**ANNEX 1**

## Briefing note to People and Families Scrutiny Committee on local rates of hip fracture: Maggie Pacini, Consultant in Public Health, Essex County Council

### Purpose

To respond to a query about Essex being an outlier for hip fracture rates:

- To present data on hip fracture rates for Essex
- To describe the risk factors for fractures and falls
- To outline the current position on falls prevention services
- To outline some key lines of enquiry for the committee

To answer the question 'why is Essex an outlier for hip fracture rates' there are two distinct aspects to be explored:

1. Does Essex have a greater prevalence of the risk factors that lead to hip fractures
2. Does Essex have the right services in place to reduce the risk of hip fractures

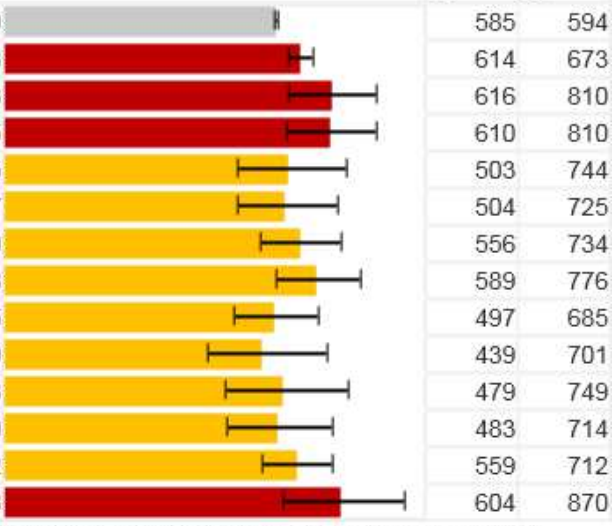
It is worth placing this question in the wider context of fractures and falls prevention as the two are intrinsically linked.

### Hip fracture rates in Essex

Essex as a county has statistically significantly higher rates of hip fracture than national average (see figure 1; 15/16 data). Essex is the only area in east of England with a higher than national average fracture rate.

**Figure 1 Hip Fracture in people aged 65 and over (rates) by district council area, 15/16**

| Area | Value | Lower CI | Upper CI |
|---|---|---|---|
| **England** | 589 | 585 | 594 |
| Essex | 643 | 614 | 673 |
| Basildon | 708 | 616 | 810 |
| Braintree | 705 | 610 | 810 |
| Brentwood | 615 | 503 | 744 |
| Castle Point | 607 | 504 | 725 |
| Chelmsford | 640 | 556 | 734 |
| Colchester | 678 | 589 | 776 |
| Epping Forest | 585 | 497 | 685 |
| Harlow | 559 | 439 | 701 |
| Maldon | 603 | 479 | 749 |
| Rochford | 590 | 483 | 714 |
| Tendring | 632 | 559 | 712 |
| Uttlesford | 728 | 604 | 870 |



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Source PHE profiles

Figure 1 also shows the breakdown by district council area. Overall, most of the council areas have fracture rates that are not significantly different than national average. Basildon, Braintree and Uttlesford all have significantly higher rates in 15/16 (latest data available).

There are higher rates than national average in females in Braintree and higher rate in males in Basildon (Figure 2a and 2b).

**Figure 2a Hip Fracture in people aged 65 and over (rates) by district council area, 15/16 females**

| Area | Value | Lower CI | Upper CI |
|---|---|---|---|
| **England** | 710 | 703 | 717 |
| Essex | 765 | 725 | 808 |
| Basildon | 786 | 661 | 927 |
| Braintree | 877 | 740 | 1,031 |
| Brentwood | 798 | 634 | 991 |
| Castle Point | 720 | 577 | 889 |
| Chelmsford | 757 | 638 | 892 |
| Colchester | 820 | 693 | 962 |
| Epping Forest | 726 | 599 | 872 |
| Harlow | 694 | 525 | 898 |
| Maldon | 625 | 462 | 828 |
| Rochford | 668 | 523 | 839 |
| Tendring | 759 | 653 | 876 |
| Uttlesford | 879 | 701 | 1,089 |

