of falls that occur in the population (aged 65 plus). The indicator is measured using data gathered by Information Services Division (ISD) on the number of patients aged 65 plus who are discharged from hospital with relevant emergency admission codes.
- 4.1.2 This indicator is monitored in the Quarterly Performance Report and was included in the Quarters 3 and 4 report (PAC16-2017) and the Annual Performance Report (DIJB29-2017). Both reports highlighted the particularly high rate of hospital admissions in Dundee of people aged 65+ as a result of a fall.
- 4.1.3 In 2016/17 Dundee had a rate of 26.0 hospital admissions as a result of a fall per 1,000 people aged 65+. Benchmarking with other Partnerships shows that Dundee had the 2nd highest falls rate in Scotland and was significantly higher than the Scottish rate of 20.9 admissions as a result of a fall per 1,000 people aged 65+. Due to poor performance in this area the PAC requested a detailed analysis of falls in Dundee at its meeting of 17 March 2017.
- 4.1.4 Falls can have a significant impact on an older person's independence and quality of life, impeding a person's mobility and confidence. However, falls are not an inevitable consequence of old age. Well-organised services, delivering recommended and evidence based practices can prevent many falls and fractures in older people in the community setting.

Rehabilitation services are key to preventing repeat falls. In addition, the safety of a person's immediate environment as well as a review of their prescribed medicines are important alongside a multifactorial assessment including; eyesight, footwear, foot condition, bone health, nutrition, continence, daily activities, cognition etc. For every £1 invested in physiotherapy rehabilitation into falls services, £4 is saved across health and social care services (Chartered Society of Physiotherapy).

- 4.1.5 A recently published economic evaluation (The high cost to health and social care of managing falls in older adults living in the community in Scotland) provided an estimate of the cost to health and social care services in Scotland of managing the consequences of falls is in excess of £470 million and without intervention is set to rise over the next decade as our population ages and the proportion with multi-morbidity and who use multiple medications grows.

4.2 WHAT THE DATA IS TELLING US

- 4.2.1 In 2016/17 Dundee had the 2nd highest rate of hospital admissions due to a fall in Scotland for people aged 65+ with 26 falls admissions per 1,000 people aged 65+.
- 4.2.2 There was variation across LCPPs and neighbourhoods for numbers of hospital admissions due to a fall by people aged 65+. In 2016/17 West End had the highest rate (32 admissions per 1,000 people) and The Ferry had the lowest rate (19.8 admissions per 1,000 people).
- 4.2.3 There were more than twice as many falls admissions in 2016/17 for females aged 65+ than for males. Additionally, in the 85+ age group there were falls related hospital admissions for one in every 20 men and one in every 12 women.
- 4.2.4 Due to the ageing population in Dundee, a sharp rise in age related falls admissions has been projected from 2032 (see chart 4 in appendix 1).
- 4.2.5 Chronic heart disease (CHD), arthritis and chronic obstructive pulmonary disease (COPD) are the most common long term conditions which underlie a falls admission. Approximately 29% of all people aged 65+ who were admitted due to a fall had CHD, 27% had arthritis and 23% had COPD.
- 4.2.6 40.8% of people admitted due to a fall had three long term conditions, 22.1% had two, 20.5% had one and 16.6% did not have a long term condition.
- 4.2.7 The largest 'need group' of people who were admitted due to a fall were 'frail' (35%) or had 'high complex conditions' (19%).
- 4.2.8 Alcohol and drug use only accounts for reasons behind 4% of falls admissions for people aged 65+, however there is inequality across the city. 45% of falls related admissions for males who were aged 65-74 were as a result of alcohol use. When combined with the 45-64 age group, over 90% of falls related hospital admissions for males aged 45-74 were alcohol related. When considering people aged 18+, over 40% of falls admissions for males in Coldside were alcohol related and over 25% of falls admissions for males in Maryfield, East End and Lochee were alcohol related.
- 4.2.9 Frailty and high complex conditions are the 'need groups' most prevalent in people admitted to hospital due to a fall, however 26.6% of people with 'frailty' did not receive home care and 62% of people with high complex conditions did not receive home care.
- 4.2.10 The data suggests that having a community alarm may reduce unnecessary hospital admissions as 66% of people aged 65+ who were admitted to hospital due to a fall did not have a community alarm. Also, people aged 65+ who attended accident and emergency due to a fall and who did not have a community alarm, were more than twice as likely to be discharged back home rather than being admitted to an acute ward as people with a community alarm.
- 4.2.11 The cost of falls in 2015/16 in Dundee was £6.5M and costs varied by LCPP. Lochee was the costliest LCPP (£1,030,543) and North East had the lowest costs (£444,220).

4.3 CURRENT SERVICE MODEL

4.3.1 Falls Classes

There are currently six falls prevention classes held each week in three locations – Mackinnon Centre, Kings Cross Hospital and Royal Victoria Hospital and these classes accept self, carer and professional referrals. These classes are organised and run by the Community Rehabilitation and Falls Team. It is intended that the location of falls classes will be reviewed in line with locality plans and neighbourhood level data about falls. These classes are supported by physiotherapists and support workers and are aimed at people who have fallen or who have a fear of falling. The classes improve strength, balance, confidence and function. Education is also provided to participants on reducing the risk of falls in the future. The evidence base behind providing classes to prevent falling states that balance and strength must be challenged in order for improvements to be seen. For this reason there are three levels which are aimed at different levels of ability and frailty. There is also an OTAGO based maintenance class within the community, to prevent re-referrals and recurrent falls.

4.3.2 Support in Care Homes

The community rehabilitation team provided support to care home employees, particularly regarding the OTAGO Falls Programme. All care homes in Dundee that expressed interest in receiving support have been provided with training to employees. There was a high uptake in training in the care homes located in Broughty Ferry. The care homes are expected to roll out training and the quality of the approach to prevent falling in care homes is expected to vary. Further work is required to ensure a sustainable model is in place across Dundee Care Homes.

