Annual Report of the

Director of Public Health 2017

Rutland's health –

new insights into our population

1.   Foreword

Welcome to my annual report for 2017. In my last annual report I set out an analysis of the health profiles for England, highlighting the importance of the place as a setting for health improvement. As can be seen in the 'update on recommendations', presenting such an analysis has led to a renewed focus on the priorities for health in Rutland, while workplace health has been taken up as a priority through the work of the wider Sustainability and Transformation Partnership (STP).

Building on the analysis in the last two years, I have chosen to dig a little deeper into the health of the local population. I believe that the annual report remains an important document setting out information on the health of the population and the areas we need to focus on.

This time around, I have chosen a more visually appealing style to the report. The use of infographics makes data 'come alive' to more people, so I hope this report casts a new light on the way people think about themselves and Rutland.

To that end, I would like to thank the team that have helped produce this: Rob Howard, Joshna Mavji, Mike McHugh, Liz Orton and Colin Thompson from Public Health and especially, Natalie Greasley from the Strategic Business Intelligence Team for her tremendous work in making my vague thoughts and instructions into a fantastic picture of the health of Rutland.

Mike Sandys

Director of Public Health

Contents

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 Rutland.

However the report is not just an annual review of public health outcomes and activity. 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 population of Rutland, its health, lifestyle behaviours, prescribing and hospitals admissions. The content should be used by commissioners and providers of services to respond to changes in the health of Rutland residents.

3. Recommendations and summary

I am aware that every slide has something in it that organisations and individuals would wish to reflect on and take forward in their future plans. This could range from demographic projections informing future service redesign, through to migration patterns informing economic growth and housing plans, etc. However, there are areas which I will be taking forward this year through the work of the department:

Military Health

The military population have a significant bearing on the population of Rutland and its use of health and other services. Although there are good links between public health and the military on specific issues, the importance of the military and veteran population in Rutland calls for a review, in line with national publications, on the links between the military defence services and public health.

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.

Crime

I will undertake further analysis exploring the potential association between crime and hospital admissions in the north of Rutland, notably in the Greetham and Exton wards.

Health summary of Rutland in 2017

- 5.4% of all-cause adult mortality is attributable to air pollution, measured as fine particulate matter, PM2.5. Nationally, air pollution is attributable to 4.7% of all adult deaths.
- Violent crime (violent offences) is significantly better than the national average
- Children with excess weight aged 4-5 years is similar to the national average
- Children with excess weight aged 10-11 years is similar to the national average
- Excess weight in adults is similar to the national average
- The percentage of physically active adults is significantly better than the national average
- Admissions to hospital for alcohol specific conditions is significantly better than the national average
- Smoking prevalence is similar to the national average
- Under 18 conceptions (teenage pregnancy rate) is significantly better than the national average
- Recorded diabetes is significantly worse than the national average
- Life expectancy for both males and females is significantly better than the national average
- Healthy life expectancy for males and females is significantly better than the national average

Domain	Indicator	
Our Communities	Deprivation score (IMD 2015), Persons	Not compared
	Children in low income families (under 16s), Persons	Better
	Statutory homelessness, Persons	Not compared
	GCSEs achieved, Persons	Better
	Violent crime (violence offences), Persons	Better
	Long term unemployment, Persons	Better
Children's and young people's health	Breastfeeding initiation, Female	Better
	Obese children (Year 6), Persons	Similar
	Hospital stays for alcohol-specific conditions (under 18s), Persons	Not compared
	Under 18 conceptions, Female	Better
	Smoking status at time of delivery - current method, Female	Not compared
Adults' health and lifestyle	Smoking prevalence in adults, Persons	Similar
	Percentage of physically active adults - current method, Persons	Better
	Excess weight in adults - current method, Persons	Similar
Disease and poor health	Cancer diagnosed at early stage, Persons	Not compared
	Hospital stays for self-harm, Persons	Better
	Hospital stays for alcohol-related harm, Persons	Better
	Recorded diabetes, Persons	Worse
	Incidence of TB, Persons	Better
	New sexually transmitted infections (STI), Persons	Better
	Hip fractures in people aged 65 and over, Persons	Similar
	Estimated dementia diagnosis rate (aged 65+), Persons	Similar
Life expectancy and causes of deaths	Life expectancy at birth, Male	Better
	Life expectancy at birth, Female	Better
	Infant mortality, Persons	Similar
	Killed and seriously injured on roads, Persons	Worse
	Suicide rate, Persons	Not compared
	Smoking related deaths, Persons	Better
	Under 75 mortality rate: cardiovascular, Persons	Better
	Under 75 mortality rate: cancer, Persons	Better
	Excess winter deaths, Persons	Similar

Statistical Significance compared to England:

■ Better   ■ Not compared   ■ Similar   ■ Worse

Rutland's population

4.1 Population and population change

Where do people live in Rutland?

In 2015, the population of Rutland was 38,000 people. Of these, 8,600 people were aged 0-19 years (22.7%), 7,900 people were aged 65-84 years (20.6%) and 1,200 people were aged 85 years and over (3.3%).[i]

The population of Rutland is growing and by 2039 the total population is predicted to reach 41,300 people, a total population growth of 8.7% compared with 2014. However, this growth is not uniform across the different age bands. In the next 25 years, the population is predicted to grow as follows:[ii]
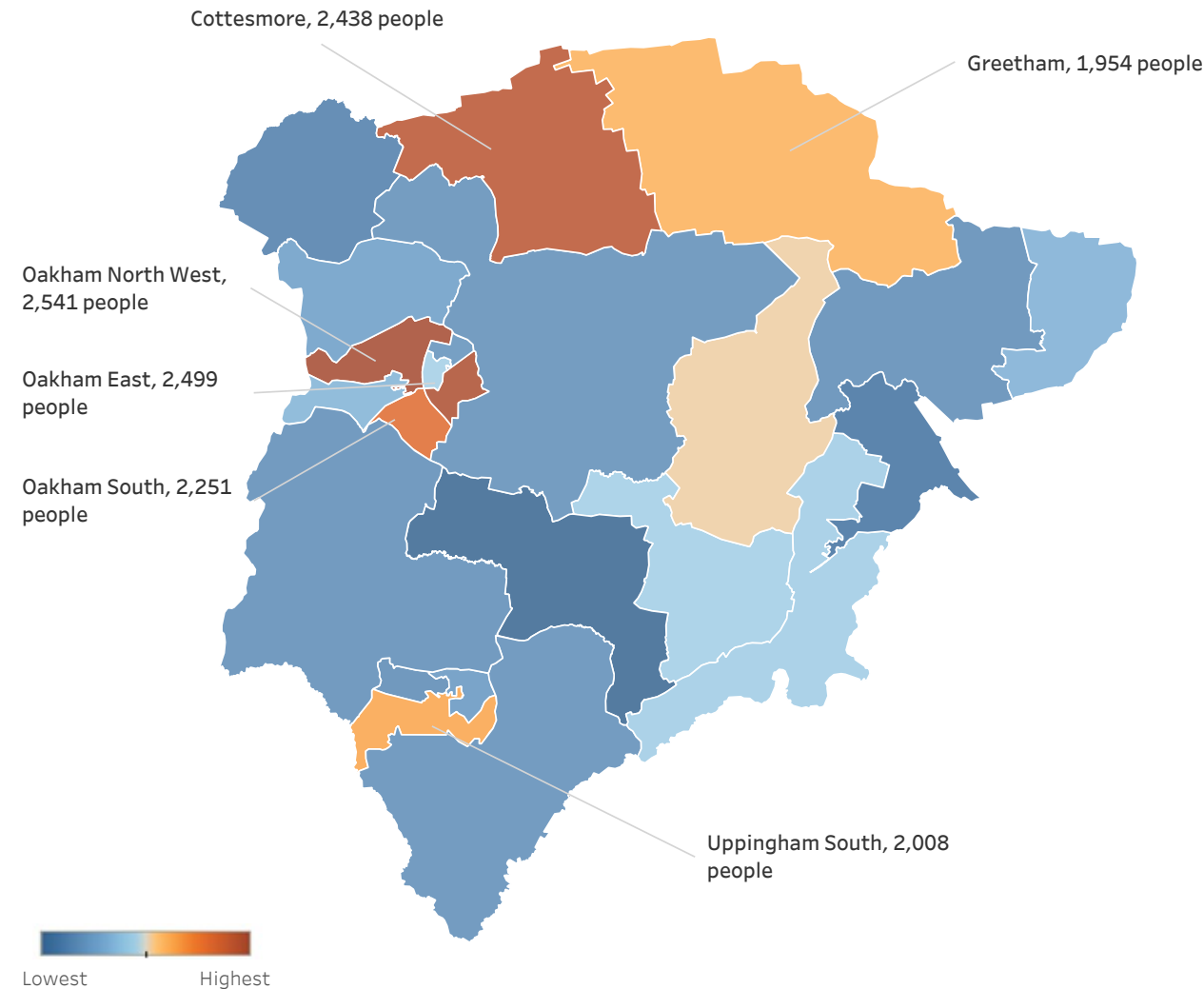
- A 2.8% decrease in children and young people aged 0-24 years (10,600 people to 10,300);