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**Figure 2b Hip Fracture in people aged 65 and over (rates) by district council area, 15/16 males**

| Area | Value | Lower CI | Upper CI |
|---|---|---|---|
| **England** | 416 | 410 | 423 |
| Essex | 469 | 429 | 511 |
| Basildon | 617 | 478 | 782 |
| Braintree | 466 | 343 | 619 |
| Brentwood | * | - | - |
| Castle Point | 432 | 299 | 603 |
| Chelmsford | 481 | 366 | 621 |
| Colchester | 467 | 353 | 606 |
| Epping Forest | 389 | 276 | 532 |
| Harlow | * | - | - |
| Maldon | 567 | 383 | 805 |
| Rochford | 488 | 331 | 691 |
| Tendring | 463 | 365 | 579 |
| Uttlesford | 537 | 371 | 750 |

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Adjusting for age profiles, there are higher rates of fractures in people aged over 80 in Braintree, Colchester and Uttlesford (figure 3b).

**Figure 3a Hip Fracture in people aged 65-79 (rates) by district council area, 15/16**

| Area | Value | Lower CI | Upper CI |
|---|---|---|---|
| **England** | 244 | 241 | 248 |
| Essex | 251 | 230 | 274 |
| Basildon | 351 | 276 | 440 |
| Braintree | 231 | 167 | 310 |
| Brentwood | * | - | - |
| Castle Point | 205 | 141 | 288 |
| Chelmsford | 283 | 217 | 362 |
| Colchester | 256 | 193 | 333 |
| Epping Forest | 195 | 134 | 275 |
| Harlow | * | - | - |
| Maldon | 253 | 166 | 370 |
| Rochford | 216 | 145 | 311 |
| Tendring | 265 | 209 | 331 |
| Uttlesford | 253 | 167 | 366 |

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Source PHE profiles

**Figure 3b Hip Fracture in people aged over 80 (rates) by district council area, 15/16**

| Area | Value | Lower CI | Upper CI |
|---|---|---|---|
| **England** | 1,591 | 1,575 | 1,606 |
| Essex | 1,779 | 1,686 | 1,875 |
| Basildon | 1,746 | 1,466 | 2,063 |
| Braintree | 2,080 | 1,767 | 2,433 |
| Brentwood | 1,903 | 1,528 | 2,343 |
| Castle Point | 1,772 | 1,423 | 2,180 |
| Chelmsford | 1,678 | 1,414 | 1,978 |
| Colchester | 1,899 | 1,611 | 2,223 |
| Epping Forest | 1,717 | 1,430 | 2,045 |
| Harlow | 1,409 | 1,053 | 1,844 |
| Maldon | 1,615 | 1,216 | 2,103 |
| Rochford | 1,676 | 1,322 | 2,094 |
| Tendring | 1,698 | 1,467 | 1,956 |
| Uttlesford | 2,107 | 1,702 | 2,578 |