4.3.3 Emergency Department (ED)

On a daily basis the falls team receives a list of people who attended the ED following a fall. The team contacts each person by telephone and then signposts to information and refers to services which can support underlying issues such as balance, substance misuse, polypharmacy and sensory impairment. The musculoskeletal and community rehabilitation physiotherapy teams provide support to people with dischargeable injuries, such as a shoulder rotator cuff tear, or stable fracture. In addition to a telephone call, people receive a pack in the post which includes a cover letter, falls prevention booklet, self / professional / carer referral form for the falls service and also the exercise classes. The pack also includes information about DIAL – OP service which signposts to all services and classes in Dundee. This includes a range of voluntary sector supports including a morning call service to check a person is safe and well.

4.3.4 In Patients and Out Patients

On a daily basis (Monday to Friday) Physiotherapy Services identify from referred patients aged 65+ who have either fallen twice in the last 12 months or who are at risk of a fall. They undertake balance, gait and strength assessments to reduce the risk of future falls. Patients are provided with strength and balance exercises, a falls booklet and referred to either the community rehabilitation team or the falls service.

4.3.5 Community Equipment Loan Service

Dundee and Angus Health and Social Care Partnerships launched a new shared community equipment loan service for people with disabilities living in Dundee and Angus. The new venture is based at the Dundee Independent Living and Community Equipment Centre in Dundee and provides, delivers, installs, repairs, maintains and recycles a range of equipment to help people of all ages living in Dundee to live independently. It also provides a technical advice service and carries out risk assessments with medical and care professionals, both in-store and in people's homes.

4.4 PRIORITY AREAS FOR IMPROVEMENT

- 4.4.1 A Tayside falls prevention and management framework for 2017 – 2020 is in development although there is currently no agreed implementation date. This will provide the infrastructure to monitor progress in the community, hospital and care homes towards preventing the incidence of falls and reducing the negative effect of falling on people who fall and their carers. In the meantime, services in Dundee recognise that more can be achieved including;

- recognising the need to work more efficiently within existing resources including the strengthening of links with community / voluntary groups and broader stakeholders.
- the provision of rolling and tailored classes to ensure more flexible and efficient service delivery providing more responsive and accessible classes.
- discussions with Dundee College to start a project where students are trained in OTAGO and then with Community Rehabilitation Team support are able to implement it within care homes.
- the implementation of a home based OTAGO project for patients who are unable to attend the class.
- the development of a pathway for use by the Scottish Ambulance Service to help avoid the conveyance of service users that have fallen, but are uninjured, to hospital. This will involve referring directly to the falls service and the first contact, out of hours and social care response teams. Work is currently being undertaken to develop cross-sector working and promote the importance of all these services, recognising potential falls risk to the service user and referring for assessment as appropriate.

5.0 RISK ASSESSMENT

Risk 1 Description	The risk of not reducing the rate of hospital admissions due to a fall could affect; outcomes for individuals and their carers, spend associated with unscheduled hospital admissions and the reputation if the Partnership's performance does not improve.
Risk Category	Financial, Governance, Political
Inherent Risk Level	15 – Extreme Risk
Mitigating Actions (including timescales and resources)	<ul style="list-style-type: none"> - The in depth analysis included in this paper and appendix will be used to inform senior managers. - The Tayside falls prevention and management framework will provide an infrastructure to monitor progress in the community, hospital and care homes towards preventing the incidence of falls and reducing the negative effect of falling on people who fall and their carers. - The priority areas for improvement (section 4.4) have been developed to reduce the rate of hospital admissions as a result of a fall.
Residual Risk Level	9 – High Risk
Planned Risk Level	5 – Moderate Risk
Approval recommendation	Given the moderate level of planned risk, this risk is deemed to be manageable.

6.0 POLICY IMPLICATIONS

This report has been screened for any policy implications in respect of Equality Impact Assessment. There are no major issues.

7.0 CONSULTATIONS

The Chief Officer, Head of Service - Health and Community Care and the Clerk were consulted in the preparation of this report.

8.0 BACKGROUND PAPERS

None.

