

Annual Report of the Director of Public Health 2018

Leicestershire's health — the challenge of frailty and multi-morbidity

1. Foreword

Welcome to my annual report for 2018. In my last annual report we presented an infographic picture of many different aspects of the health of Leicestershire.

Presenting such an analysis led to a raft of publicity and interest on a range of diverse topic areas. As can be seen in the 'update on recommendations', the report has led to action and progress on air quality, a food plan for Leicestershire, joint work on community safety and health with the Leicestershire Safer Communities Strategy Board (LSCSB) and some initial thoughts about addressing rural health inequalities.

In this year's report I have focussed on the ageing population and, in particular, the challenges of 'multi-morbidity'.

We are all aware of the profound changes in our population structure and the demand that places on health and council services. But, in itself, getting older is not the problem. It's the increasing number of years spent in poor health that drives demand.

It is important to recognise this and think about how services might be delivered in such a way that takes account of the increase in multi morbidity. As a whole system we need to continue our efforts to promote good health throughout all ages, if we want effective care for our future generations.

I would like to thank Liz Orton, Rob Howard, Trish Crowson and Joshna Mavji from the public health department for their help in compiling the report and Natalie Davison from the Strategic Business Intelligence Team for her tremendous work in constructing the infographics and narrative that underpin this report.



Mil.

Contents

1. Foreword
2. Introduction
3. Recommendations and summary 4
4. The ageing population 6
4.1 Population
4.2 Prevalence of conditions10
5. Multi morbidity and frailty
5.1 Multi morbidity18
5.2 Frailty and hospital admissions
5.3 Mortality
6. Treating the person, not the condition
7. Feedback on recommendations from 2017 37

2. Introduction

Directors of Public Health have a statutory duty to write an Annual Public Health Report that describes the state of health within their communities.

It is a major opportunity for advocacy on behalf of the population and, as such, can be used to help talk to the community and support fellow professionals, providing added value over and above intelligence and information routinely available such as that contained within health profiles or the Joint Strategic Needs Assessment (JSNA).

It is intended to inform local strategies, policy and practice across a range of organisations and interests and to highlight opportunities to improve the health and wellbeing of people in Leicestershire. The annual report is an important vehicle by which Directors of Public Health can identify key issues, flag up problems, report progress and thereby serve their local populations. It is also a key resource to inform stakeholders of priorities and recommend actions to improve and protect the health of the communities they serve.

Within this report, data is presented on the changing population of Leicestershire, the prevalence of individual and multiple conditions in the population and data on excess winter deaths and place of death. The content should be used by commissioners and providers of services to respond to changes in the health of Leicestershire residents.



3. Recommendations and summary

Like last year's report, I am aware that this one is 'data heavy'. Each slide should contain something of relevance for commissioners and providers of services to reflect on in their plans, as well stimulating wider public debate on the changing nature of the population's health. There are, though, actions I intend to progress through the work of the public health department:

If there is one thing we can all do it is to promote 'healthy ageing'. There are many ways to do this:

Social Isolation/Loneliness

Being socially connected to friends, family and the wider community is a key element of healthy ageing. In addition to utilising the social prescribing model for Leicestershire to connect people with their communities, the Council's 'tackling loneliness and social isolation project', alongside the Government Strategy for tackling loneliness, will provide further opportunities for the whole council to 'do more' on loneliness.

Promote Social Prescribing in Leicestershire

'Social prescribing' is a key way in which broader services can help support the frail, and those with multiple health conditions to maintain independence. I will ensure that the model for social prescribing in Leicestershire, with public health services at its heart, continues to be integral to the emerging integrated locality teams.

The social prescribing model should consider how frail patients in the community should have a home assessment for trip hazards and for other risks such as poor medication compliance, social isolation, difficulty with the activities of daily living, and alleviating the strain on carers.

Falls

Falls are a serious health issue for older people, with around a third of all people aged 65 and over falling each year. Regular physical activity, can develop and maintain strength and balance in frail patients.

We will continue to support the implementation of the Falls programme with an emphasis on evaluating the effectiveness of the postural stability programmes.

Physical Activity

Physical activity is a key preventative element of healthy ageing – from protecting against some forms of dementia, to reducing the risk of depression, heart disease and the risk of a fall in older age.

Working with partners in Leicester-Shire and Rutland Sport (LRS) and district councils, Public Health will ensure that muscle strengthening activity and physical activities of older people are reflected in sport and physical activity plans.

Carers

Supporting Carers and supporting them to be healthy is a key element to ensuring a good outcome for the frail and those with multiple health conditions.

The recently adopted Carers Strategy across Leicestershire, Leicester City and Rutland sets out a broad programme of support for carers. Within public health I will ensure we play our part in the implementation of the Carer's strategy, ensuring that public health information services provide good advice to carers.

Support the health care system to treat the person, not the individual condition

Healthcare systems are not currently designed to treat patients with multiple illnesses. The recently produced LLR Frailty Resource Pack is a welcome step to local health services understanding, and responding to, frailty.

Through the specialist support provided by public health consultants to CCG's and the broader health system, public health can play a part in redesigning pathways to take account of frailty and multi-morbidity. The introduction of risk stratification software in GP practices will give better quality, comprehensive data on multi-morbidity. Public Health should use this to target work and influence pathway development.

Health summary of Leicestershire 2018

- Life expectancy for both males and females is significantly better than the national average
- Healthy life expectancy for both males and females is significantly better than the national average
- Suicide rate is similar to the national average
- Dementia diagnoses are similar to the benchmark goal of 66.7%
- Diabetes diagnoses are similar to the national average
- Hip fractures in older people are similar to the national average
- Admissions to hospital for alcohol specific conditions for under 18s and all ages are both significantly better than the national average
- Excess weight in adults is similar to the national average
- The percentage of physically active adults is similar to the national average
- Smoking prevalence is significantly better than the national average
- Under 18 conceptions (teenage pregnancy rate) is significantly better than the national average
- Children with excess weight aged 4-5 years and aged 10-11 years are both significantly better than the national average
- School readiness: achieving a good level of development at the end of reception is similar to the national average
- Excess winter deaths is similar to the national average
- 5.9% of all-cause adult mortality is attributable to air pollution, measured as fine particulate matter, PM2.5. Nationally, air pollution is attributable to 5.3% of all adult deaths.

Group	Indicator Name	Time Period	Sex
		2014 - 16	Female
	Life expectancy at birth	2014 - 16	Male
Life expectancy and causes of	Under 75 mortality rate: all causes	2014 - 16	Persons
death	Under 75 mortality rate: cancer	2014 - 16	Persons
	Under 75 mortality rate: cardiovascular	2014 - 16	Persons
	Suicide rate	2014 - 16	Persons
	Cancer diagnosed at early stage	2016	Persons
	Dementia diagnoses (aged 65+)	2018	Persons
Injuries and ill	Diabetes diagnoses (aged 17+)	2017	Persons
health	Hip fractures in older people (aged 65+)	2016/17	Persons
	Hospital stays for self-harm	2016/17	Persons
	Killed and seriously injured on roads	2014 - 16	Persons
	Alcohol-related harm hospital stays	2016/17	Persons
	Alcohol-specific hospital stays (under 18s)	2014/15 - 16/17	Persons
Behavioural risk factors	Excess weight in adults (aged 18+)	2016/17	Persons
lactors	Physically active adults (aged 19+)	2016/17	Persons
	Smoking prevalence in adults (aged 18+)	2017	Persons
	Breastfeeding initiation	2016/17	Female
	Infant mortality rate	2014 - 16	Persons
Child health	Obese children (aged 10-11)	2016/17	Persons
	Smoking status at time of delivery	2016/17	Female
	Under 18 conceptions	2016	Female
	Children in low income families (under 16s)	2015	Persons
Wider	Employment rate (aged 16-64)	2016/17	Persons
determinants of	GCSEs achieved	2015/16	Persons
health	Statutory homelessness	2016/17	Persons
	Violent crime (violence offences)	2016/17	Persons
	Excess winter deaths	Aug 2013 - Jul 2016	Persons
Health protection	New cases of tuberculosis	2015 - 17	Persons
p. occcion	New sexually transmitted infections	2017	Persons

Compared To England Value or Target

Better Not compared Similar

Source: Local Authority Health Profiles, Public Health England.

4. The ageing population

The 'ageing population' is rightly seen as a big issue for health, social care, other public services and society as a whole. Previous annual reports have highlighted the profound changes in our population both now and in the future.

The latest Joint Strategic Needs Assessment (JSNA) for Leicestershire states that, of the predicted overall population growth in Leicestershire to 2041 of 107,000 people, roughly three quarters of that growth will be in the 65+ age group.