- A reduction in the working age population aged 25-64 of 9.1% (from 18,600 people to 16,900);

- A 37.7% increase in people aged 65-84 (from 7,700 people to 10,600);

- A 169.2% increase in the oldest population group of people aged 85 years and over (from 1,300 people to 3,500).

The infographic examines the population density of residents in Rutland by each specified age group. It estimates the counts of residents by each Lower Super Output Area (LSOA).[i] It shows that for all ages of the population, Oakham is the most densely populated area in the county. When examining population density by age, Uppingham has the highest number of children and young people. Oakham East has the highest number of adults aged over 65 and aged 85 and over.
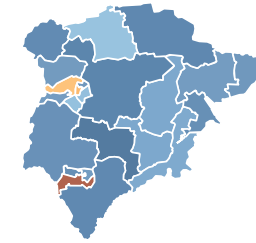
Where do people live in Rutland?

The maps below display population by Lower Super Output Area (LSOA) in Rutland. These are small units of geography used for the dissemination of Census data and, on average, contain a population of 1,500. The darkest orange LSOAs have the highest counts of people in the specified age group.
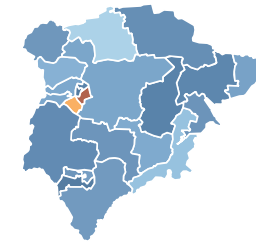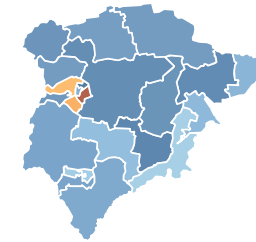
All Ages Population

Cottesmore, 2,438 people

Greetham, 1,954 people

Oakham North West, 2,541 people

Oakham East, 2,499 people

Oakham South, 2,251 people

Uppingham South, 2,008 people

Lowest   Highest

Population aged 0-19

Population aged 65+

Population aged 85+

Living arrangements in Rutland

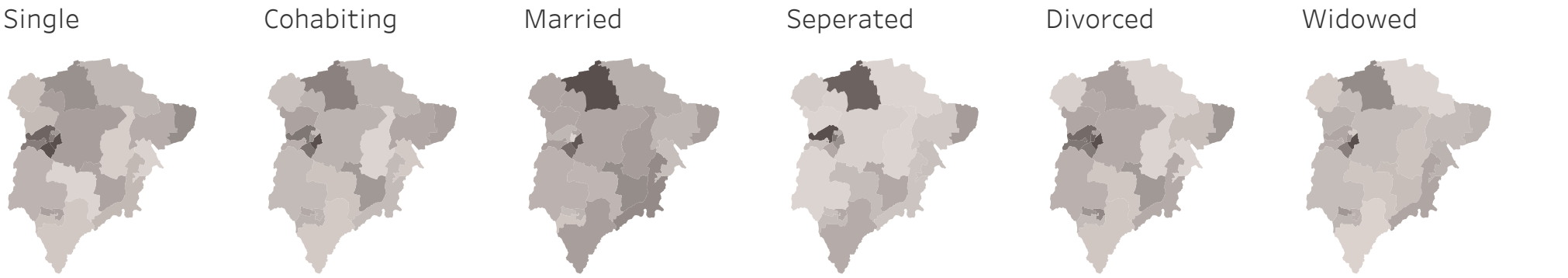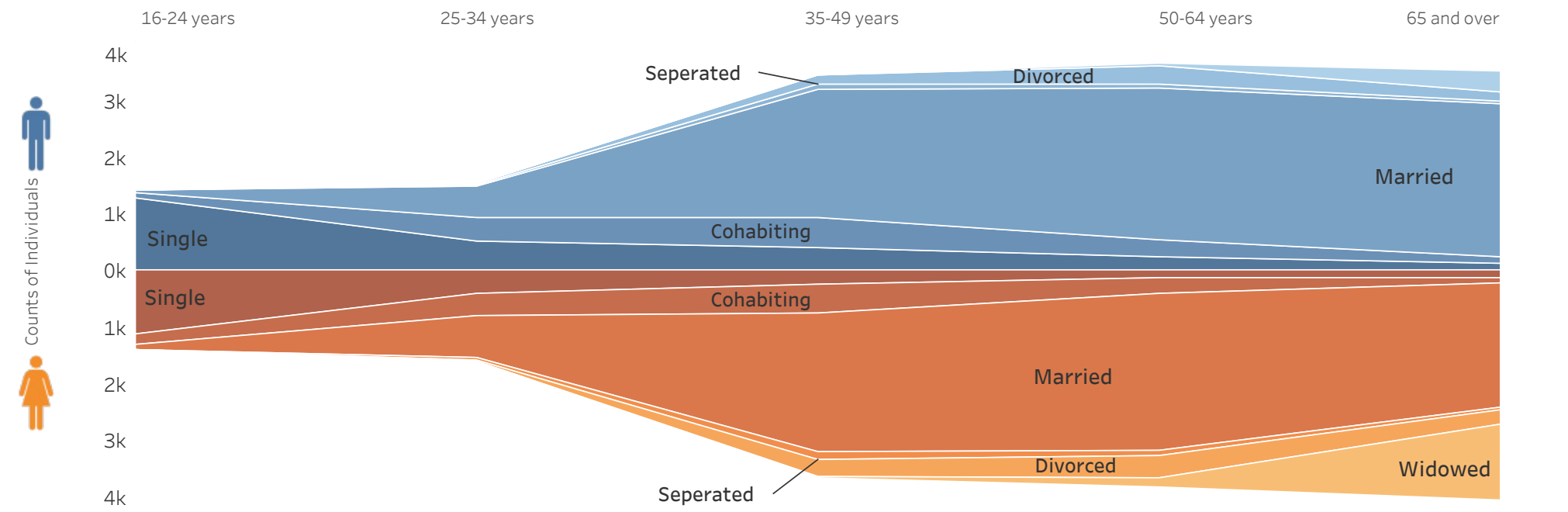The 2011 Census data shows living arrangements vary by age. In 2011:

- almost all young people aged 16-24 were either single, or cohabiting; 85% were single while 10% were cohabiting. The highest density of single people was in Oakham. This could be attributed to the large student population within the town.

- At 25-34, people begin to marry[1] resulting in an increased variation of living arrangements for this age band; in 2011 40% of individuals were married followed by 29% who were single.

- The vast majority of people aged 34-49 were married (65%), while 11% were separated or divorced.

- By age 50-64, almost three-quarters of the population were married (72%) while 13% were divorced or separated, 8% cohabiting and 5% were single.

- At age 65 and over, the vast majority of people were married (63%), but the proportion of people who were widowed increased to 23%, while the proportion of people separated or divorced decreased slightly to 8%. A third of females (33%) aged 65 or over were widowed compared to 11% of males, which reflects longer life expectancy in females compared to males.

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[1] Includes married, or in a same-sex civil partnership. N.B. Homosexual marriages were introduced after 2011 Census.