Dave Berry
Chief Finance Officer

DATE: 21 August 2017



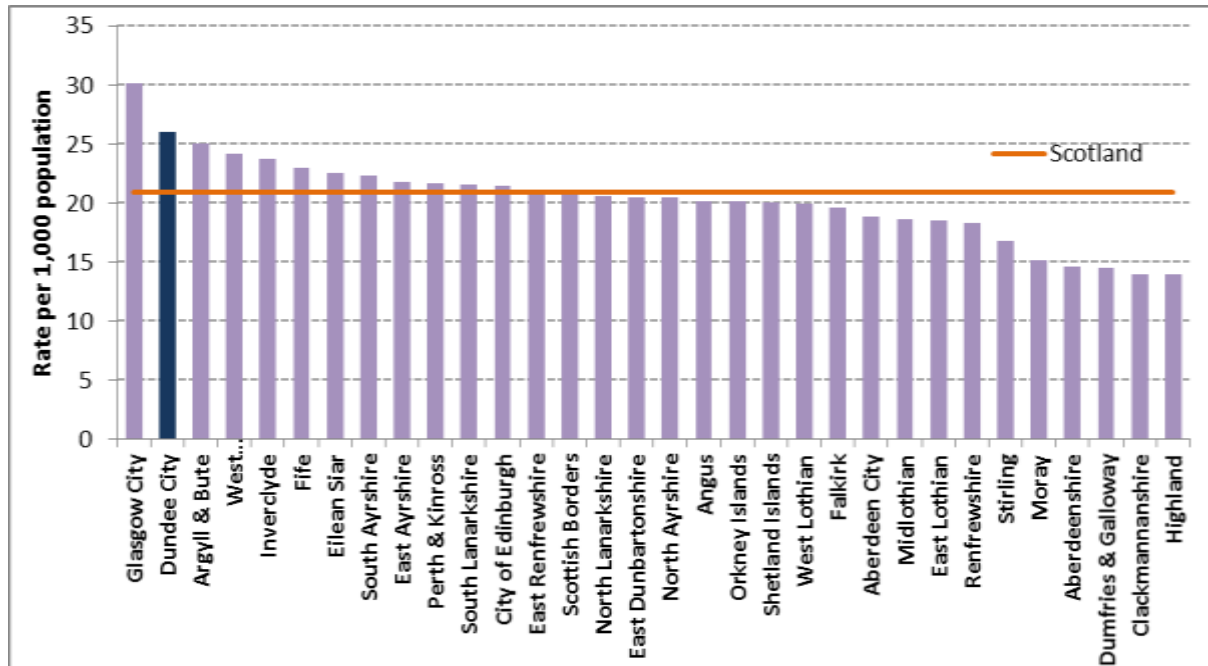
Falls Report for Dundee H&SCP

By Stephen Halcrow

Background

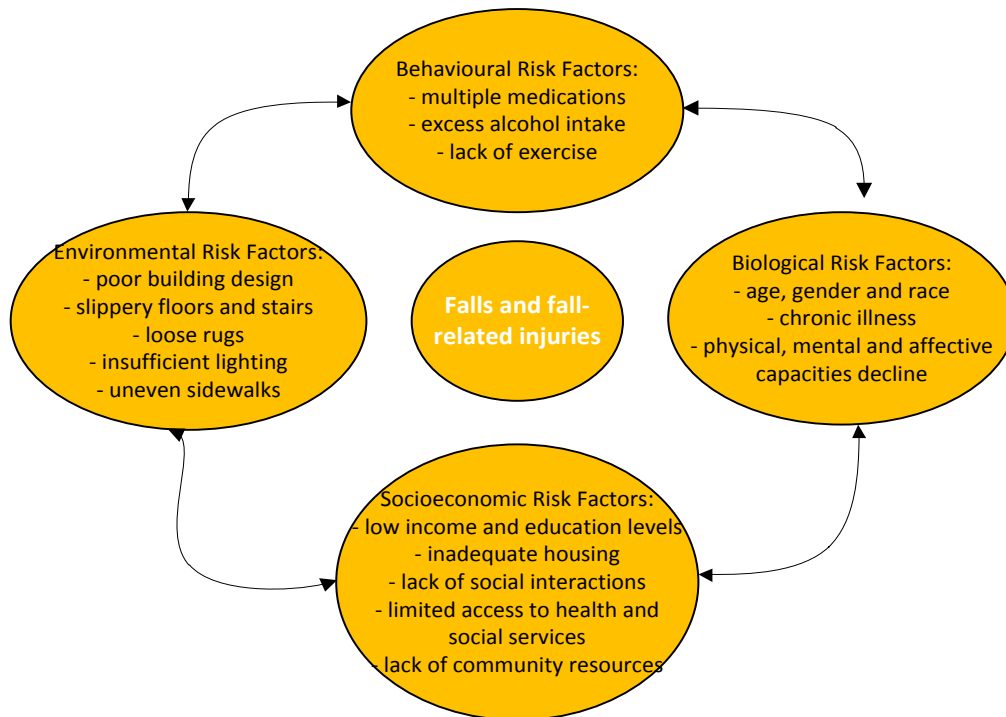
Dundee H&SCP has one of the highest admission rates for falls in Scotland. As at 2016/17 the fall hospital admission rate was 26 per 1,000 population aged 65+ (see chart 1).

Chart 1: Fall hospital admission rate per 1,000 65+ population in Scotland during 2016/17



Source: ISD SMR01

The purpose of this report is to provide a better understanding of some of the possible contributing risk factors to fall admissions, such as behavioural (e.g. alcohol consumption), biological (e.g. long term conditions) and socioeconomic (e.g. lack of support in the community). Environmental risk factors (e.g. poor building design) would also be useful but we do not currently hold housing data.



Source: World Health Organisation Global Report on Falls Prevention in Older Age 2007

Cost of Falls for All Adults

The health cost of falls in adults to Dundee H&SCP during 2015/16 was around £6.5 million. Lochee was the costliest LCPP area due to falls whilst Maryfield and North East had the lowest costs.

Table 1: Total Net Cost of falls admissions for all Adults aged 18+ in Dundee during 2015/16 split by acute and A&E

Locality	Acute Admissions	A&E Attendances	Total Cost
Dundee	£5,701,607	£635,322	£6,336,930
Coldside	£895,527	£98,906	£994,434
East End	£812,543	£84,158	£896,701
Lochee	£933,413	£97,130	£1,030,543
Maryfield	£379,551	£64,669	£444,220
North East	£369,400	£56,868	£426,269
Strathmartine	£752,225	£83,516	£835,741
The Ferry	£884,567	£75,039	£959,606
West End	£674,381	£75,036	£749,416

Source: ISD Source

Local Community Planning Partnerships (LCPPs)

Chart 2: Dundee LCPPs



The West End, a prominently affluent area, had the highest fall hospital admission rate in Dundee during 2016/17 with 32 per 1,000 population for people aged 65+ and its rate has been consistently higher than Dundee's over the last 5 years. Other areas with consistently high falls admission rates for people aged 65+ are Coldsid, East End and Lochee.