But getting older on its own should not drive up healthcare costs. The growth of our older population - people living longer, healthier lives should be celebrated. Our older population are a valued part of our community and contribute a wealth of experience and skills. Many of the older population are active members of the community, contribute to third sector organisations and work as informal carers.

But the key phrase in celebrating older life is 'healthier lives'. We know that healthy life expectancy is not increasing at the same rate as overall life expectancy, with recent signs that increases in life expectancy have now stalled.

This means we are living more years in poorer health, often with an increasing number of health conditions in a health system that is designed to respond to single diseases and acute health problems.

The increasing number of health conditions and age-related impairments, and the inevitable high cost of care as we get closer to death at whatever age, are strongly linked to healthcare costs.

4.1 Population

Population Projections in Leicestershire

Between 2016 and 2041 the population of Leicestershire is projected to increase by 15.8% to 787,500 in 2041, an increase of 107,100 people. This is higher than the projected increase of 12.4% for the East Midlands and 12.1% for England.¹

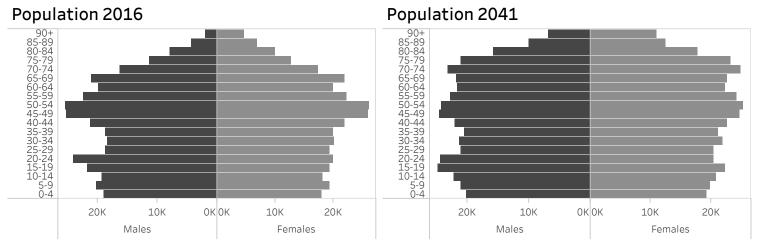
The greatest cumulative change by broad age group is projected to occur in the 65+ age group, accounting for an additional 74,300 older people in the county by 2041. This represents a projected increase of 54.5%, higher than the national increase of 51.5%. However, the 85+ age group is projected to experience a percentage growth of 126.6%. The population in this age group is expected to more than double, from 17,700 persons in 2016 to 40,100 persons in 2041.



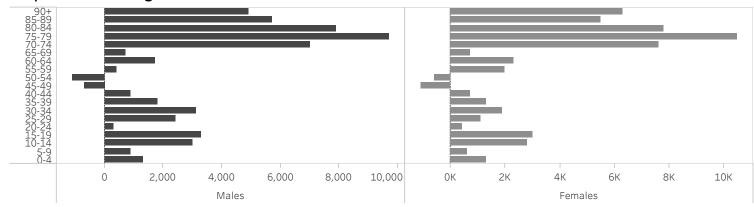
Population Projections in Leicestershire

The 2016-based population projections provide statistics on the potential future size and age structure of the population. They are used as a common framework for informing local-level policy and planning as they are produced in a consistent way. The projections take the revised mid-2016 population estimates as their starting point. The projected local authority populations for each year are calculated by ageing on the population from the previous year, applying local fertility and mortality rates to calculate the number of projected births and deaths, and then adjusting for migration into and out of each local authority. The local authority fertility, mortality and migration assumptions are derived using estimated values from the five years before the base projection year.

Please note the population projections are not forecasts. They do not attempt to predict the impact of future government or local policies, changing economic circumstances or other factors that may influence demographic behaviour.





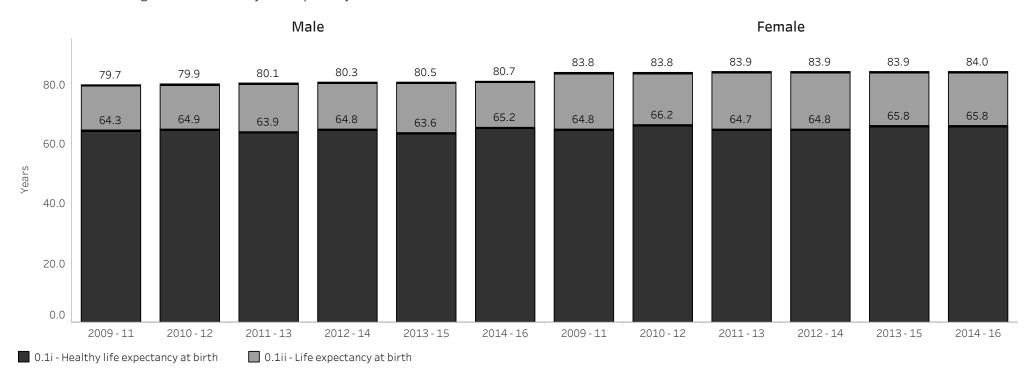


Life Expectancy in Leicestershire

Nationally, life expectancy at birth has remained constant for males over the last two time periods and in females over the last three periods, at 79.5 and 83.1 years respectively. In Leicestershire, life expectancy at birth for males and females have shown a slight increase from 80.5 to 80.7 years between 2013-15 and 2014-16 in males and from 83.9 to 84.0 years between 2013-15 and 2014-16 in females.²

Nationally, healthy life expectancy at birth has fallen for males and females compared to the previous time period, from 63.4 years to 63.3 years in males and from 64.1 years to 63.9 years in females. In Leicestershire, healthy life expectancy at birth in males has increased from 63.6 years in 2013-15 to 65.2 years in 2014-16 in males. In females, healthy life expectancy at birth has remained constant for the last two time periods 65.8 years.²

The gap in life expectancy at birth and healthy life expectancy at birth infers the number of years a person is likely to live in poor health. As shown by the graph, females, on average, live more years in poor health than males. The latest data from 2014-16 shows in Leicestershire males spend 15.5 years in poor health compared to 18.2 years in females. This is lower than the national average of 16.2 and 19.3 years respectively.²



Source: Public Health Outcomes Framework, PHE

4.2 Prevalence of Conditions

GP Recorded Disease Prevalence

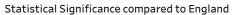
With the introduction of the new General Medical Services (GMS) contract in April 2004, a quality framework of indicators (QOF) was developed for general practice, the QOF. An integral part of the QOF is the collection of prevalence data to allow practices to case find those patients that require specific management. Prevalence data within the QOF are collected in the form of practice registers. Please note, while many patients are likely to suffer from co-morbidity, i.e. are diagnosed with more than one of the clinical conditions included in the QOF clinical domain, robust analysis of co-morbidity is not possible and therefore patients may be on more than one disease register if they have multiple conditions or risk factors.

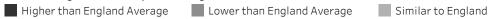
The table shows the percentage of patients recorded on a QOF disease register in Leicestershire General Practices. In 2016/17, over 100,000 patients (14.9%) were on the Hypertension disease register and almost 58,000 patients aged 18 years and above (10.7%) were on the Depression disease register in the county. Both these percentages are significantly higher than the national percentages of 13.8% and 9.1% respectively. Almost 37,000 patients aged 17 years and above (6.7%) in Leicestershire were recorded on the Diabetes Mellitus register.³ This is identical to national prevalence, but still represents a substantial burden of ill-health locally.



GP Recorded Disease Prevalence

Group	Disease Register	Register	Prevalence
	Atrial Fibrillation (All Ages)	14,073	2.1%
	Coronary Heart Disease (All Ages)	20,754	3.1%
	CVD - Primary Prevention (Ages 30-74)	5,411	1.4%
Cardiovascular	Heart Failure (All Ages)	6,614	1.0%
Cardiovascular	Heart Failure due to LVSD (All Ages)	2,095	0.3%
	Hypertension (All Ages)	100,613	14.9%
	Peripheral Artery Disease (All Ages)	3,639	0.5%
	Stroke and TIA (All Ages)	12,111	1.8%
	Cancer (All Ages)	18,811	2.8%
High Dependency Chron	Chronic Kidney Disease (Ages 18+)	23,197	4.3%
	Diabetes Mellitus (Ages 17+)	36,847	6.7%
	Palliative Care (All Ages)	5,664	0.8%
Lifestyle	Obesity (Ages 18+)	48,394	8.9%
Musculoskeletal	Osteoporosis (Ages 50+)	1,090	0.4%
Musculoskeletai	Rheumatoid Arthritis (Ages 16+)	4,175	0.7%
	Dementia (All Ages)	5,983	0.9%
	Depression (Ages 18+)	57,914	10.7%
Neurology	Epilepsy (Ages 18+)	4,084	0.8%
	Coronary Heart Disease (All Ages) 20,754 CVD - Primary Prevention (Ages 30-74) 5,411 Heart Failure (All Ages) 6,614 Heart Failure due to LVSD (All Ages) 2,095 Hypertension (All Ages) 100,613 Peripheral Artery Disease (All Ages) 3,639 Stroke and TIA (All Ages) 12,111 Cancer (All Ages) 18,811 Chronic Kidney Disease (Ages 18+) 23,197 Diabetes Mellitus (Ages 17+) 36,847 Palliative Care (All Ages) 5,664 Obesity (Ages 18+) 48,394 Osteoporosis (Ages 50+) 1,090 Rheumatoid Arthritis (Ages 16+) 4,175 Dementia (All Ages) 5,983 Depression (Ages 18+) 57,914 Epilepsy (Ages 18+) 4,084 Learning Disabilities (All Ages) 2,575 Mental Health (All Ages) 5,026 Asthma (All Ages) 41,600	0.4%	
	Mental Health (All Ages)	5,026	0.7%
Posniratory	Asthma (All Ages)	41,600	6.2%
Respiratory	COPD (All Ages)	12,146	1.8%





Hypertension

Cardiovascular disease is a key driver of premature mortality (death under 75 years) and inequalities in Leicester, Leicestershire and Rutland (LLR). Across LLR the prevalence of coronary heart disease, stroke, heart failure, hypertension and atrial fibrillation are likely to be underestimated with a large number of patients at risk of CVD remaining undiagnosed and unaware of their CVD risk.