Living arrangements in Rutland

The Census 2011 estimates the living arrangements of household residents by age. Living arrangements differs from marital and civil partnership status because cohabiting takes priority over other categories. For example, if a person is divorced and cohabiting, then they are classified as cohabiting. The graph examines how living arrangements changes with age. The maps examine the population by living arrangement category by Lower Super Output Area (LSOA) in Rutland. These are small units of geography used for the dissemination of Census data and, on average, contain a population of 1,500. The darkest coloured LSOAs represent a more densely populated area.

16-24 years   25-34 years   35-49 years   50-64 years   65 and over

Counts of Individuals

4k 3k 2k 1k 0k 1k 2k 3k 4k

Seperated   Divorced   Married   Cohabiting   Single

Single   Cohabiting   Married   Divorced   Seperated   Widowed

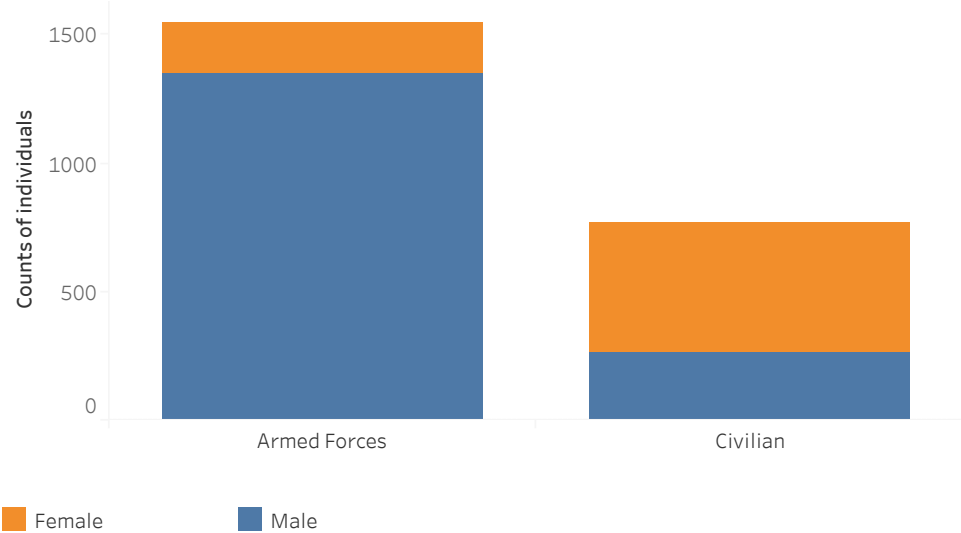Single   Cohabiting   Married   Seperated   Divorced   Widowed

Military Population in Rutland

Two British Army barracks are located in Rutland, Kendrew Barracks in Cottesmore and St George's Barracks in North Luffenham. The data presented examines summary statistics on the number of serving UK Armed Forces personnel and entitled civilian personnel with a Defence Medical Services (DMS) registration. Personnel with a DMS registration have their primary care (GP services) provided by the Ministry of Defence rather than the NHS.
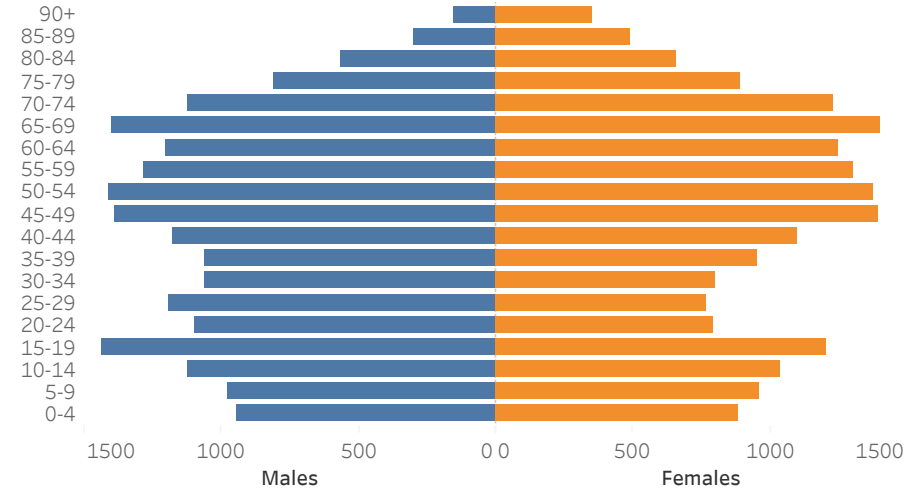
The resident population pyramid shows the population structure of all individuals that live in Rutland, including the military population. The military population accounts for 6.0% of the resident population in the county. The military population is younger and has a higher proportion of males compared to the resident population of Rutland. In April 2017, there were 2,320 Armed Forces personnel and entitled civilian personnel registered in Rutland. 1,540 individuals (two-thirds) were in the Armed Forces and 780 individuals (one-third) were entitled civilian personnel. Of those in the Armed Forces, 88% were male compared to a third of the entitled civilian personnel.

Resident Population in Rutland

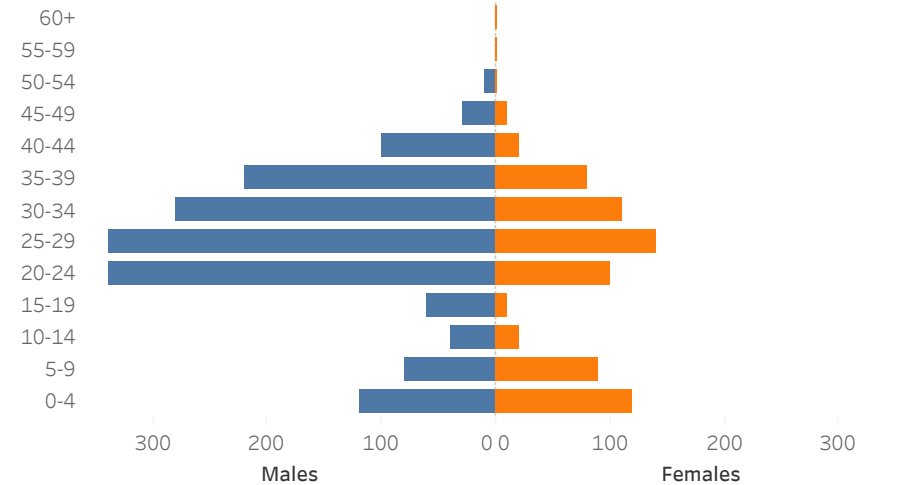## Military Registrations by Personnel

Military Registrations by Age

- Female
- Male

Deprivation in Rutland

The wider determinants of health are described and ranked within the English Indices of Deprivation 2015[iii]. These are a group of indicators which gauge different aspects of deprivation. Deprivation is a general lack of resources and opportunities, which includes financial poverty and a range of other aspects such as lack of access to education or good quality housing. The measures are combined into an overall measure of the amount of deprivation in an area called the Index of Multiple Deprivation (IMD), which can be used to compare different local areas.

The indices of deprivation use several measures in each of seven "domains":

- Income;

- Employment;

- Health and disability;

- Education, skills and training;

- Barriers to housing and services;

- Crime; and

- Living environment.

The infographic presents the level of deprivation throughout Rutland according to the IMD 2015. The data are presented as "deciles" of deprivation - areas of Rutland that fall into the most deprived tenth (10%) of areas in England are decile 1, those in the second most deprived tenth of areas are decile 2, and so on, through to decile 10 which are areas that are within the least deprived tenth (10%) in England.

According to the IMD 2015, the population of Rutland is less affected by material deprivation than the average for England, with none of the population living in the most deprived 40% of areas nationally. Almost half (46%) of the Rutland population live in the least deprived quintile of deprivation, accounting for over 17,000 people.