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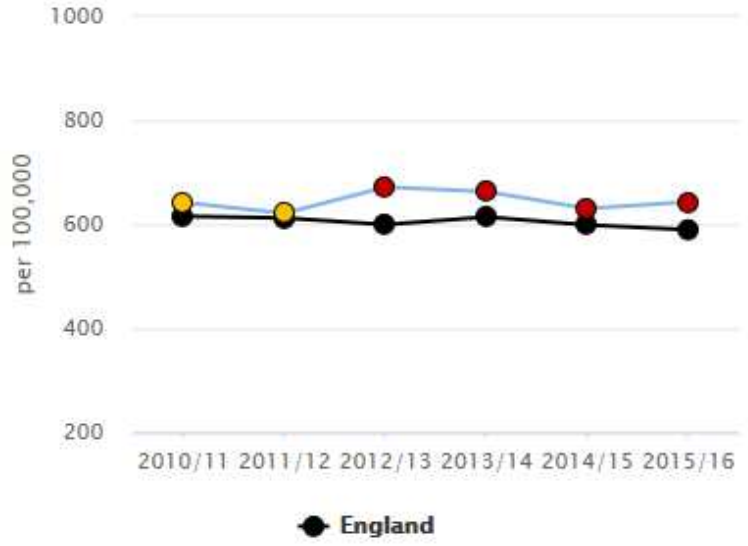
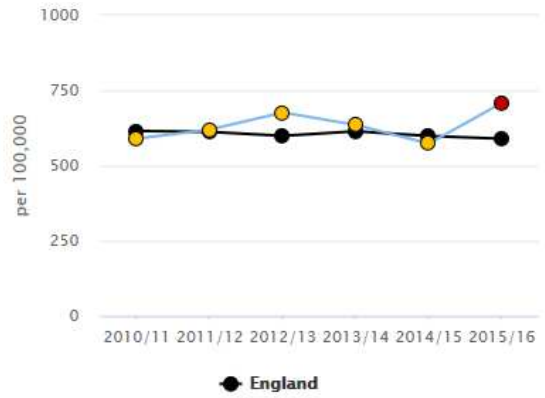
Figure 4 shows the trends over the past 6 years for Essex; Essex has had significantly higher fracture rates since 12/13. This was driven by Chelmsford, Epping, Harlow and Tendring in 12/13; Chelmsford and Uttlesford in 13/14; and no clear indication in 14/15; (data not shown). For 15/16 - the latest year available - this was driven by Basildon, Braintree and Uttlesford (figures 5a, 5b, 5c).

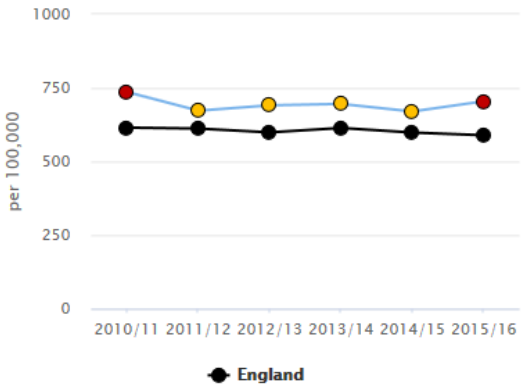
**Figure 4 Essex hip fracture rates, time trends**



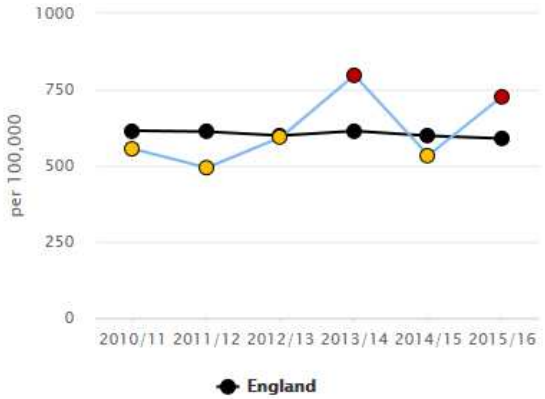

Source PHE profiles

**Figure 5a Basildon trends; 5b Braintree; 5c Uttlesford, Hip fracture rates, time trends**




Source PHE profiles




Presenting the data by district, age, sex and over time indicates no clear pattern within Essex district councils that drives the overall Essex rate above national average. Below is presented information on the risk factors for fractures and falls. We do not necessarily have data to map the distribution of these risk factors across Essex (except age and sex). That aside, these risk factors do not change drastically over single years in each district and so do not present clear reasons for the variation by geography by year.

**Risk factors for hip fractures**

- **Age**. The likelihood of hip fractures increases with age; this may be a combination of the factors below that also increase with age but also reflect the increase likelihood of falling such a poor vision or weakened balance.
- **Sex**. About 70 percent of hip fractures occur in women. Women lose bone density at a faster rate than men do, in part because the drop in estrogen levels that occurs with menopause accelerates bone loss. However, men also can develop dangerously low levels of bone density.
- **Chronic medical conditions**. Endocrine disorders, such as an overactive thyroid, can lead to fragile bones. Intestinal disorders, which may reduce absorption of vitamin D and calcium, also can lead to weakened bone and hip fracture. Cognitive impairment also increases the risk of falling.
- **Certain medications**. Cortisone medications, such as prednisone, can weaken bone if taken long term. Certain drugs or certain combinations of medications can make a person dizzy and more prone to falling.
- **Nutritional problems**. Lack of calcium and vitamin D in the diet when someone is young lowers their peak bone mass and increases their risk of fracture later in life. Serious eating disorders, such as anorexia nervosa and

bulimia, can damage the skeleton by depriving the body of essential nutrients needed for bone building.
- **Physical inactivity**. Weight-bearing exercises, such as walking, help strengthen bones and muscles, making falls and fractures less likely.
- **Tobacco and alcohol use**. Both can interfere with the normal processes of bone building and maintenance, resulting in bone loss.
- **Previous history of fracture**