Table 2: Falls admission rate per 1,000 65+ population in Dundee between 2012/13 and 2016/17

LCPP	2012/13	2013/14	2014/15	2015/16	2016/17
Dundee	23.8	26.1	25.0	24.7	26.0
Coldsid	23.6	24.5	24.9	29.6	28.7
East End	31.9	28.1	26.0	27.4	29.0
Lochee	23.8	29.5	28.8	26.6	28.7
Maryfield	21.7	31.4	22.1	23.2	25.2
North East	16.9	20.2	22.8	20.5	25.1
Strathmartine	17.9	26.4	24.4	25.2	23.6
The Ferry	24.4	21.0	22.5	19.3	19.8
West End	28.6	31.0	28.9	27.2	32.7

Source: ISD SMR01

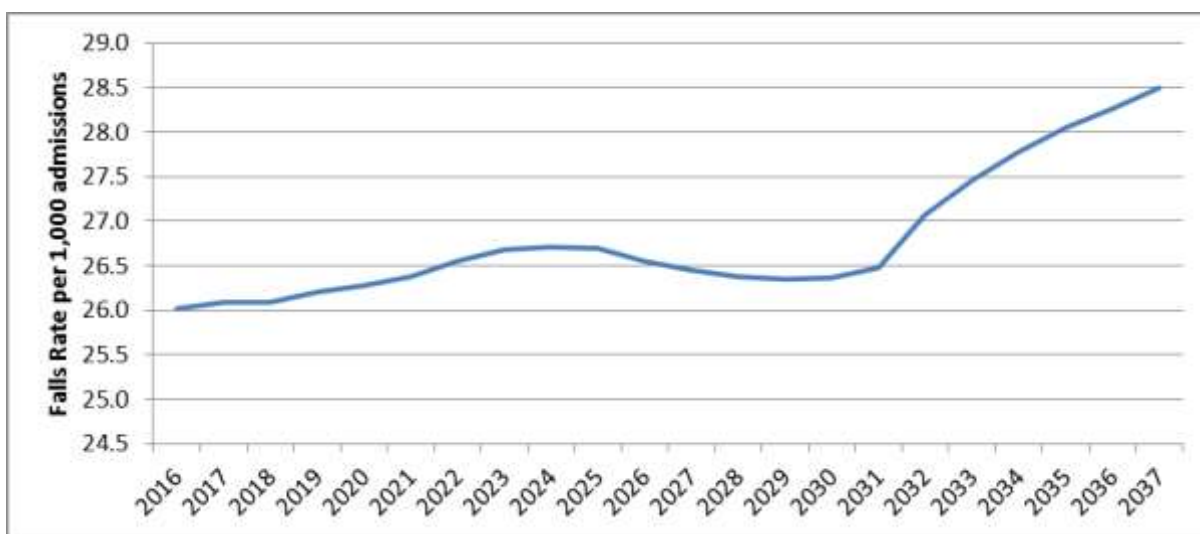
Biological Risk Factors

Population Ageing

The 65+ age group is one of the fastest growing age groups in Dundee. Currently, the number of people aged 65+ is estimated by National Records of Scotland to be 25,967 (almost the same number as 0-17 year olds). By 2037, the 65+ population is expected to increase by 28% to 33,138.

If the current age-specific admission rates persist then the fall admission rates for people age 65+ will only slightly increase to 26.5 per 1,000 population in 2027 but will start to increase at a faster rate post 2032 and reach 29 admissions per 1,000 population in 2037.

Chart 3: Projected falls admission rate per 1,000 65+ population between 2016 and 2037 in Dundee H&SCP



Source: ISD SMR01 and NRS

Gender

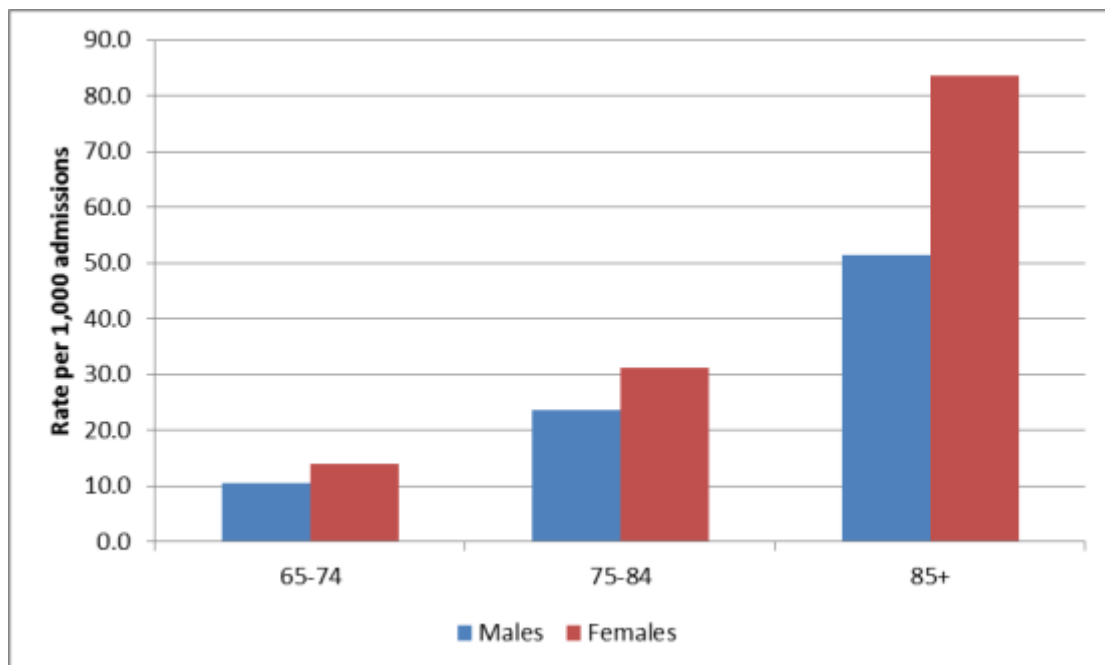
As at 2016/17, there were more than twice as many falls for females aged 65+ than there were fall for males aged 65+. Even accounting for the larger female population who are aged 65+ the rate of falls per 1,000 was still larger for females. This discrepancy is highlighted in the 85+ age group where males experience 51 hospital admissions per 1,000 population (1 in every 20 men aged 85+) compared to 83 admissions per 1,000 population for females (1 in every 12 women aged 85+).