Despite Rutland being a relatively affluent county, the infographic highlights that areas of Rutland fall into the most deprived areas in England for the Barriers to Housing domain and Services and Living Environment domain. The Barriers to Housing and Services Domain measures the physical and financial accessibility of housing and local services and is made up of the following indicators:

- Road distance to a post office

- Road distance to a primary school

- Road distance to general store or supermarket

- Road distance to a GP surgery

- Household overcrowding

- Homelessness

- Housing affordability

Over a half (55%) of the population of Rutland live in the most 20% deprived and most 20-40% deprived of areas in England for Barriers to Housing and Services. This accounts for over 21,100 people. This is likely to be due to the rural nature of the county.

The Living Environment Deprivation Domain measures the quality of the local environment and is made up of the following indicators:

- Housing in poor condition

- Houses without central heating

- Air quality indicator

- Road traffic accidents indicator

In Rutland, 16% of the population (6,200) live in areas categorised within the most 20% deprived and most 20-40% deprived of areas in England for Living Environment.
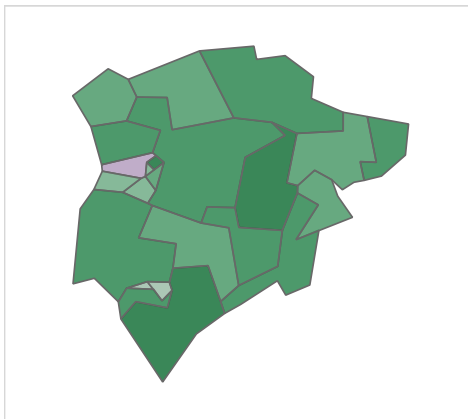
Deprivation in Rutland

The English Indices of Deprivation 2015 are based on 37 separate indicators, organised across seven distinct domains of deprivation which are combined, using appropriate weights, to calculate the Index of Multiple Deprivation 2015 (IMD 2015). This is an overall measure of multiple deprivation experienced by people living in an area and is calculated for every Lower layer Super Output Area (LSOA), or neighbourhood, in England. The analysis presented splits all LSOAs in Rutland into national deciles for each of the seven domains of deprivation and for IMD 2015 overall.
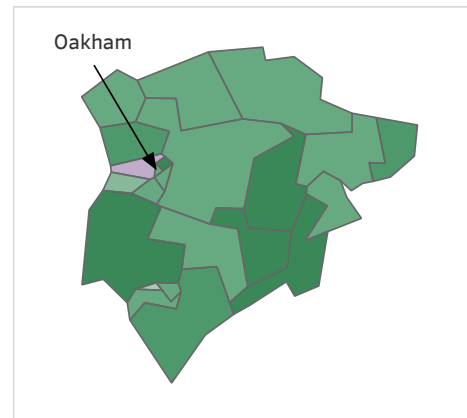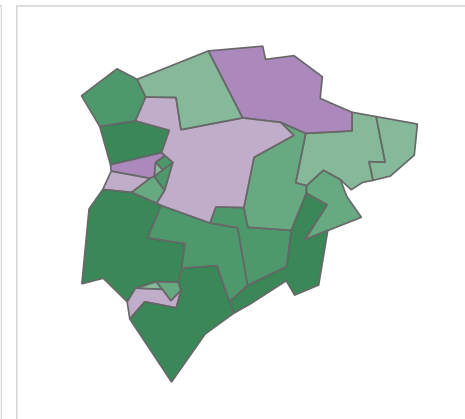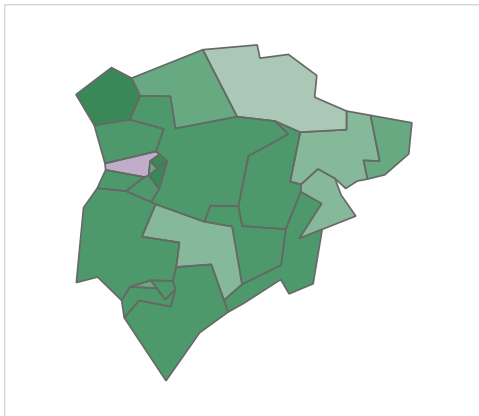
Index of Multiple Deprivation 2015
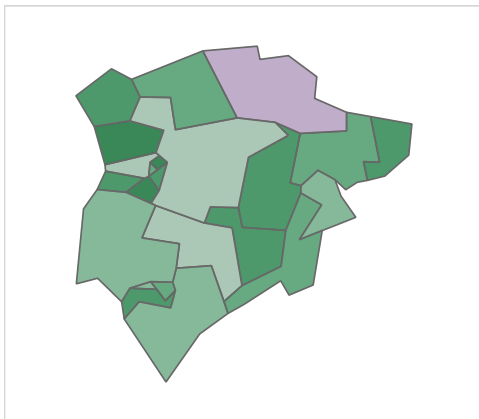
Income Domain

Employment Domain

Oakham

Education, Skills and Training Domain

Health Deprivation and Disability Domain

Crime Domain

Uppingham
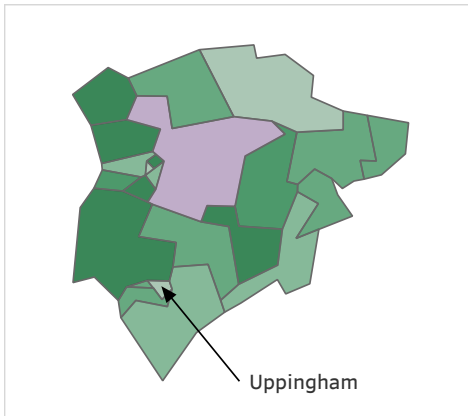
Barriers to Housing and Services Domain
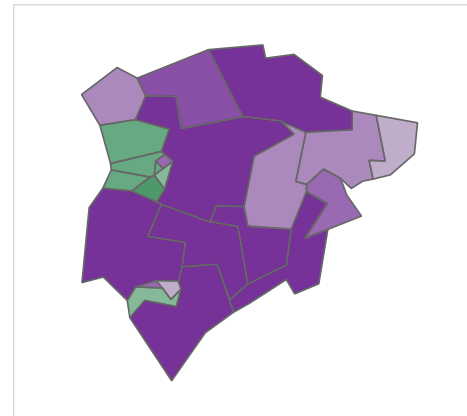
Living Environment Domain
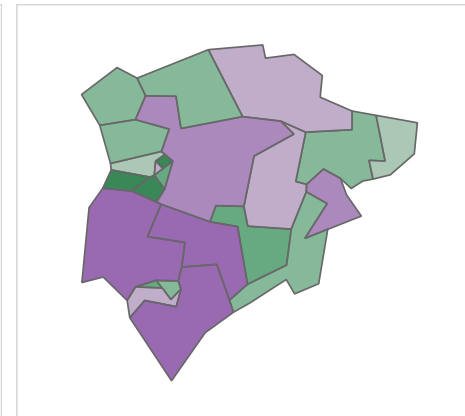
National Deprivation Decile

1 ▮▮▮▮▮▮▮▮▮▮ 10

Most deprived   Least deprived

Social classification in Rutland

The social classification chart displays the percentage point difference between the proportion of the population in a ward that are classed as higher social grades (ABC1) compared to lower social grades (C2DE).[iv] Wards with a very high or very low score are more uneven in their social grade composition, while wards with a score close to zero are more even in their composition.

In Rutland, there are 15 wards with a higher proportion of the population in higher social grades, compared with one ward with lower grades. Lyddington Ward followed by Normanton Ward have the highest difference in social grade. Both wards have a 49 percentage point difference between higher and lower social grades. At the other end of the chart, Oakham North West Ward has the highest proportion of the population in social grades C2DE, with a 14 percentage point difference. In comparison, Oakham South West Ward is the most equal wards in the county, with just an 11 percentage point difference between both social grade groups.

Social classification in Rutland

Social Grade is the socio-economic classification used by the Market Research and Marketing Industries, most often in the analysis of spending habits and consumer attitudes. Although it is not possible to allocate Social Grade precisely from information collected by the 2011 Census, a method for using Census information to provide a good approximation of Social Grade has been performed. The chart examines the percentage point difference between high (ABC1) and low (C2DE) grades throughout each ward in Rutland.