One of the key interventions identified by the Department of Health and NICE in reducing health inequalities within populations was through optimising blood pressure (BP) control in patients with uncontrolled hypertension.

Increasing the prescribing of antihypertensives by 40% in patients with hypertension, in conjunction with other key interventions, will contribute to reducing the gap in life expectancy between affluent and deprived groups by around 6%. Hypertension is the third most costly risk factor across England.

Optimising anti-hypertensive treatment for diagnosed hypertensives in Leicestershire would realise significant cost savings to the NHS. National guidance suggest that the implementation of targeted hypertension programmes can reduce activity for a wide variety of conditions including, but not limited to, diabetes, heart failure, strokes and myocardial infarctions.

Hypertension is a 'trojan horse' to address multiple long term conditions (e.g. heart failure, diabetes, stroke, dementia and chronic kidney disease) through the use of prevention (including Health Checks), upskilled primary care staff, a communications campaign and a streamlined clinical management protocol. The overall integration of primary and secondary prevention should be improved by developing a more coordinated and high-profile approach around hypertension across the system.

Locally, work has begun to implement a Hypertension Prevention Programme. The objectives of this are:

- To improve prevention of hypertension in primary care via optimal use of patient registers, anti-hypertensives and longer term management of these patients
- To improve the connection between NHS Health Checks, primary prevention (e.g. lifestyle advice and services) and subsequent hypertension management
- To increase awareness of the importance of checking blood pressure (i.e. Know Your Numbers) both amongst the public and health professionals.
- To develop a clear end-to-end hypertension prevention pathway and treatment protocol that maximize patient care and outcomes as well as reducing burden on the system

By working towards the objectives outlined above, the intended outcomes are

- To reduce the number of hypertensives not optimally treated with anti-hypertensives
- To reduce the financial and clinical burden of hypertension and subsequent illness on the NHS
- To avert heart attacks and strokes in line with RightCare estimates

Hypertension

The QOF disease register examines the number of people diagnosed with hypertension (high blood pressure) but it is important to understand the number of people who may have undiagnosed hypertension in the local area. Public Health England have created hypertension prevalence estimates based on Health Survey for England data from 2013 and 2014 to help understand this.

It is estimated that 170,000 people in Leicestershire and Rutland have either GP recorded or undiagnosed hypertension. This is equal to approximately 24.9% of the population. Across Leicestershire and Rutland it is estimated that 70,000 people are living with undiagnosed and untreated hypertension. In both CCGs, the estimated undiagnosed hypertension prevalence is 12.0%, at GP level it ranges from 11.1% to 14.2%. Comparisons with the estimates and the 2014/15 QOF suggest that approximately 59.4% of the expected number of people with hypertension in Leicestershire and Rutland are recorded on GP registers. At GP level, this percentage ranges from 9.7% to 67.0%.

CCG name	QOF register hypertension prevalence (%)	QOF register hypertension cases	Estimated undiagnosed prevalence 16+ (%)	Estimated undiagnosed cases
NHS East Leicestershire and Rutland CCG	15.0%	48,454	12.5%	33,250
NHS West Leicestershire CCG	14.5%	54,339	12.0%	37,050
England	13.8%	7,833,779	12.0%	5,552,400

Estimated undiganosed hypertension prevalence by GP practice

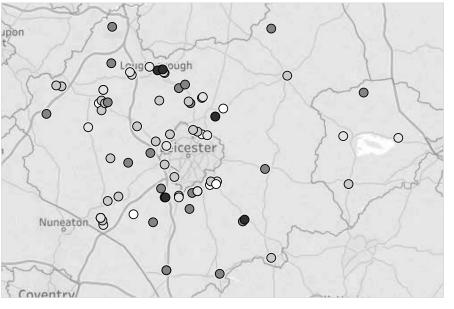


CCG Name

NHS East Leicestershire and Rutland CCG NHS West Leicestershire CCG

Source: Hypertension prevalence estimates for local populations, October 2016, PHE

Ratio of observed (QOF) to expected hypertension by GP practices



Observed vs Expected Ratio

0.52

Depression and Anxiety

Around a quarter of the over 65s will be affected by depression. The prevalence of depression may be higher in those living in a care home where up to 40% of older adults may experience depression. Higher rates of depression are also associated with adults who have suffered a stroke or heart disease or have a diagnosis of Parkinson's or Alzheimer's disease.

The Government's recent Loneliness Strategy has highlighted the importance of social connections between individuals and communities. Locally, the social prescribing model, the work of Council services such as Local Area Coordination and the Council's initiative on social isolation and loneliness highlight the importance the County Council attaches to this area of work.

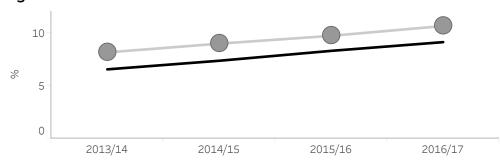


Depression and Anxiety

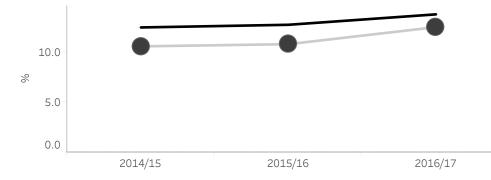
The depression recorded prevalence from QOF examines the percentage of the practice register with a diagnosis of depression.⁵ In contrast, the indicator reporting the percentage of depression or anxiety among patients is sourced from the GP Patient Survey. Across all time periods presented, the prevalence of depression or anxiety identified in this survey is higher (12.5% compared to 10.6% in 2016/17), perhaps because patients who have chronic conditions are more likely to respond. However, differences in the two prevalence estimates might also reflect an under- diagnosis of depression in General Practice.

It is well known that mental illnesses are frequently comorbid with physical illnesses and vice versa. The bar chart shows the prevalence of anxiety or depression in Leicestershire is significantly higher for those with a musculoskeletal (MSK) condition compared to those without a MSK condition, a pattern which is reflected nationally. In 2016/17, a fifth (20.2%) of those patients in Leicestershire with a long term MSK condition also reported depression or anxiety, compared to 12.5% of the entire population.⁶

Depression recorded prevalence (QOF): % of practice register aged 18+



Percentage reporting depression or anxiety (GPPS)

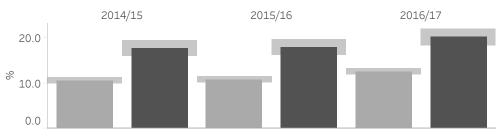


Statistical Significance compared to England:

Better

Source: Fingertips, Public Health England

Percentage reporting a long term MSK problem who also report depression or anxiety (GPPS)



N.B. Grey bars display 95% confidence intervals

% reporting depression or anxiety

🧾 % reporting a long term MSK problem who also report depression or anxiety

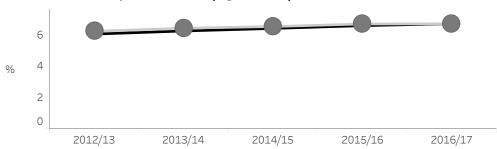
Diabetes

For the Council, Clinical Commissioning Groups and the Health and Wellbeing Board to understand the scope for prevention and make headway in tackling the rising numbers of people with or at risk of diabetes, it is important to understand not only how many people have diabetes but also the estimated number of people expected to have diabetes given the characteristics of the population. This will help identify the scale of the challenge in terms of numbers and costs in developing diabetes identification and prevention programmes. It will also help monitor the progress of closing the gap (i.e. meeting previously unmet need) between observed prevalence and actual prevalence in identifying people at high risk or with undiagnosed diabetes.