Table 3: Number of fall admissions in Dundee H&SCP during 2016/17 split by age group and gender

Age Group	Males	Females
65-74	67	100
75-84	87	161
85+	62	198
Total	216	459

Source: ISD SMR01

Chart 4: Falls admission rate per 1,000 65+ population in Dundee H&SCP during 2016/17 split by age group and gender



Source: ISD SMR01

Long Term Conditions

Coronary Heart Disease (CHD), Arthritis and COPD are the most common chronic illnesses underlying a fall admission. Approximately 29% of all people aged 65+ who are admitted due to a fall have CHD, 27% have arthritis and 23% have COPD. Chart 5 shows the breakdown of all long term conditions associated with fall admissions in 2015/16.

Chart 5: Underlying long term conditions that are prevalent in fall hospital admissions for people aged 65+ during 2015/16

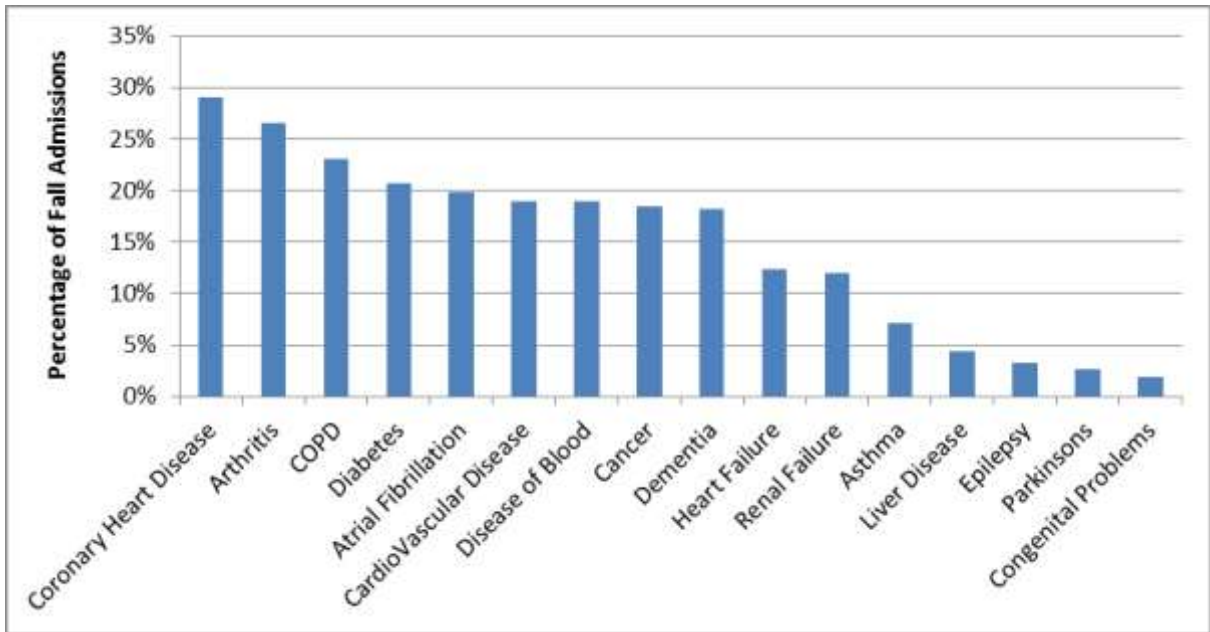
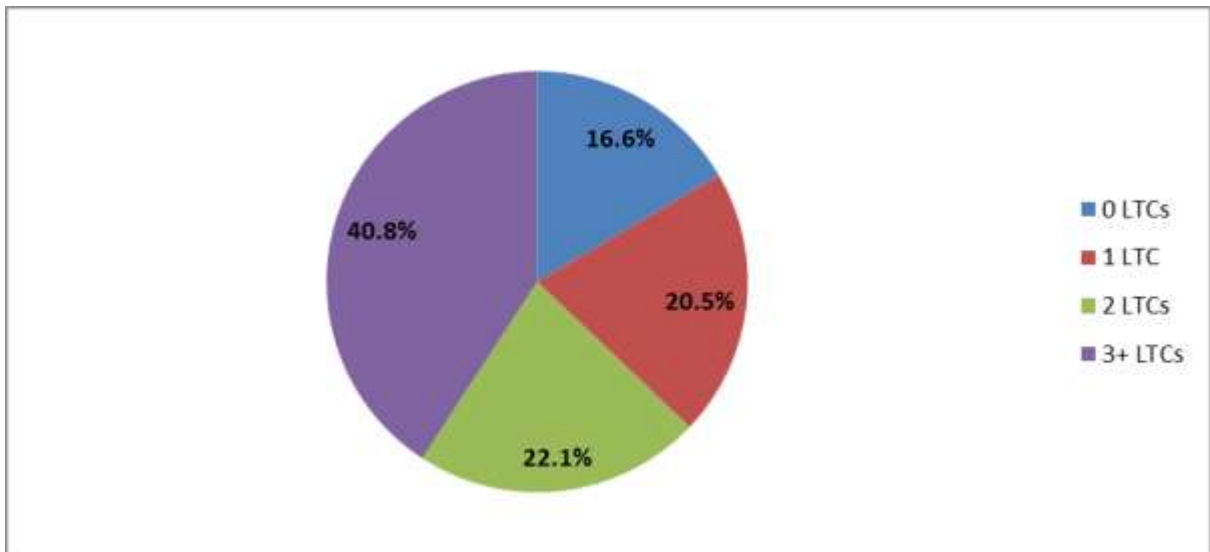