Lyddington Ward has the highest difference in grades in Rutland, with 49%

Oakham SW Ward is the most equal ward in the county, with just a 11% difference

Oakham NW Ward is the only ward in Rutland to have a negative difference with -14%

-----> Higher Grades (ABC1)

% Point Difference

Lower Grades (C2DE) <-----

Lyddington
Normanton
Braunston & Belton
Ketton
Greetham
Martinsthorpe
Cottesmore
Whissendine
Langham
Oakham SE
Exton
Oakham NE
Uppingham
Ryhall & Casterton
Oakham SW
Oakham NW

Occupation Classification
AB: Higher and intermediate managerial/administrative/professional occupations
C1: Supervisory, clerical and junior managerial/administrative/professional occupations
C2: Skilled manual occupations
DE: Semi-skilled and unskilled manual occupations; unemployed and lowest grade occupations

Source: 2011 Census

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

Migration in Rutland

Understanding migration, both internal and international, provides a picture of those entering and leaving Rutland and allows us to better understand our evolving population. This learning is essential for local government and health sector planning. The infographic shows long-term international and internal migration increased the population of Rutland by 279 residents between 2015 and 2016. Internal migrants accounted for four times as many international migrants in this change. The percentage of live births to non-UK born mothers has risen from 9.0% in 2006 to 16.4% in 2016.[v]

Migration in Rutland

This graphic examines the migration flows throughout Rutland in 2016. Long-term international migration is when someone changes their country of usual residence for a period of at least a year, so that the country of destination effectively becomes the country of usual residence. Internal migration is defined as residential moves between different local authorities in the UK, including those that cross the boundaries between the four UK nations. Long-term international and internal migration increased the population of Rutland by 279 residents between 2015 and 2016.

INFLOW

OUTFLOW

LONG-TERM INTERNATIONAL MIGRATION: **153**

LONG-TERM INTERNATIONAL MIGRATION: **94**

Population of Rutland: **38,606**

INTERNAL MIGRATION (WITHIN THE UK): 2,430

INTERNAL MIGRATION (WITHIN THE UK): 2,210
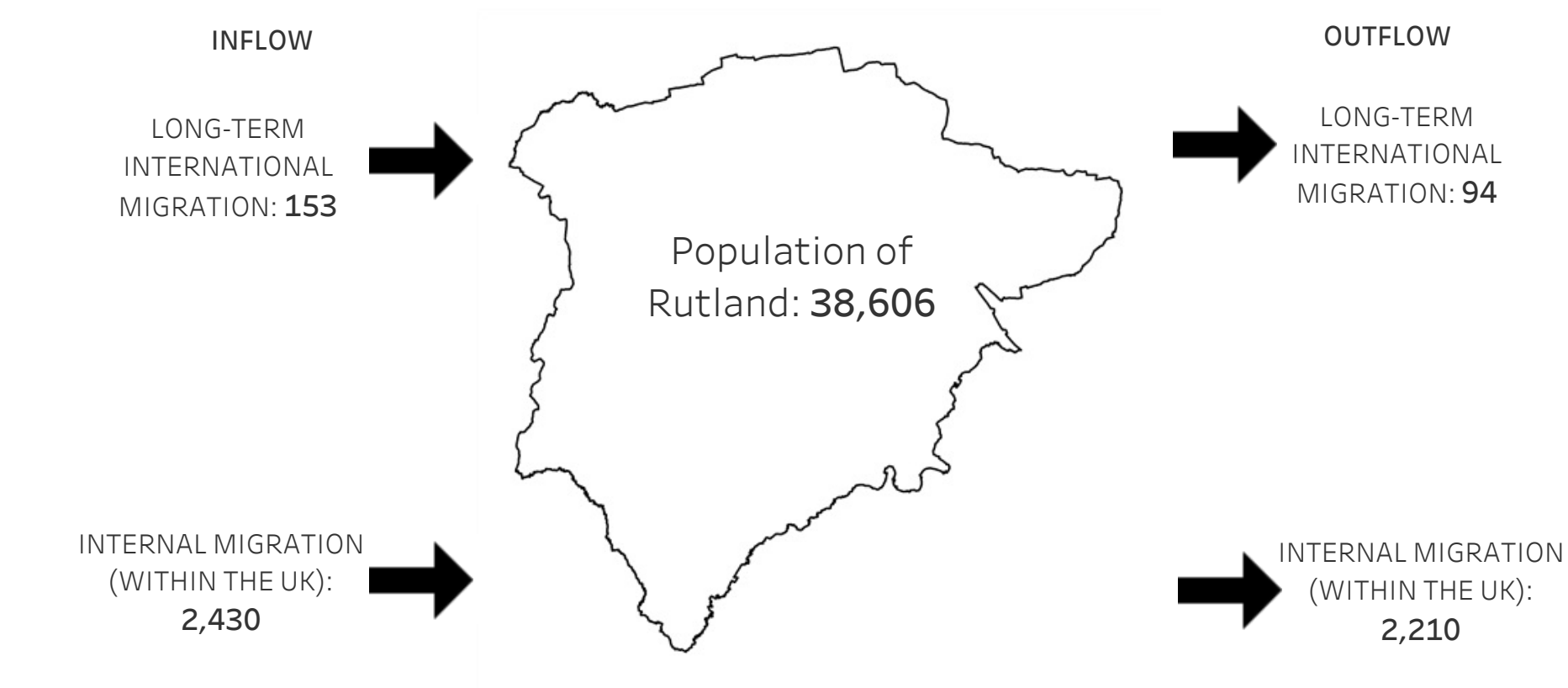
In 2016 in Rutland, there were:

84 migrant National Insurance number registrations (0.4% of 16-64 aged population)

231 new migrant GP registrations (0.6% of population)

The population increased by **279** due to migration

55 live births to non-UK born mothers (16.4% of all births)

4.2 The wider determinants of health

Air quality

The Public Health Outcomes Framework examines the fraction of all-cause adult mortality attributable to human-made particulate air pollution (PM2.5). The map examines the levels of PM2.5 throughout Rutland.[vi] The highest levels in the county are closely correlated with major roads and road junctions, such as the A1.

There is emerging evidence from the Royal College of Physicians (amongst others) of possible links with a range of other adverse health effects including diabetes, cognitive decline and dementia, and effects on the unborn child.

The Government's recently public Air Quality Plan passes responsibility for tackling NO2 emissions largely onto Local Authorities but offers little detail as to how this will be achieved.

Many of the solutions to poor air quality also have enormous co-benefits by increasing levels of physical activity – for example by encouraging active travel. Future housing developments should encourage physical activity by design – making active travel the easiest, quickest and most enjoyable option.