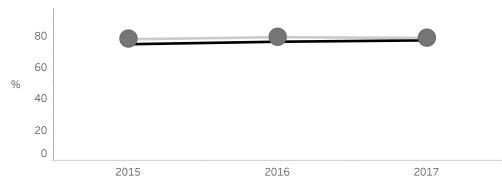
In Leicestershire the percentage of the population diagnosed with diabetes has significantly increased over the last five years, from 6.2% in 2012/13 to 6.7% in 2016/17. Nationally, the percentage has increased year on year throughout this time. The latest data in 2016/17 shows Leicestershire performs similar to the national average (6.7%).⁷

The estimated diabetes diagnosis rate examines the number of people with a formal diagnosis of diabetes (from the QOF disease register) as a proportion of the estimated number with diabetes. This then infers the proportion of the expected diabetes population who are with undiagnosed diabetes. Over the last three years in Leicestershire, the estimated diagnosis rate has remained similar to the national average. The latest data from 2017 shows 78.6% of the expected diabetes population has been diagnosed, similar to the national rate (77.1%). However throughout the county, variation exists. Harborough has the lowest estimated diagnosis rate (66.2%) and Oadby and Wigston, the highest (88.0%).²

Recorded QOF prevalence (aged 17+)



Trend of estimated diagnosis rate for people with diabetes aged 17+ in Leicestershire



Worse

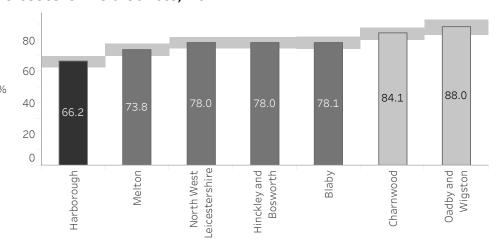
Source: Fingertips, Public Health England

☐ Better

Statistical Significance compared to England

Similar

Estimated diagnosis rate for people with diabetes aged 17+ in Leicestershire districts, 2017

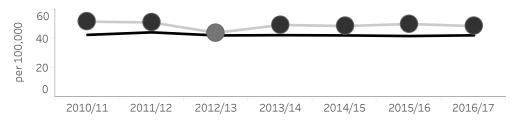


Sight Loss

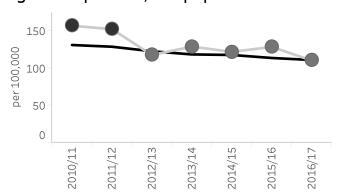
Prevention of sight loss will help people maintain independent lives as far as possible and reduce needs for social care support, which would be necessary if sight was lost permanently. The counts of new completions of Certifications of Visual Impairment (all causes - preventable and non-preventable) by a consultant ophthalmologist as a rate of the resident population in the county have been examined. In Leicestershire the rate of sight loss certifications per 100,000 population has remained significantly worse (higher) than the national average since 2013/14. The latest data shows in 2016/17 there were 333 new certifications in the county.² Completing the sight loss certification initiates the process of registration with a local authority and leads to access to services.

Where the cause of sight loss is Age-related Macular Degeneration (AMD), Glaucoma or Diabetic Eye Disease, the rate of new completions of Certifications of Visual Impairment due to these disorders have been examined separately. For the last five years, the rate of sight loss due to AMD in those aged 65 years and above and the rate of sight loss due to diabetic eye disease in those aged 12 years and above has remained similar to the national average. The rate of sight loss due to glaucoma in those aged 40 years and above has declined year on year for the past three years, to perform significantly better (lower) than the national average in 2016/17.²

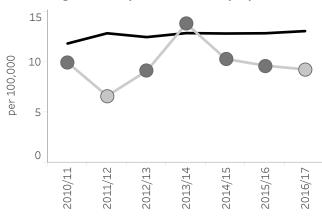
Rate of sight loss certifications per 100,000 population



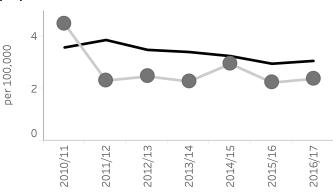
Rate of sight loss due to age related macular degeneration (AMD) in those aged 65+ per 100,000 population



Rate of sight loss due to glaucoma in those aged 40+ per 100,000 population



Rate of sight loss due to diabetic eye disease in those aged 12+ per 100,000 population



Statistical Significance compared to England



Source: Public Health Outcomes Framework, Public Health England

5. Multi Morbidity and Frailty

5.1 Multi Morbidity

Multimorbidity, commonly defined as the presence of two or more chronic medical conditions in an individual, is associated with a greater risk of disability and dying early, a lower quality of life and increased healthcare utilisation, including emergency admissions.

Studies show that multimorbidity is more common in older people, women and those who come from poorer backgrounds. However, it's not just a problem for these groups. People across all ages and backgrounds can develop multi morbidity. Rates of multi morbidity in older people are largely due to higher rates of physical health problems or conditions. However, in the less affluent, multimorbidity due to combinations of physical and mental health conditions is common.

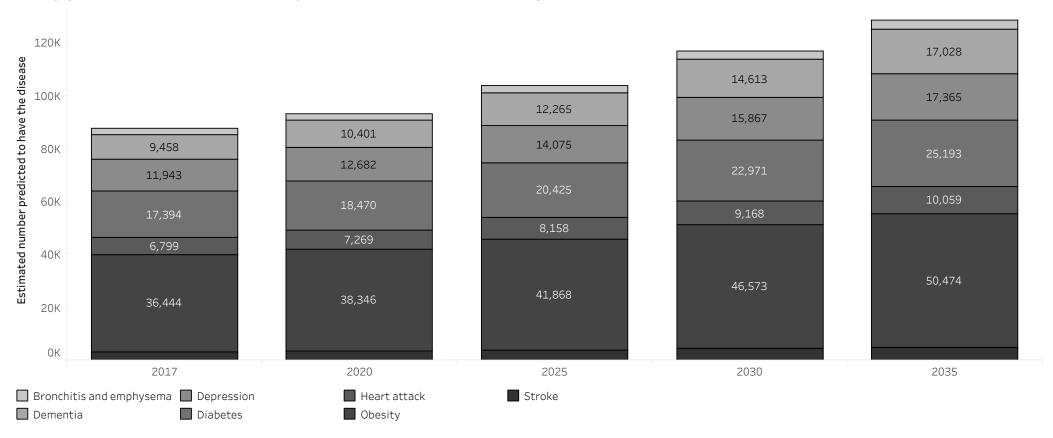
Patients with multiple long term conditions often have complicated medical needs, including having to manage multiple illnesses and complex medication regimens. Multimorbidity also affects the quality of life of the families and carers of patients affected.

Multimorbidity has a substantial impact on various health services ranging from general practice to end-of-life care. Much of the management of patients with multimorbidity is undertaken in primary care, placing large demands on GPs.



Forecasted prevalence of Long Term Conditions in people aged 65 years and above

The chart shows the projected number of people over the age of 65 years with a long term condition between 2017 and 2035 in Leicestershire. The numbers are based on the current prevalence rates applied to projected populations. Please note, the numbers refer to people on individual registers i.e. people with multi-morbidities will be counted on each register, therefore the totals will be greater than projected populations for the over 65s. The projected increase in number of people with the following conditions between 2017 and 2035 in Leicestershire is: Dementia (80.0%), Stroke (51.3%), Bronchitis and emphysema (46.4%), Heart attack (47.9%), Depression (45.4%), Diabetes (44.8%), Obesity (38.5%).



Prevalence estimates of Multi-Morbidity

Although multi-morbidity (presence of multiple chronic (long-term) conditions) has been researched extensively, there is currently no consensus on its precise definition. The number, type (physical or mental health) and selection criteria for conditions included in multi-morbidity indices vary from one author to another. The differences in definitions and measurement tools give rise to non-comparable information on the prevalence of multi-morbidity across various studies. Barnett et al.⁹ defined multi-morbidity as the presence of two or more chronic conditions from 40 specified conditions, and reported prevalence by sex, age group and area deprivation decile. The data reported here are based on two or more, three or more, and physical and mental health comorbidity only.