**Risk factors of falls**

| **Medical Risk Factors** | **Demographic Risk Factors** | **Environmental Risk Factors** |
|---|---|---|
| • Osteoporosis<br>• Parkinson's<br>• Diabetes<br>• Stroke<br>• Arthritis<br>• Gait and balance deficit<br>• Psychotropic medication use<br>• Depression<br>• Cognitive impairment<br>• Personal history of fracture / falls<br>• Family history of osteoporosis<br>• Dementia / poor health / frailty<br>• Poor vision<br>• Use of oral glucocorticoids for > 3m | • Female gender<br>• Older age<br>• Caucasian<br>• Low body weight and body mass index<br>• Low calcium intake<br>• Smoking / excessive alcohol intake<br>• Low level of physical activity<br>• Use of assistive devices<br>• Impaired activities of daily living | • Home hazards such as lighting, slippy surfaces, trip hazards |

**Interventions that reduce the risks for falls and fractures**

NICE recommends the following interventions to reduce the risk of falls:
- Screening
- Comprehensive assessment for those screened as high risk
- Home hazard assessment and home improvements
- Equipment
- Vision assessment and interventions
- Medicines review
- Strength and balance training
- Management of osteoporosis

There are also interventions relating to the primary prevention at earlier ages
- Early development of bone health eg nutrition and strength (in childhood)
- Building and maintaining strength and balance (in adulthood)

ECC has been funding falls prevention services across Essex since 2013 within the public health grant. The decision was made to decommission in June 2017 and providers are working out their notice periods. The decision paper to ECC Cabinet is enclosed

ECC is actively working with providers, voluntary sector partners and CCGs to look at alternative community led approaches to preventing falls. Some activity within the

falls prevention NICE guidance compliant multi-factorial Intervention can take place as part of other existing NHS and social care pathways. For example the service includes medication reviews, prescribing and vision assessments which are already funded by the NHS through general practice, pharmacy and opticians. Other elements of the service, such as home equipment assessments are already funded by NHS and social care under frailty assessment services. iBCF funds have been identified to continue the strength and balance training component for another 2 years.

We plan to minimise the impact of decommissioning the service through alignment of the falls prevention agenda with existing community resilience work streams, and adopting a community asset approach in line with the new ways of working outlined in the Public Health strategic approach. Regardless of the funding situation this is an opportune time to review delivery with a view to greater integration of provision and commissioning responsibilities as was always intended with the S75 approach.

**Potential key lines of enquiry**

I. What role can ECC – namely social care – continue to play with regard to falls prevention within its already commissioned services?

II. How do we reframe our intentions for falls prevention into the prevention and management of frailty more broadly eg holistic and integrated health and social care approach rather than seeing it as a separate service?

III. What are the opportunities for community resilience in the falls prevention agenda especially earlier intervention? Who are the key stakeholders to engage with?

**ANNEX 2**
**Essex County Council**
**Overview and Scrutiny Committee**
**Extracts from Scoping Document**

**Health Overview, Policy and Scrutiny Committee (HOPSC)**
**and the People and Families Policy and Scrutiny Committee (PAF)**