Air quality in Rutland

Inhalation of particulate pollution can have adverse health impacts. The biggest impact of particulate air pollution on public health is understood to be from long-term exposure to fine particulate matter, PM2.5, which increases the age-specific mortality risk, particularly from cardiovascular causes. The map examines the levels of human-made particulate air pollution, measured as PM2.5, throughout Rutland. The highest levels in the county are present along the A1 road.
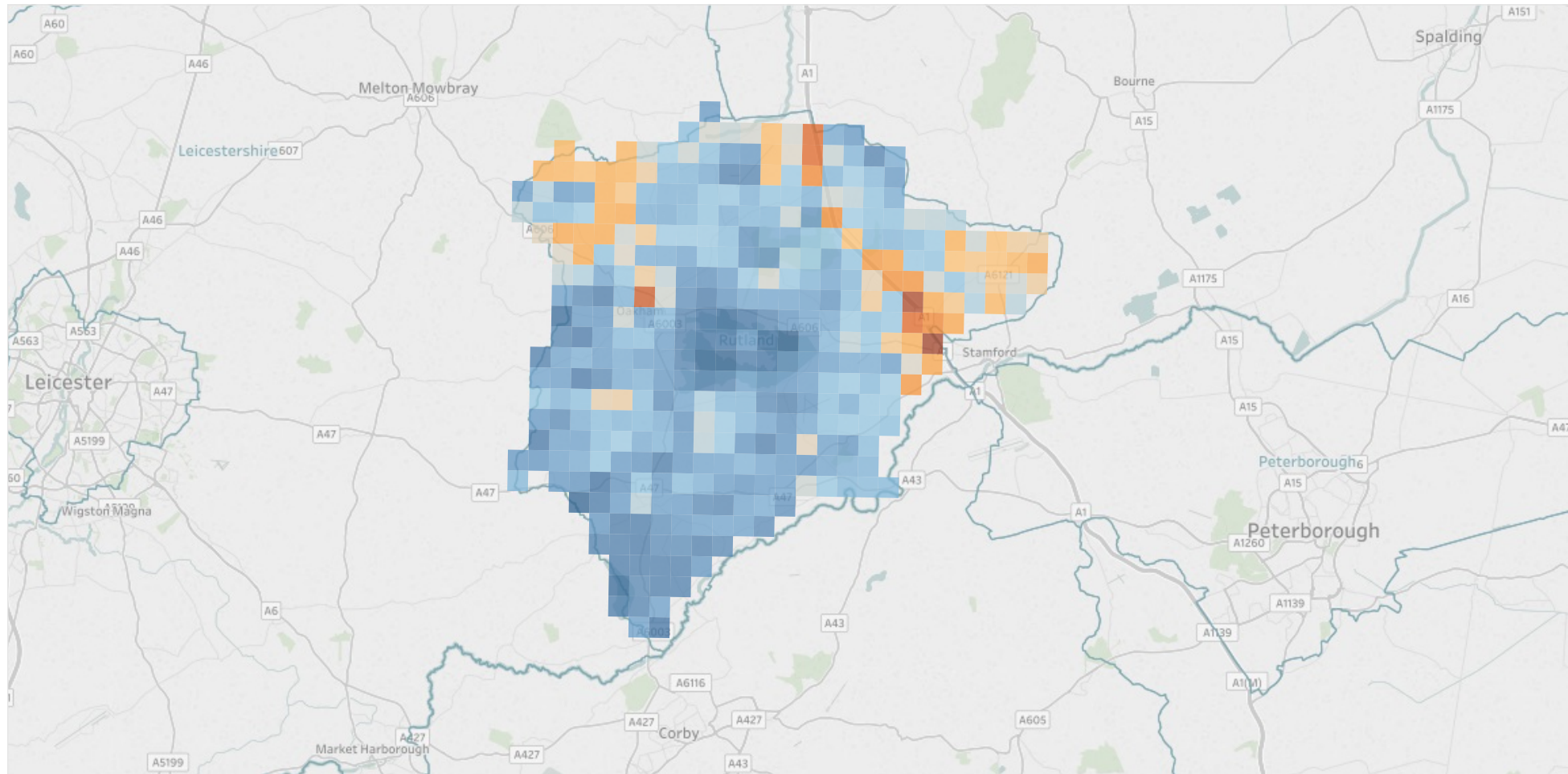
Please note, each square represents one Ordnance Survey 1km grid square.

Range of PM2.5 values throughout Rutland

8.2 ▬▬▬▬▬▬▬▬▬ 11.5

Crime in Rutland

There were 1091 recorded crimes in Rutland County in 2016/17, a 1.5% increase on the previous year.[vii] Total crimes recorded have remained fairly consistent over the last 3 years. Of all crimes reported, 24% (266) were recorded as violent crime. Just over a third (36%, 96) of all violent crime is domestic related and a fifth (20%, 52) of all violent crime is alcohol related. Both domestic violent crimes and alcohol related crimes are likely to be under recorded.

Rutland has the lowest crime rates in the country with 29 offences per 1,000 population, compared to the England average of 74 offences per 1,000 population. Oakham, the County Town of Rutland, has the highest rates for crime, including violent crime, alcohol related violence, domestic related violence and sexual offences.

Crime in Rutland

The maps examine the crime rate per 1,000 population in each ward in Rutland between April 2016 and March 2017 by offence. Each rate of crime is split into local quintiles, with the darkest areas equating to the highest crime rate throughout the county. Please note, the counts of crimes in Rutland are small and variation is likely.

Total Crimes
Rutland rate: 1.62 per 1,000 population
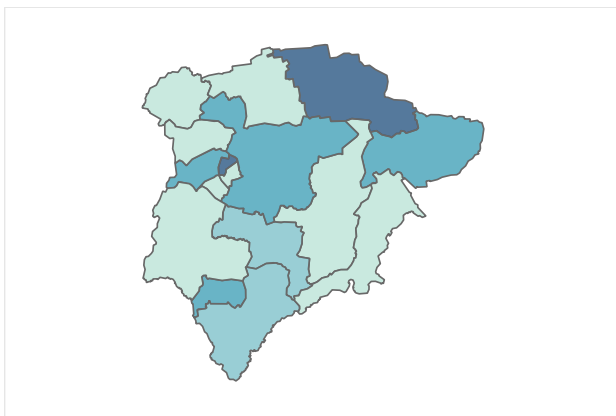
Violent Crimes
Rutland rate: 0.39 per 1,000 population

Domestic Violence
Rutland rate: 0.14 per 1,000 population

Alcohol-related Crimes
Rutland rate: 0.08 per 1,000 population

Sexual Offences
Rutland rate: 0.05 per 1,000 population
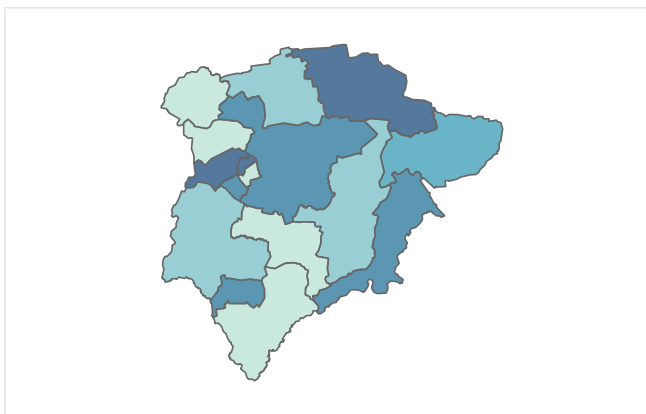
Drug Offences
Rutland rate: 0.02 per 1,000 population
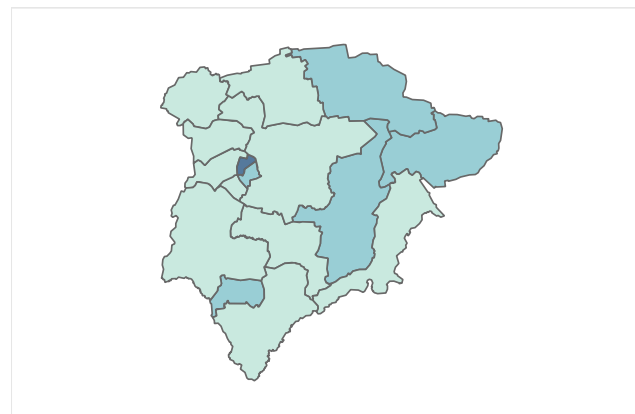
Key