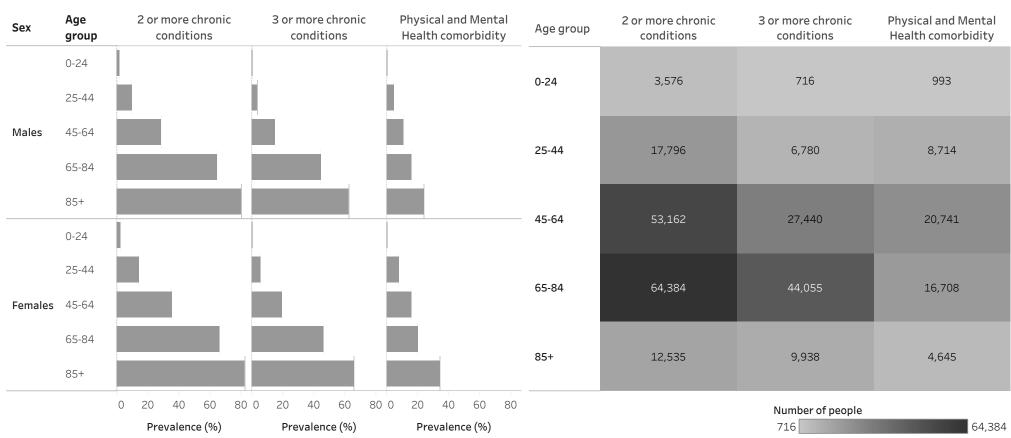
Prevalence estimates for the East Midlands show, regardless of gender, as we age the prevalence of multi-morbidity increases. In each age group, the prevalence of two or more chronic conditions was the highest, followed by three or more chronic conditions and the physical and mental health comorbidity. In Leicestershire, the highest count of people (65,000) with multi-morbidity was in the 65-84 years age group with two or more conditions respectively. This was followed by the 45-64 years age group with two or more conditions (53,000) and the 65-84 years age group with three or more conditions (44,000). Interestingly, there was a higher count of people with two or more chronic conditions in the 25-44 years age group compared to those in the 85 year and above age group. This is likely to reflect the smaller absolute population in the older age group.¹⁰



Prevalence estimates of Multi-Morbidity

Prevalence of multi-morbidity in the East Midlands

Estimated people with multi-morbidity in Leicestershire



Expected prevalence estimates are based on observed prevalence estimates provided by Barnett and colleagues and mid-2011 population estimates. **Source:** Public Health England

5.2 Frailty and Hospital Admissions

The strongest risk factor for frailty is age but not all old or very old adults are frail, nor is it always associated with comorbidity or disability. Frailty is a long-term condition which can predate a health crisis by a decade or more and many people with frailty also have multimorbidity.

Frail individuals have up to ten times the rate of adverse outcomes such as falls, hospital or care home admissions, and are less able to cope with life events such as illness and trauma.

It describes how our bodies gradually lose their in-built reserves, leaving us vulnerable to dramatic, sudden changes in health triggered by seemingly small events such as a minor infection or a change in medication or environment. Frailty defines the group of older people who are at highest risk of adverse outcomes such as falls, disability, admission to hospital, or the need for long-term care.

Older people with moderate to severe frailty are often well known to local health and social care professionals. They usually have weak muscles and also usually have other conditions like arthritis, poor eyesight, deafness and memory problems. This means older people with frailty will walk slowly, get tired easily and struggle to get out of a chair or climb stairs. Typically therefore they are housebound, or only able to leave their home with help.



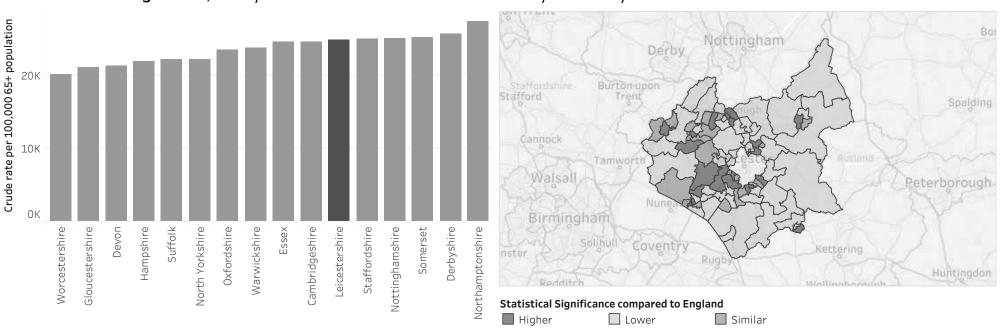
Emergency admission for residents aged 65 years and above

Good management of long term conditions requires effective collaboration across the health and care system to support people in managing conditions and to promote swift recovery and reablement after acute illness. There should be shared responsibility across the system so that all parts of the health and care system improve the quality of care and reduce the frequency and necessity for emergency admissions.

In 2017/18, the crude rate of emergency admissions for patients aged 65 years and above in Leicestershire is 24,770 per 100,000 population aged 65 years and above. This is the 6th highest rate out of the 16 CIPFA nearest neighbours to Leicestershire.¹¹ The map illustrates the variation across Leicestershire in the rate of emergency admissions for people aged 65 years and above and will identify areas where the rates are both higher and lower than the national average. Areas of both types might warrant further investigation to establish either the underlying causes for higher rates and thus gain an understanding of where improvements might be required, or for lower rates what good practice might look like. Areas in Wigston, Hinckley, Coalville and Loughborough may benefit from targeted intervention to reduce emergency admissions from residents in these areas.¹²

Emergency Admissions (65+) per 100,000 65+ population by CIPFA Nearest Neighbours, 2017/18

Standardised Admission Ratio, people aged 65+, MSOA, 2015/16 - 2017/18



Numerator: Emergency admission code (episode order number = 1, admission method starts with 2). Age at admission 65 and over. Ordinary admission only (classpat = 1). Admissions are only included if they have a valid Local Authority code. Denominator: Local Authority estimates of resident population, Office for National Statistics (ONS)

Source: Local Area Performance Measures, DoH and HES and ONS population estimates

 $Produced \ by \ the \ Strategic \ Business \ Intelligence \ Team, \ Leicestershire \ County \ Council, \ 2018.$

Falls

Regular physical activity can develop and maintain strength and balance. Poor muscle strength increases the risk of a fall by three quarters in older adults.

Locally, the Falls programme has put in place a number of interventions.

The Postural Stability Programmes continue to be delivered across the County CCG footprints. As a result of the additional funding approved by East and West CCG to enable the Falls programme to continue until March 2019, the Postural Stability Programme continues. This investment from the CCG's will enable a further 18 courses (24 week duration) to be completed by the end of the financial year. As each course ends, each candidate will undertake a repeated falls risk prediction tools to identify the impact of the programme.

The Therapy Triage service continues to review referrals into the consultant falls clinic and redirect a large number of these directly to Therapy review and support. As a result patients are continuing to benefit from drastically reduced waits, therapy interventions in a timely manner and only onwardly referred to a Consultant Falls clinic if it is professionally supported by the Leicestershire, Leicester City and Rutland (LLR) Falls Therapists.

The Falls Prevention Programme within community settings to be launched in August 2018 (delayed from June 2018). The programme will run for 12 months and strengthen the prevention/self assessment/early intervention activities for LLR regarding those at risk of falling in the future.

The Ambulance and Fire Service have agreed to work together to design the pilot Falls Response service. This service will respond to fallers who have been triaged as not requiring medical intervention to lift hem up, but still need lifting from the floor promptly.

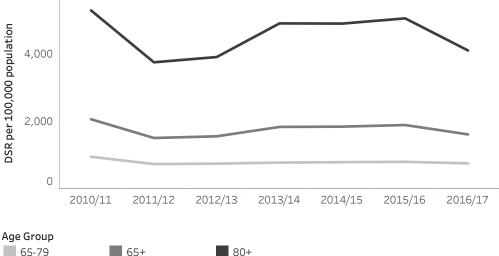
Emergency Admissions from Falls

Falls are the largest cause of emergency hospital admissions for older people, and significantly impact on long term outcomes, e.g. they are a major precipitant of people moving from their own home to long-term nursing or residential care. The highest risk of falls are in those aged 65 years and above and it is estimated that about 30% of people aged 65 years and above living at home or in residential care will experience an episode of fall at least once a year.