Chart 6: Percentage of fall hospital admissions with number of co-morbidities for people aged 65+ in Dundee during 2015/16



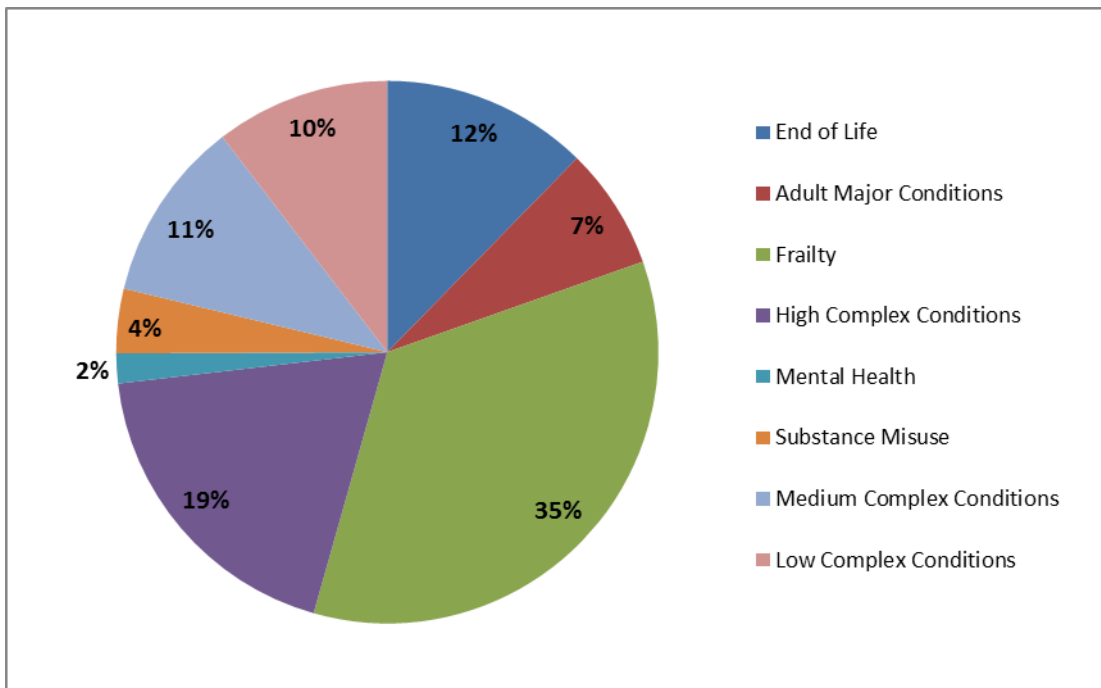
Source: ISD Source

Level of Need

Health & Social Care service users can be categorised into levels of need. This ranges from people who are identified as being healthy and are either non-users, or at least very infrequent users of the service, to people with medium complex chronic conditions to people who will not get better but are managing their conditions to people towards the last years of life who use H&SC services frequently.

The most prevalent level of need service user that we see admitted for a fall are those who are frail (see appendix B for definitions). Approximately a third of the people aged 65+ who were admitted to hospital for a fall during 2015/16 was identified as being frail. In total, approximately 79% of fall admissions for people aged 65+ were high end service users ('end of life', 'adult major conditions', 'frailty', 'high complex conditions', 'mental health' and 'substance misuse').

Chart 7: Percentage of fall admissions for people aged 65+ in Dundee during 2015/16 split by level of need



Source: ISD Source

Behavioural Risk Factors

Alcohol Related Admissions

Excess alcohol consumption can lead to physical injuries from falls and such behaviour is potentially modifiable. Males are more likely to be admitted for alcohol related fall admission than females whilst females under the age of 65 are more likely to be admitted for alcohol related falls than older females.

Chart 8: Percentage of falls that were alcohol related by age group and gender during 2015/16