Lowest quintile   Highest quintile

4.3 Lifestyle behaviours

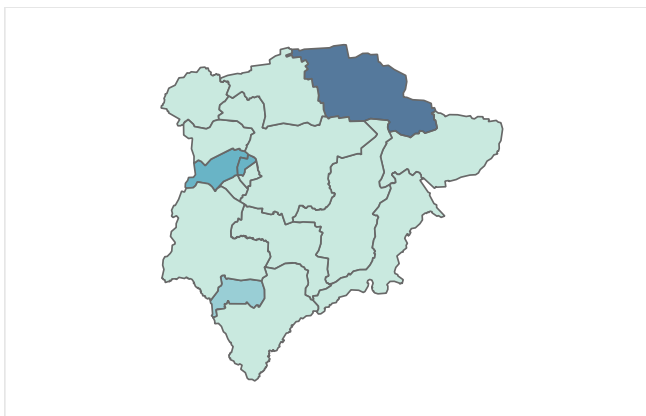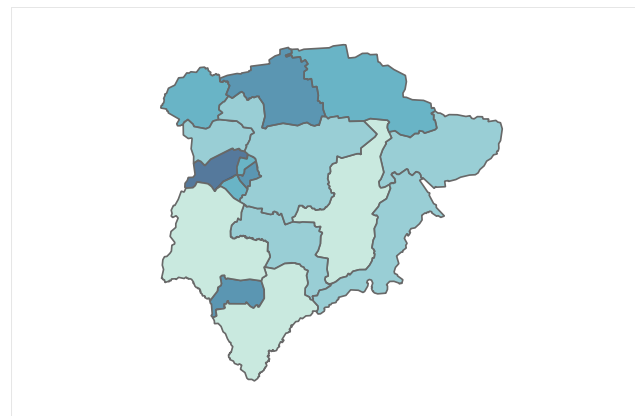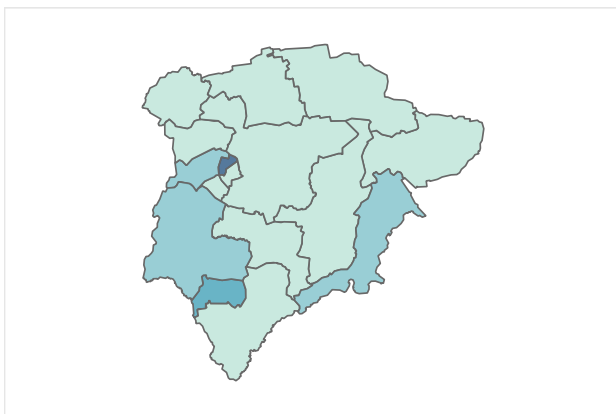## Overweight and obese children in Rutland

The extent of unhealthy weight, including overweight and obesity, in Rutland's children is surveyed through the National Child Measurement Programme (NCMP). This measures the height and weight of children aged 4-5 and 10-11 years each year in state maintained primary schools. Children are classified as overweight (including obese) if their BMI is on or above the 85th percentile of the British 1990 growth reference (UK90) according to age and sex. The latest data shows that in Rutland a quarter of children in both Reception (24.0%) and Year 6 (25.4%) were overweight or obese in 2016/17. This equates to 82 children in Reception and 85 children in Year 6.[viii] Rutland has the lowest prevalence of obese children in Year 6 nationally, at 11.3%. The national pattern of the proportion of children with excess weight increasing with age is not as strongly apparent in Rutland.

The maps use three years' worth of NCMP data to examine areas in Rutland that have a significantly high or low percentage of overweight or obese children in Reception or Year 6, when compared to England. All areas within Rutland perform similar to England in the Reception age range. The east of Rutland has continued to perform significantly better for the prevalence of overweight or obesity in Year 6 in the last four time periods.[ix]

Overweight and obese children in Rutland

The latest National Childhood Measurement Programme (NCMP) data shows in 2016/17, a quarter of children in both Reception (24.0%) and Year 6 (25.4%) were overweight or obese. This equates to 82 children in Reception and 85 children in Year 6. Pleasingly, this data shows Rutland has the lowest obesity prevalence for Year 6 children out of the whole country. The maps presented use three years worth of NCMP data to examine over time, areas in Rutland that have a significantly high or low percentage of overweight or obese children in Reception or Year 6. The Rutland data is compared to the England percentage for a national comparison.
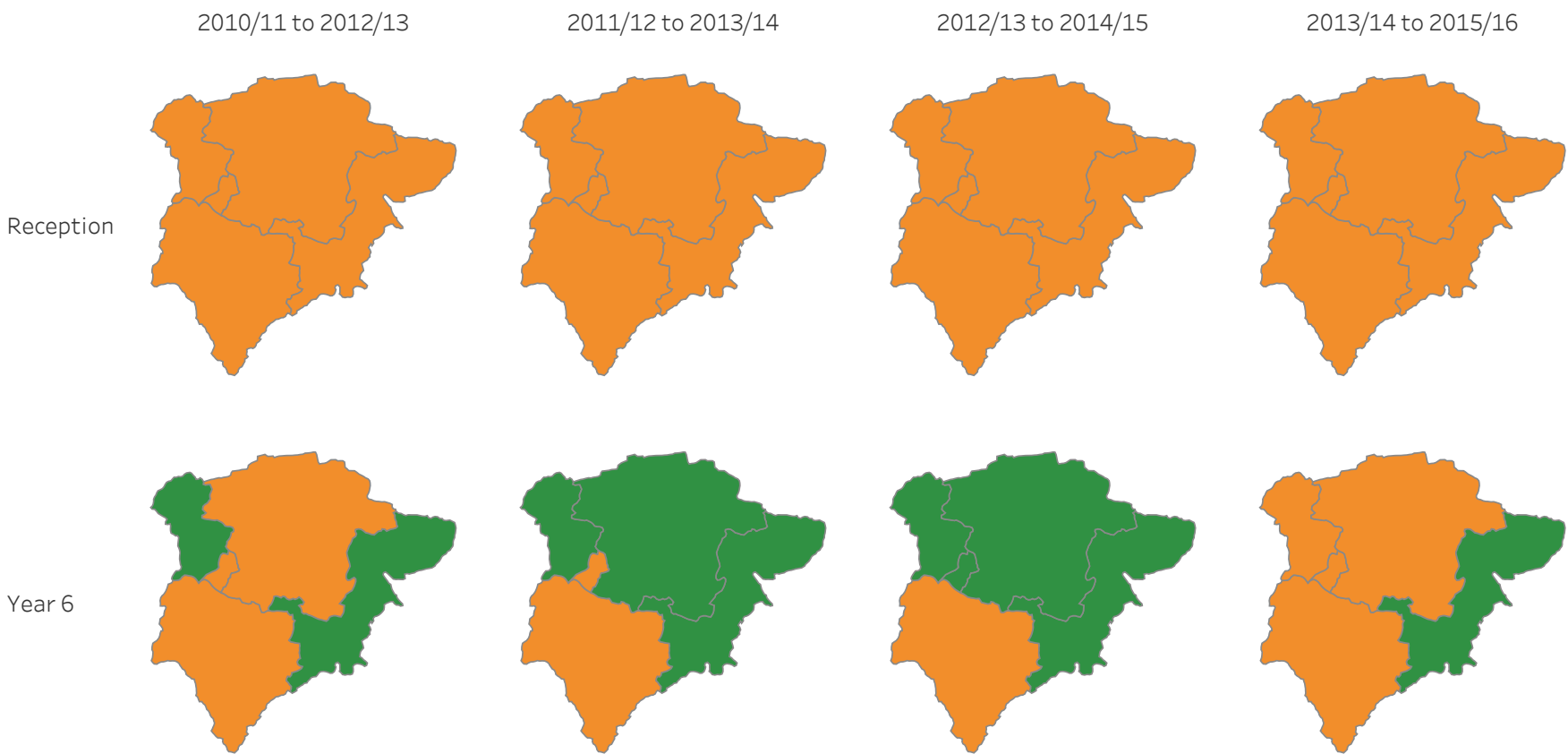
	2010/11 to 2012/13	2011/12 to 2013/14	2012/13 to 2014/15	2013/14 to 2015/16
Reception				
Year 6				

Statistical Significance compared to England
- Better
- Similar

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

Physical activity and weight management in Rutland

Physical inactivity is the fourth leading risk factor for global mortality accounting for 6% of deaths globally. People who have a physically active lifestyle have a 20-35% lower risk of cardiovascular disease, coronary heart disease and stroke compared to those who have a sedentary lifestyle. Regular physical activity is also associated with a reduced risk of diabetes, obesity, osteoporosis and colon/breast cancer and with improved mental health. In older adults, physical activity is associated with increased functional capacities.

In 2015/16, 69% of residents aged 19 and over in Rutland achieved the Chief Medical Officer (CMO) recommendations of undertaking 150 minutes of moderate activity per week. This is a significantly better percentage of adults achieving the CMO recommendations compared to the national average (65%). Despite performing significantly better than nationally for physical activity, over half of adults (58%) in Rutland are classified as overweight or obese. This is similar to the national percentage of 61%.[x]

Physical activity and weight management in Rutland

In 2015/16, 69% of residents in Rutland achieved the Chief Medical Officer's recommendation for physical activity. The maps below highlight the location of specified sports facilities in Rutland. Despite performing significantly better than nationally for physical activity, over half of adults (58%) in Rutland are classified as overweight or obese. This is similar to the national percentage of 61%. Please note, for both graphs, the grey shading represents 95% confidence intervals and Rutland is compared to its similar Local Authority neighbours.