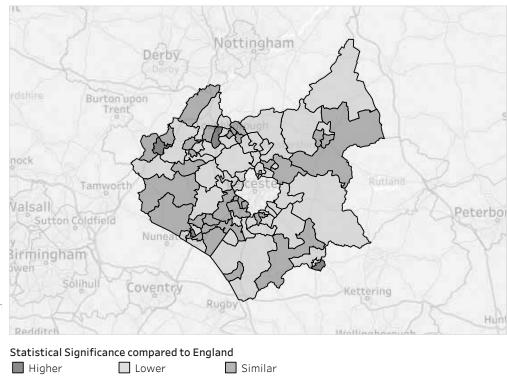
The local data for Leicestershire shows the rate of emergency admissions for falls increases with age, with the rate of admissions for those aged 80 years and above being five times higher than those aged 65 to 79 years.² The map illustrates the variation across Leicestershire in the rate of emergency admissions for falls in people aged 65+ will identify areas

where the rates are both higher and lower than the national average. Areas of both types identified might warrant further investigation to establish either the underlying causes for higher rates and thus gain an understanding of where improvements might be required, or for lower rates what good practice might look like. Areas in Hinckley, Market Harborough, Ashby-de-la-Zouch and Shepshed may benefit from targeted intervention to reduce emergency admissions from falls from residents in these areas.¹²

Rate of emergency hospital admissions for injuries due to falls per 100,000 population by age, 2010/11 - 2016/17



Standardised Admission Ratio, people aged 65 and over, MSOAs, 2015/16 - 2017/18



Numerator: Emergency admissions for falls injuries classified by primary diagnosis code (ICD10 code S00-T98) and external cause (ICD10 code W00-W19) and an emergency admission code (episode order number = 1, admission method starts with 2). Age at admission 65 and over. Regular and day attenders have been excluded. Admissions are only included if they have a valid Local Authority code. Denominator: Local Authority estimates of resident population, Office for National Statistics (ONS)

Source: HES, ONS population estimates and Public Health Outcomes Framework

Dementia

Dementia describes a group of symptoms associated with a decline in memory and other thinking skills, severe enough to reduce a person's ability to go about their daily business. Alzheimer's disease accounts for between two thirds and three quarters of cases.

There are a number of changes at different stages of life that evidence suggests could help prevent more than a third of cases of dementia. Dementia in later life is associated with low educational attainment in childhood, hearing loss, hypertension, obesity, smoking, depression, physical inactivity, social isolation, and diabetes.

Age is also associated with increasing levels of dementia but dementia itself is not an inevitable part of ageing

Smoking is one of the biggest lifestyle risk factors for dementia. It doubles the risk of dementia by increasing the risk of cardiovascular disease, diabetes and stroke. One of the best ways to prevent dementia is to quit smoking.



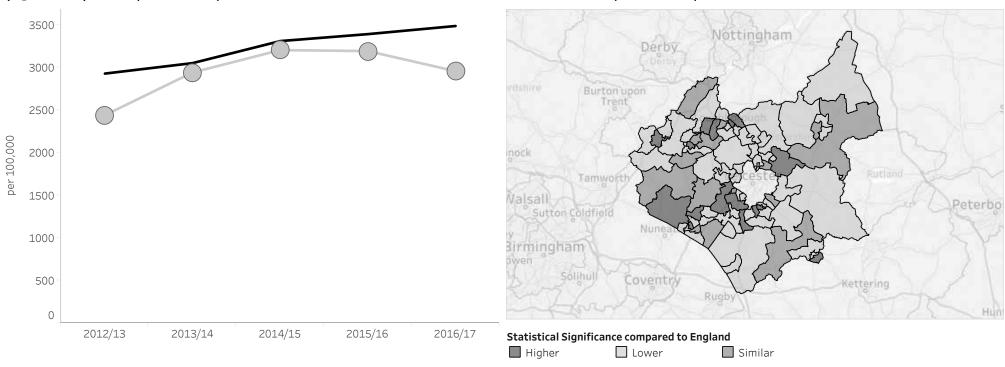
Emergency Admissions from Dementia

This indicator is useful to understand the variation in the provision of care of people with dementia in England. It examines the trend in the directly age standardised rate of emergency inpatient hospital admissions for people with a mention of dementia in any of the diagnosis code positions (aged 65 years and above) per 100,000 population in Leicestershire. Over the last five years, the rate has remained significantly better (lower) than the national average and has seen a year on year decrease over the last two years.¹³

The map illustrates the variation across Leicestershire in the rate of emergency admissions for people aged 65 years and above with dementia and will identify areas where the rates are both higher and lower than the national average. Areas of both types identified might warrant further investigation to establish either the underlying causes for higher rates and thus gain an understanding of where improvements might be required, or for lower rates what good practice might look like. Areas in Coalville, Shepshed, Hinckley, Loughborough and Ashby-de-la-Zouch may benefit from targeted intervention to reduce emergency admissions from falls from residents in these areas.¹²

Trend of Directly Standardised Rate per 100,000 population (aged 65+), 2012/13 - 2016/17

Standardised Admission Ratio, people aged 65 and over, MSOAs, 2015/16 - 2017/18



Numerator: Emergency admissions with any mention of dementia (F00-F04, G30 & G31) in any diagnostic field position and an emergency admission code (episode order number = 1, admission method starts with 2). Age at admission 65 and over. Ordinary admission only (classpat = 1). Admissions are only included if they have a valid Local Authority code. Denominator: Local Authority estimates of resident population, Office for National Statistics (ONS)

Source: HES, ONS population estimates and Fingertips, PHE

Emergency Admissions from any Frailty Diagnosis

To understand where frailty is higher than expected in the county, we used Hospital Episode Statistics to extract the unique patients aged 65 years and over who had one or more frailty syndrome diagnosis code in any diagnosis field. Definitions of the frailty syndromes were provided from J Soong et al.¹⁴. Across the county, almost 20,000 people aged 65 years and over with one or more frailty syndromes were admitted to hospital between 2014/15 to 2016/17. The map illustrates the variation across Leicestershire in the rate of emergency admissions for people aged 65 years and above with at least one frailty syndrome and will identify areas where the rates are both higher and lower than the national average. Areas in Loughborough, Coalville, Shepshed, Hinckley, Wigston and Ashby-de-la-Zouch may benefit from targeted intervention to reduce emergency admissions due to frailty from residents in these areas.¹⁵

The analysis also allows us to estimate what conditions and syndromes related to frailty we might want to prioritise due to the demand imparted on the acute health system. In Leicestershire, evidence points to dementia diagnoses and admissions related to falls.¹⁵



Emergency Admissions from any Frailty Diagnosis

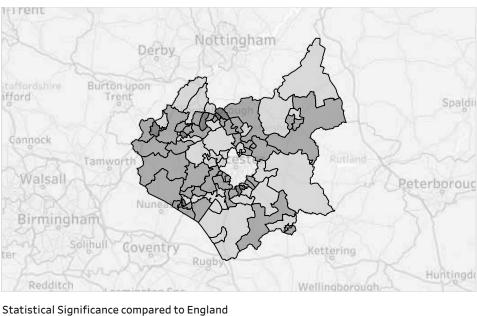
Count of patients by the type of different frailty diagnoses

	65-69	70-74	75-79	80-84	85-89	90+
Anxiety and Depression	1,234	1,028	954	883	773	530
Delirium	133	207	383	661	811	846
Dementia	154	301	724	1,341	1,751	1,755
Falls and Fractures	656	773	1,119	1,572	1,893	1,686
Functional dependence	58	79	109	168	196	160
Incontinence	224	280	461	625	737	651
Mobility problems	331	474	693	997	1,100	1,041
Pressure ulcers	131	206	282	437	493	510
Senility	20	41	75	136	199	225

Count of patients by the number of different frailty diagnoses

	65-69	70-74	75-79	80-84	85-89	90+
1	1,848	1,831	1,995	2,117	2,017	1,592
2	267	386	604	1,011	1,171	1,145
3	85	141	271	403	617	664
4	39	56	91	207	255	274
5	16	12	39	80	116	96
6		9	9	13	19	21
7				7		

Standardised Admission Ratio of unique patients with a frailty related hospital admission, aged 65+, MSOAs



Numerator: Counts of unique patients aged 65 and over, with finshed admission episodes (where EPISTAT=3 and EPIORDER=1) in the financial years 2014/15, 2015/16 and/or 2016/17, and at least one ICD diagnosis code in any of the following groups: Anxiety & Depression: F32, F33, F34, F38, F41, F43, F44; Delirium: F05; Dementia: F00, F01, F02, F03, F04; Senility: R54; Pressure ulcers: L89; Incontinence: R15, R32; Functional dependencies: Z74, Z75; Mobility problems: R26; Falls and fractures: S32, S33, S42, S43, S62, S72, S73 OR cause in: W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19. Where patients had multiple admission episodes, the most recent admission episode for that patient was used to get the patients age, address and GP practice to group by to avoid double counting patients. Denominator: Counts of unique patients aged 65 and over, with finshed admission episodes (where EPISTAT=3 and EPIORDER=1) in the financial years 2014/15, 2015/16 and/or 2016/17.