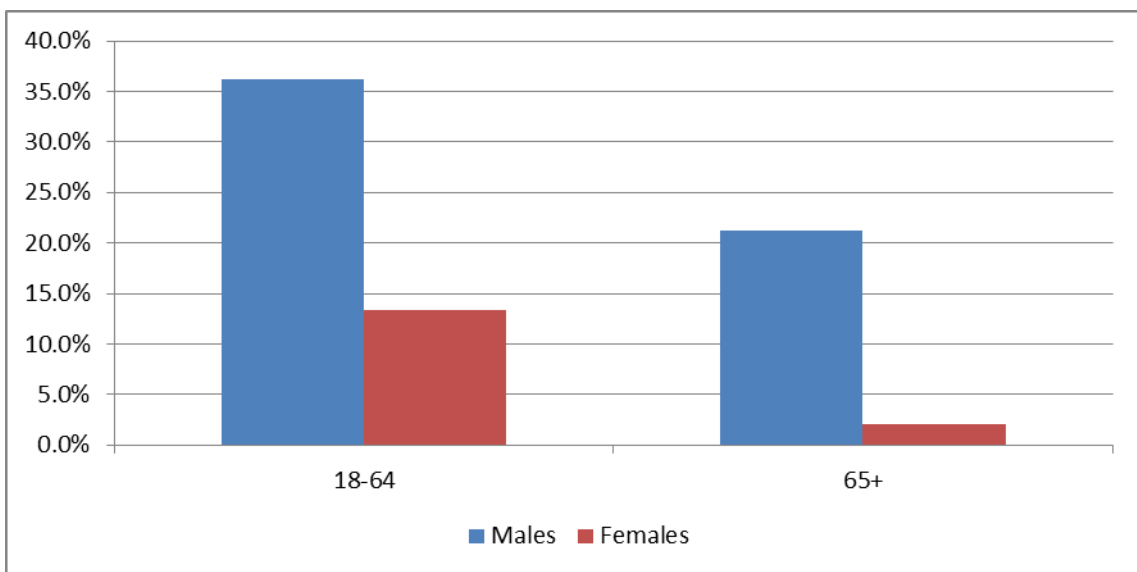
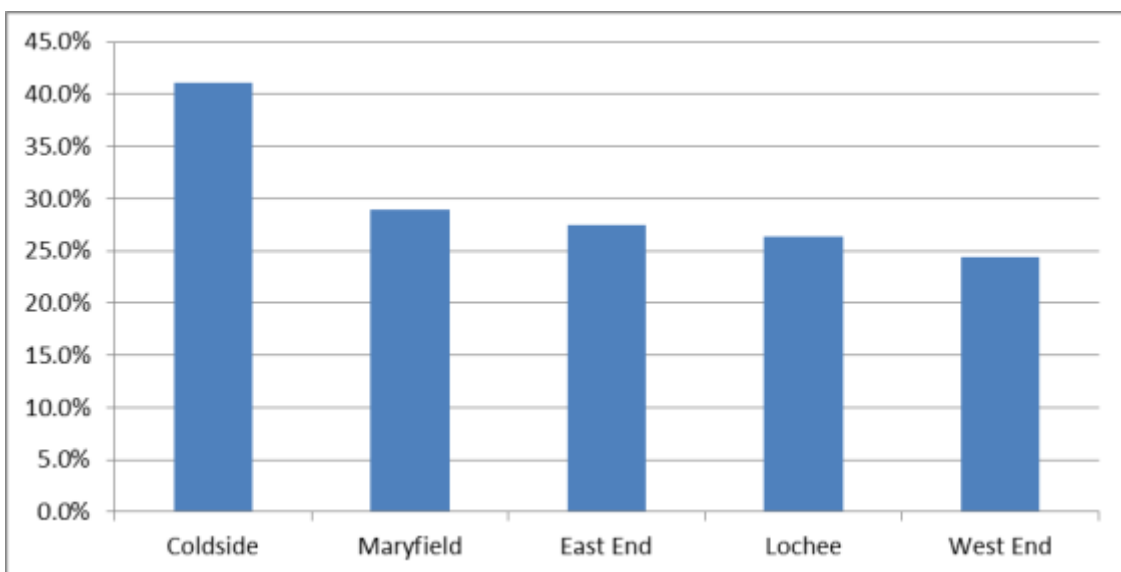


Chart 9: Percentage of falls that were alcohol related for all adult males aged 18+ by LCPP during 2015/16



Source: ISD Source

Notes:

Percentage of falls that were alcohol related have been omitted for the North East, Strathmartine and the Ferry due to the potential risk of disclosure and to help maintain confidentiality

Socioeconomic Risk Factors

Home Care by LCPP

During 2015/16 there were 2,637 people aged 65+ receiving homecare (personal and non-personal combined) in Dundee. In the same year, around 374 of these people experienced a hospital admission for a fall. This represents just over half of all fall admissions that occurred in 2015/16 had home care at some point during the year.

Table 4: Number of fall admissions and those receiving home care in Dundee H&SCP during 2015/16 by LCPP (aged 65+)

LCPP	Total Fall Admissions	Fall adm occurred and HC received during year	Fall adm occurred whilst receiving HC	Fall adm occurred after HC had finished	Fall adm occurred before receiving HC	Fall adm occurred and no home care was received
Dundee	730	374	212	30¹	140¹	356
Coldside	122	56	35	*	19	66
East End	91	51	30	*	16	40
Lochee	109	67	35	*	27	42
Maryfield	53	30	15	*	13	23
North East	51	24	14	*	*	27
Strathmartine	94	45	28	*	14	49
The Ferry	124	47	24	*	19	77
West End	86	54	31	*	19	32

Source: ISD Source

Notes:

1 Total has been rounded to the nearest 10 due to the potential risk of disclosure and to help maintain potential confidentiality

** Values have been suppressed due to the potential risk of disclosure and to help maintain potential confidentiality*

Home Care by Level of Need

People with frailty and who were admitted for a fall in 2015/16 received the most home care, with 74% of people aged 65+ admitted to hospital due to a fall having received home care at some point in 2015/16. Less than half of those who are at end of life and were admitted for a fall received any home care in 2015/16 and only around a third of people aged 65+ with adult major conditions or high complex needs who were admitted for a fall received any home care that year.

Table 5: Number of fall admissions and those receiving home care in Dundee H&SCP during 2015/16 by level of need (aged 65+)

Level of Need	Fall admissions	Home Care received	% receiving HC	Average daily hours received in HC
End of Life	90	43	48%	1.8
Adult Major Conditions	53	19	36%	1.1
Frailty	254	187	74%	3.1
High Complex Conditions	137	52	38%	2.2
Mental Health	13	*	*	1.3
Substance Misuse	28	*	*	1.5
Medium Complex Conditions	79	40	51%	1.4
Low Complex Conditions	76	25	33%	2.0
Total	730	374	51%	2.4

Source: ISD Source

Community Alarms by LCPP

The highest percentage of admissions for falls where community alarms were previously installed was in the East End, followed by Lochee and West End. These three LCPPs consistently had amongst the highest fall admission rates in Dundee by LCPP area. The lowest percentage of fall admissions

where community alarms were already installed was in the North East, Coldside and the Ferry. The North East and the Ferry had amongst the lowest fall admission rates in Dundee whilst Coldside had the highest rates of alcohol related admissions (many of these could have occurred outside the home).