3 JANUARY 2018

| **WHAT ARE WE LOOKING AT?** | |
|---|---|
| **Review Topic**<br>(Name of review) | Hip fractures and falls prevention – social care and other support for daily living |
| **Type of Review** | Joint HOPSC and PAF Task and Finish Group |

| **WHY ARE WE LOOKING AT THIS?** | |
|---|---|
| **Rationale for the Review** | Essex as a county has statistically significantly higher rates of hip fractures than national average. Essex is the only area in east of England with a higher than national average fracture rate.<br><br>The issue is relevant to the Council's strategic objectives and corporate priorities, namely that:<br>(i) residents Enjoy Good Health and Wellbeing<br>http://www.essex.gov.uk/Your-Council/Strategies-Policies/Documents/Enjoy_good_health_wellbeing.pdf<br>(ii) people in Essex can Live Independently and Exercise Choice and Control over their lives<br>http://www.essex.gov.uk/Your-Council/Strategies-Policies/Documents/Independent_living_choice_control_over_lives.pdf<br><br>A member focus can approach the issue in a non-partisan way and provide challenge to the wider system on collaborative and partnership solutions. It can raise the profile of issues that may need a wider system approach. |

| **WHAT DO WE HOPE TO ACHIEVE?** | |
|---|---|
| **Indicators of success** | Through investigating aspects of the commissioning and provision of support in care/nursing homes, the intention of the review is to identify quality improvements and changes in standard operating procedures to further prevent the incidence of falls and hip fractures. |

| **WHAT INFORMATION DO WE NEED?** | |
|---|---|
| **Terms of Reference** | To consider the type of social care and other support available for daily living in more formalised settings that can minimise falls |
| **Key Lines of Enquiry** | (i) Does Essex County Council commission care homes/nursing homes with the safest environments?<br>(ii) What is the attitude of care/nursing homes to risk management?<br>(iii) What further quality improvements can be made to minimise the risk of falls and hip fractures? |
| **What primary/new evidence is needed?** | Informants:<br>(i) PROSPER lead manager;<br>(ii) care homes;<br>(iii) service users; and<br>(iv) site visits. |
| **What secondary/ existing information is needed?** | TBC |
| **What briefings and site visits might be relevant?** | (i) The work of PROSPER which works with care homes to embed a quality improvement ethos and roll out quality improvement methods.<br>(ii) Site visits to a selection of care homes |

**Annex 3**

## EVIDENCE

### Advance reading material/background reports and publications

1. Improving resident safety in care homes - Learning from the PROSPER programme in Essex – UCL Partners November 2016.

Written evidence during the review:

2. Briefing note from Maggie Pacini, Public Health Consultant – August 2017 - Briefing note on local rates of hip fracture to People and Families Scrutiny Committee.
3. Briefing note from Maggie Pacini, Public Health Consultant on the Epidemiology of falls and fractures – December 2017.
4. PROSPER newsletters.
5. Power point presentation on the methodology behind PROSPER (dated 2 February 2018.
6. Documentation provided at Community of Practice Day and PROSPER Champions Days referred to below.
7. Documents used by Mundy House Care Home to monitor falls.

The Group has met 5 times (the first two on 7 November and 15 December 2018 spent scoping the review) – and formal evidence sessions on 2 February, 12 March, 13 April 2018. The Group then met on 2 May 2018 and [other dates] to finalise this report and discuss conclusions with the Cabinet Member – Health and his deputy.

Oral evidence

*Witnesses in the order of appearance:*

Mike Gogarty, Director, Wellbeing, Public Health & Communities (briefing provided in advance of the formal review starting)
Gemma Andrews, Commissioning Support Manager, Essex County Council.
Maggie Pacini, Public Health Consultant, Essex County Council
Lesley Cruickshank, Quality Innovation Manager, Essex County Council
Rod Manning, Quality Improvement Officer. Essex County Council
Karen Williams, Placement Co-ordinator, Essex County Council.
Josi George, Manager of Mundy House Care Home, Church Road, Basildon SS14 2EY and other staff at the home.
Ryan Mooring, Manager - The Haven care home, 84 Harwich Road, Colchester CO4 3BS and other staff at the home.
Simon Evans, Category and Supplier Relationship Specialist, Essex County Council.
Jenny Peckham, Quality Innovation Manager, Essex County Council
Participants at PROSPER Community of Practice event on 15 February 2018 at Essex County Cricket Ground, Chelmsford.
Participants at PROSPER Champions Days held in Basildon, Colchester, Clacton and Harlow.

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