5.3 Mortality

Excess Winter Deaths

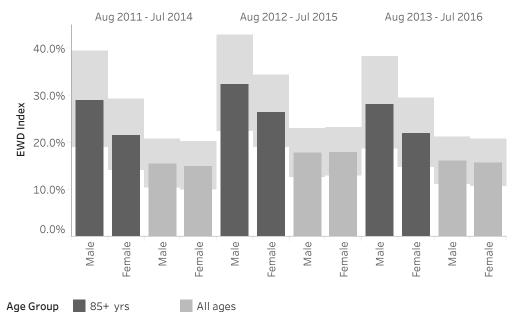
In common with other countries, more people die in the winter than in the summer in England and Wales. The Excess Winter Deaths (EWD) Index is defined as the ratio of extra deaths from all causes that occur in the winter months compared with the expected number of deaths, based on the average of the number of non-winter deaths. Between August 2013 to July 2016 there were an estimated 889 excess winter deaths in Leicestershire. This represents a EWD Index of 15.8%, which means that 15.8% more deaths occurred in the winter months compared with the non-winter months.² As it is common to observe large fluctuations in EWDs for which trends over time are often not smooth, we have presented a three-year moving average to smooth out any short-term fluctuations and make the trend over time clearer in the graphs presented.

Nationally, EWDs are generally higher in females and the elderly. In Leicestershire the EWD Index for those aged 85 years and above has been consistently higher (although not significantly) than those of all ages since recordings began. When examining by gender, on a national level, the EWD Index for females aged 85 and above has been higher than males (although not always significantly) for the last 12 time periods. In Leicestershire, the EWD Index for males aged 85 and above has been higher (although not significantly) than females in the same age group for the last three time periods.²

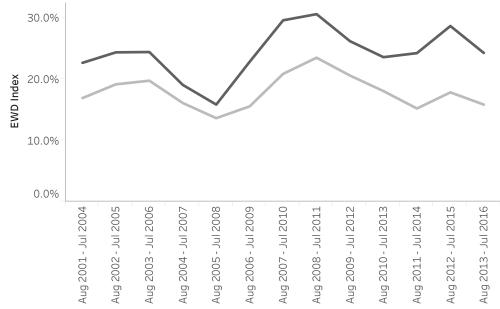


Excess Winter Deaths

Excess Winter Deaths Index (3 years) by sex and age group



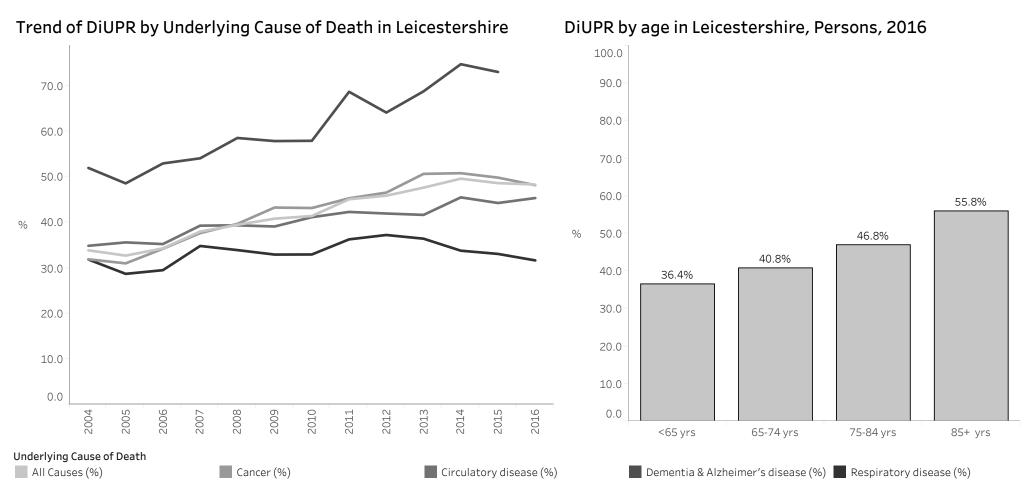
Trend in Excess Winter Deaths Index (3 years) by age group



Deaths in Usual Place of Residence

The proportion of deaths in usual place of residence (DiUPR) is a key indicator for end of life care and acts as a proxy quality marker for choice and access. The latest data from 2016 shows as age increases, the proportion of people dying in their usual place of residence increases. In Leicestershire over the last six years, the percentage of DiUPR has significantly increased. This pattern is consistent across all age bands.¹⁶

When examining DiUPR by cause of death in 2015, this showed Dementia and Alzheimer's disease had the highest percentage of DiUPR (73.1%), followed by Cancer (49.9%), Circulatory disease (44.3%) and Respiratory disease (33.1%). Trend analysis for Leicestershire shows that deaths in usual place of residence for Respiratory disease has shown no significant increase over time whereas Dementia and Alzheimer's disease, Cancer and Circulatory disease have all shown significant increases in the percentage of DiUPR. ¹⁶



Source: End of Life Care Profile, PHE

6. Treating the person, not the condition

The challenge of frailty and multi morbidity will need action in a number of areas. There are broadly:

- actions the health and care system need to consider to help them care successfully for patients with multiple conditions;
- actions public health and wider local government can support to help people live a healthy old age, and;
- actions that public sector partners can work together on to reduce isolation and encourage participation in communities

The health system

The longer term challenge for the health system is shifting away from treating individual diseases towards providing help for people with a number of different conditions. This help should be the earlier the better and preferably, in their own communities. The 'system' should be about prevention, early identification and management of conditions, ideally within primary care, to prevent the onset of ill health.

For healthcare, this suggests a need to ensure investment in improved primary care, prevention, case management and integrated/co-ordinated NHS and social care. Improvements to information sharing across services, and implementing 'risk stratification' tools in general practice will help.

GPs when caring for younger and poorer patients with multimorbidity, should consider the cross over between physical and mental health morbidities. By comparison, when caring for older patients with multimorbidity, the sheer number of morbidities is likely to define a patients' needs. A well thought out collaborative planning process is crucial for people with multimorbidity.

Promote healthy ageing

We need to maintain good health throughout life. Quitting smoking, being physically active and eating well will not only help slow the earlier onset of chronic conditions such as osteoarthritis and diabetes, but lifestyle improvements in those with multiple health conditions and the frail can help them keep well.

Loneliness and social isolation

Being housebound is a risk factor for loneliness, and that loneliness is itself a risk factor for depression, poor sleep, impaired thinking skills, higher use of health care with more GP visits, higher use of medication, and higher incidence of falls. Linked to prevention and social prescribing, tackling loneliness and supporting people in their own communities will help mitigate the increasing numbers of frail people.



Social Prescribing

Social prescribing is a way of linking patients in primary care with sources of support within the community. It provides GPs with a non-medical referral option that can operate alongside existing treatments to improve health and well-being.

In Leicestershire the vision for social prescribing is that: 'We will work together to create a coherent social prescribing offer across Leicestershire that will benefit citizens by allowing them greater access to our menu of services and community resources, to enhance their health and wellbeing'.

The Council's 'First Contact Plus' service acts as the coordinating "front door" for accessing a range of social prescribing solutions, as illustrated by Figure 1.

Emerging Model for Social Prescribing

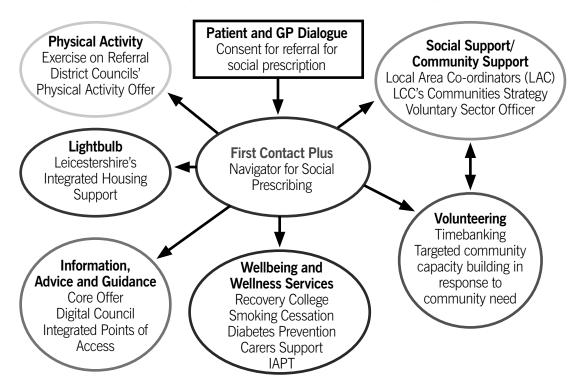


Figure 1

The social prescribing model recognises that the 'offer' would not be the same in the two areas as, for example, the physical activity services and approach to community development vary by district council.

Local Area Coordination

Local Area Coordination (LAC) is an approach to supporting people and their families to have a good life as part of their local community that is a central part of the social prescribing model.

Rather than waiting for people to fall into crisis, assessing deficits, testing eligibility and fitting people into more expensive (and increasingly unaffordable) services, it works alongside people to:

- Build and pursue their personal vision for a good life,
- Stay strong, safe and connected as contributing citizens,
- Find practical, non-service solutions to problems wherever possible, and
- Build more welcoming, inclusive and supportive communities.

Local Area Coordinators take time to build valued, trusting relationships with individuals, families and communities – they start with supporting people to build a vision for a good life and the ways they may get there. Services are the last part of the conversation.

By starting with asking 'what matters to you?' rather than 'what's the matter?' they promote a focus on person-centred care rather than on individual medical conditions.

Support for carers

Informal carers, friends and family, often provide considerable support to people with multimorbidity. It is important to take an integrated approach to identifying and assessing carer health and wellbeing. Carers have worse health outcomes than people who are not carers and that they might need support too. 70% of carers come into contact with health professionals with only around 10% being identified as carers.