People who were frail and were admitted due to a fall were more likely to have had a community alarm installed than any other level of need cohort. Half of all frail people who were admitted due to a fall had a community alarm installed prior to admission.

Community alarms seem to have made an impact on the number of people who attended A&E and were subsequently discharged home. The number of “non-community alarm” people who were discharged home from A&E was twice as many as those who were discharged to an acute ward from A&E. However, with “community alarm users”, the number of people discharged home was actually less than the number discharged to an acute ward (see chart 10).

Table 6: Number of fall hospital admissions for people aged 65+ during 2015/16 and number of people with a community alarm installed as at 31st March 2015 in Dundee H&SCP by LCPP

LCPP	Number of Fall Admissions	Number of admissions for falls where a community alarm was installed prior to admission	% of admissions for falls where a community alarm was installed prior to admission
Dundee	730	249	34%
Coldside	122	35	29%
East End	91	37	41%
Lochee	109	41	38%
Maryfield	53	19	36%
North East	51	11	22%
Strathmartine	94	34	36%
The Ferry	124	39	31%
West End	86	33	38%

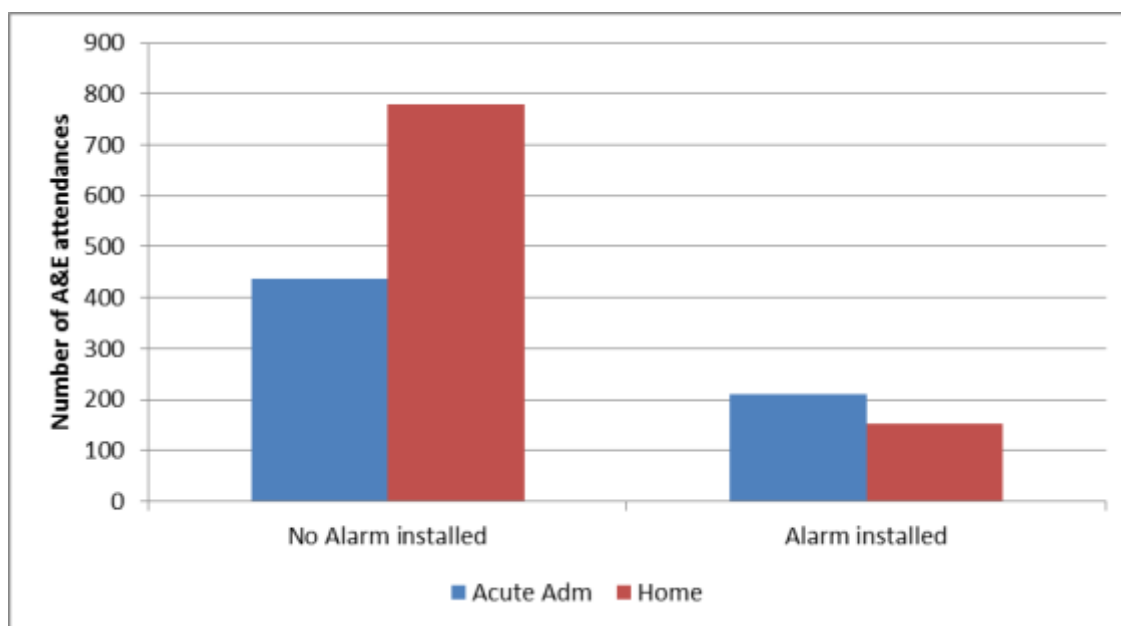
Source: ISD Source

Table 7: Number of fall hospital admissions for people aged 65+ and the number of people with a community alarm installed prior to hospital admission in Dundee H&SCP during 2015/16 by level of need cohort

Level of Need	Fall admissions	Alarm installed prior to admission	% with alarm installed prior to admission
End of Life	90	30	33%
Adult Major Conditions	53	10	19%
Frailty	254	127	50%
High Complex Conditions	137	41	30%
Mental Health	13	*	*
Substance Misuse	28	*	*
Medium Complex Conditions	79	20	25%
Low Complex Conditions	76	17	22%
Total	730	374	34%

Source: ISD Source

Chart 10: Number of A&E fall related attendances for people aged 65+ and discharge destination from A&E during 2015/16; split by alarm users and non-alarm users.



Source: ISD Source

Appendix A

Description of Level of Need

1. End of Life
People who have died within the year in question (currently the matrices are only looking at FY 2015/16).
2. Frailty
These people are older adults, with episodes of care in Geriatric Medicine or receiving a home care/ care home social care package which is not due to learning or physical disabilities
3. High Chronic Conditions
Chronic conditions are based on the 15 SPARRA Long Term Condition flags, anyone with learning or physical disability and anybody below the age of 65 who receive home care or are resident in a care home.
4. Mental Health
People who suffer from a mental illness
5. Substance Misuse
People who suffer a drug or alcohol addiction
6. Medium Chronic Condition
Detailed definition: Any person with one of the following LTC flags: CVD, COPD, CHD, Parkinsons or MS.
7. Low Chronic Conditions
Detailed definition: Any person with one of the following LTC flags: Epilepsy, Asthma, Arthritis, Diabetes or Atrial Fibrillation.
8. Adult Major Conditions
Detailed definition: Adults aged 18+ who had either £500+ of community prescribing costs, or at least one acute (SMR01) episode
9. Healthy and Low Service User
Detailed definition: People who have at least one SMR record and were 'low users' of NHS services, but not otherwise defined in the other cohorts. People in this cohort may also have at least one District Nursing or other Social Care record if not already defined in an above cohort.
10. Non-Service User
Detailed definition: People who don't use any NHS service in the financial year (currently FY 2015/16).