7. Feedback on recommendations for 2017

Air quality

As an emerging national risk to health, I would encourage a partnership approach between Leicestershire County Council, District Councils, businesses and other partners to address this issue with the urgency and scale that it requires.

Response:

Public Health have started to map a range of air quality related health conditions against modelled air quality across Leicestershire, and will be working with new modelling software within the Department Environment & Transport and the University of Leicester to take this forward.

This Winter will see the launch of an action plan for air quality in Leicestershire focussing on better data and intelligence, active travel promotion in identified hot spots, and a communications campaign to educate wider public on what they can do to reduce their own impact on air quality and protect themselves and their families if they have health issues exacerbated by poor air quality"

Demography

The figures for life expectancy, healthy life expectancy and population change make it clear that Leicestershire's population is undergoing rapid change. It is estimated that 56,000 men and 58,000 women are living in the 'age gap' between healthy life expectancy and life expectancy, potentially in poor health. This accounts for 17% of the population in the county. It is imperative that government funding formulas reflect the drivers for demand for our services, such as adult social care, so that Leicestershire can plan for this ongoing change.

Response:

The recommendation still stands. Council officers and members continue to lobby for fairer funding work. It is hoped we will have sight of the new system in the spring for implementation for 2020/21.

Lifestyles

Around two-thirds of deaths among the under 75s are caused by diseases and illness that are largely avoidable, including cancer and diseases of the circulatory system. Many of the direct causes are due to lifestyle related factors and are preceded by long periods of ill-health. I will ensure that lifestyle services tackle multiple lifestyle risk factors and that such services are integral to developments such as Integrated Locality Teams.

Response:

Following public consultation, Council Cabinet approved the development of a new model for an integrated lifestyle service to be in place for September 2019. The model will deliver:

- a. Universal Tier 1 support for all residents The provision of online evidence-based information on healthy eating, nutrition and cooking that is consistent with NICE Guidelines;
- b. Integrated lifestyle service triage The introduction of a telephone-based triage service to develop personalised behaviour change plans and co-ordinate access to lifestyle services as necessary. Some people will need only one-off information, advice and guidance. Other people will need more support and for weight management would be referred to the in-house Tier 2 service;
- c. In-house Tier 2 weight management service working alongside the existing Quit Ready smoking cessation service. The adult weight management service will operate using a combination of online/web based information, telephone support, app, text and web-chat approaches and face to face groups for specific, targeted, service users to form an integrated and multi-component service. Access will be by self-referral or GP referral to online information or to the existing First Contact Plus (FC+) telephone service.
- d. Improved cross referral improving integration and cross referral of people across lifestyle services including physical activity services delivered by district councils.

Through the work of the Unified Prevention Board (UPB – a sub-group of the Health and Well Being board), prevention services are represented at each integrated locality team across Leicestershire, helping ensure that prevention play a key part in the development of multi-disciplinary working across health and social care.

Alcohol

Alcohol specific hospital admissions highlight 'hotspots' around the county where such admissions occur. I will help develop stronger links between the Leicestershire Community Safety Partnership Board and the Health and Wellbeing Board to work on identified joint priorities such as alcohol related admissions.

Response:

Public Health completed a needs assessment to explore links between health & wellbeing and community safety. This led to the development of 5 priority areas of focus, one of which is alcohol misuse. These priorities have been endorsed by the Leicestershire Safer Communities Strategic Board and the Health and Wellbeing Board. In addition, Public Health is leading on the development of a substance misuse strategy which will include elements such as criminal justice and domestic abuse and will have key partners such as the police at the heart of its development.

The Office of the Police and Crime Commissioner (OPCC) are leading on the development of 'People Zones' which are geographically defined areas wherein public services (including health, police, local authorities, fire services and criminal justice services) work collaboratively to address the key social problems for that particular area. The intention is to address the issues that are the highest priority for the local community and the organisations that support them. One of the People Zone areas is Bell Foundry which has the highest number of alcohol specific hospital admissions in Leicestershire. Stakeholders within this People Zone area have identified drug related crime as a key issue and an ambition statement has been developed which focuses on addressing substance misuse

Weight management

Although our weight management services show a level of effectiveness, it is clear that they are, in part, providing for a group of patients with a higher level of need than they were designed for. I would re-new a call for all partners, including Clinical Commissioning Groups (CCGs), to recognise their commissioning responsibilities in the creation of an integrated weight management pathway.

Response:

Obesity related ill-health and the importance of having an obesity pathway in place has been recognised across the healthcare system in Leicester, Leicestershire and Rutland, and is part of several work streams to redesign patient pathways (e.g. gastroenterology and cardiology), led by University Hospitals Leicester NHS Trust.

The Council's part of the 'obesity pathway' has been redesigned and through this work the continued gap in CCG commissioned specialist weight management services has been highlighted. There will be some groups not eligible for Council weight management services (e.g. people with complex obesity-related ill health, people with learning disabilities and women who are pregnant) that may not have access to weight management support unless this gap is addressed.

Deprivation and rural health

Although relatively affluent as a whole, analysis of the 'housing and environment' domain of the Index of Multiple Deprivation shows that Leicestershire faces challenges around housing and access to services. A priority for public health in the next year will be to examine rural health in more depth and ensure that robust plans are in place to tackle rural health issues.

Response:

The recently completed demography chapter of the Joint Strategic Needs Assessment (JSNA) 2018-2021 sets out data on the health and well being needs of Leicestershire both now and into the future. The JSNA sets out the key rural health issues that should be borne in mind by commissioners and providers.

Farmers and other agricultural workers are included amongst occupational groups that are at particularly high suicide risk (other groups include nurses and doctors). For example, GPs in rural areas, aware of the higher rates of suicide in farmers and agricultural workers, will be well prepared to assess and manage depression and suicide risk.

The recently launched 'Start a Conversation' campaign tackling attitudes and stigma towards death by suicide, recognises the importance of rurality as a risk factor. The Leicestershire and Rutland Rural Partnership holds a series of suicide prevention awareness training workshops across the county.

References

- 1. Office of National Statistics (2018) Subnational population projections for England: 2016-based. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/subnationalpopulationprojectionsforengland/2016based
- Public Health England (2018) Public Health Outcomes Framework. Available at: https://fingertips.phe.org.uk/profile/public-health-outcomes-framework
- 3. NHS Digital (2017) Quality and Outcomes Framework (QOF) 2016/17. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/quality-and-outcomes-framework-achievement-prevalence-and-exceptions-data/quality-and-outcomes-framework-qof-2016-17
- 4. Public Health England (2016) Hypertension prevalence estimates for local populations. Available at: https://www.gov.uk/government/publications/hypertension-prevalence-estimates-for-local-populations
- 5. Public Health England (2018) Mental Health and Wellbeing JSNA Profile. Available at: https://fingertips.phe.org.uk/profile-group/mental-health/profile/mh-jsna
- 6. Public Health England (2018) Musculoskeletal Diseases Profile. Available at: https://fingertips.phe.org.uk/profile/msk
- 7. Public Health England (2018) NHS Health Check Profile. Available at: https://fingertips.phe.org.uk/profile/nhs-health-check-detailed
- 8. Institute of Public Care (2018). Projecting Older People Population Information. Available at: http://www.poppi.org.uk/
- Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie, Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. The Lancet, Volume 380, Issue 9836, 2012, Pages 37-43, ISSN 0140-6736, https://doi.org/10.1016/S0140-6736(12)60240-2. (https://doi.org/10.1016/S0140-6736(12)60240-2.
- 10. Public Health England (2018) PHE prevalence estimates of multi-morbidity (region and local authority)
- 11. Department of Health and Social Care (2018) Local area performance measures: NHS social care interface dashboard. Available at: https://www.gov.uk/government/publications/local-area-performance-metrics-and-ambitions
- 12. Leicestershire County Council (2018). Standardised Admissions Ratio from Hospital Episode Statistics and ONS Midyear Population Estimates.

- 13. Public Health England (2018) Dementia Profile. Available at: https://fingertips.phe.org.uk/profile-group/mental-health/profile/dementia
- 14. Soong J, Poots A, Scott S, et al. Quantifying the prevalence of frailty in English hospitals. BMJ Open 2015;5:e008456. doi: 10.1136/bmjopen-2015-008456
- 15. Public Health England, Local Knowledge and Intelligence Service East Midlands (2018) Patients with frailty admissions in Leicester, Leicestershire and Rutland, 2014/15 2016/17
- 16. Public Health England (2018) End of Life Care Profile. Available at: https://fingertips.phe.org.uk/profile/end-of-life