Adults achieving at least 150 minutes of physical activity per week
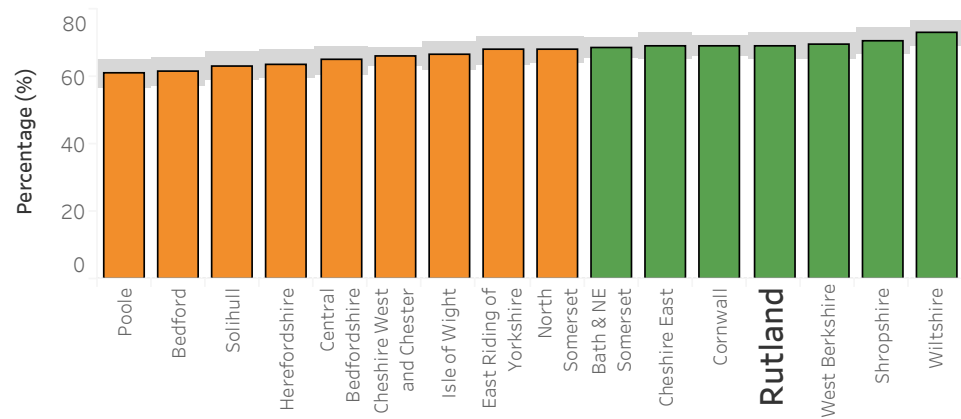
Adults classified as overweight or obese
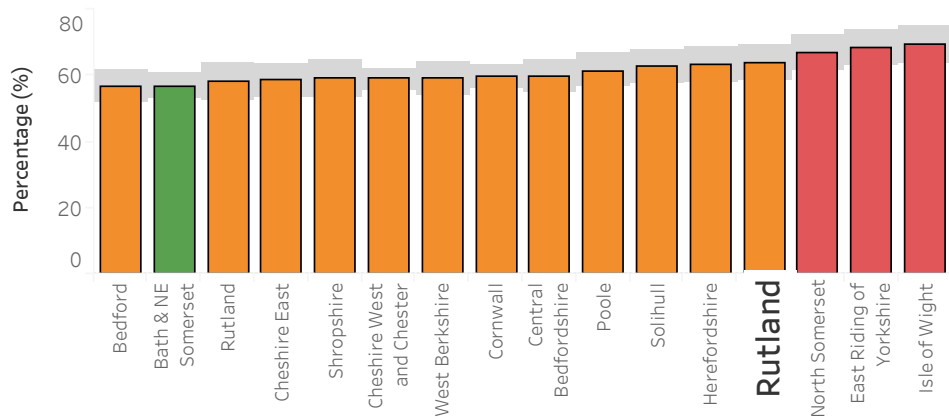
Statistical Significance compared to England

🟩 Better   🟧 Similar   🟥 Worse

Golf Course Locations
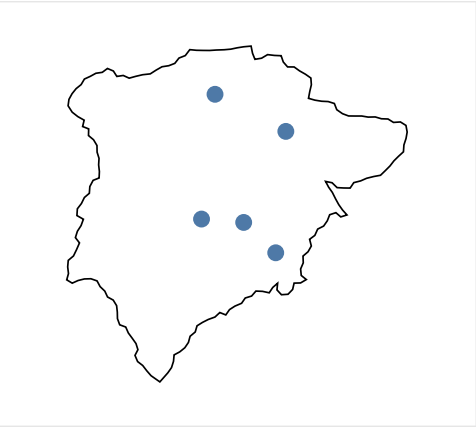
Grass Pitch Locations
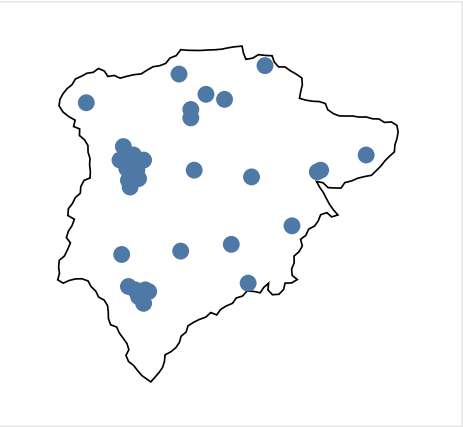
Sports Hall Locations
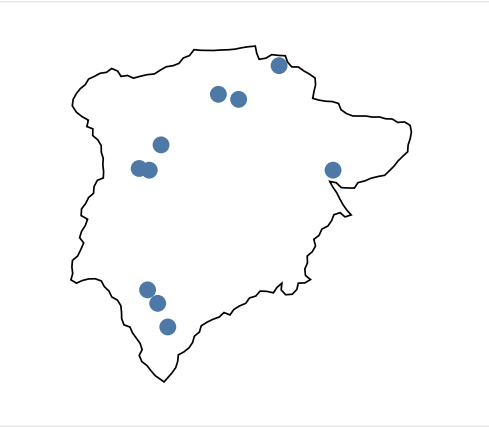
Swimming Pool Locations
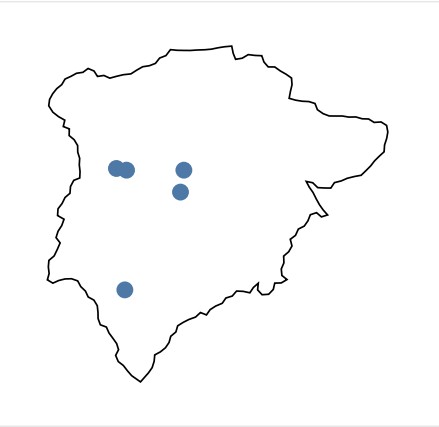
4.4 Life and death and illness

Life expectancy

Choices and behaviours during adulthood can have profound impacts on people's health for the rest of their lives. A number of factors such as socioeconomic, environmental (including working conditions), education and lifestyle factors may impact the average age of life expectancy. In Rutland, life expectancy for males is 81.8 years and for females is 85.2 years, both significantly higher than the national average.[xi] The infographic highlights that throughout the county, variation in life expectancy exists for both males and females. There is an eight year difference in life expectancy between males who live in the Oakham North West Ward (77.6 years) and Greetham Ward (85.4 years). In females these differences are also apparent, with life expectancy varying by fifteen years between females who live in the Oakham North West Ward (78.8 years) and Oakham South East Ward (94.1 years).[xvii]

Life Expectancy at birth in Rutland

Life Expectancy by Ward in Rutland

The charts highlight the variations in life expectancy that exists throughout the residents of Rutland, for both males and females. The data reflects mortality of those living in these wards between 2010-2014. Please note, data is missing for Greetham, Whissendine, Exton, Langham, Martinsthorpe, Braunston and Belton and Lyddington.

Males

Ward	Value
Cottesmore	81.9
Ketton	78.1
Normanton	84.1
Oakham North East	82.3
Oakham North West	77.6
Oakham South East	80.3
Oakham South West	82.2
Ryhall and Casterton	82.5
Uppingham	82.9

Females

Ward	Value
Cottesmore	85.8
Ketton	82.9
Normanton	87.2
Oakham North East	88.4
Oakham North West	78.8
Oakham South East	94.1
Oakham South West	91.4
Ryhall and Casterton	85.3
Uppingham	87.0

Statistical Significance compared to England
Similar   Lower   Higher

Healthy life expectancy

Healthy life expectancy (HLE) measures the average number of years a person would expect to live in good health based on contemporary mortality rates and prevalence of self-reported good health. In Rutland, HLE is 71.1 years for men and 70.6 years for females, whereas life expectancy (LE) for males is 81.8 years and for females is 85.2 years.[xi] On average, this equates to males and females in Rutland spending 10.7 years and 14.6 years in poor health before death. Currently, there are 2,100 males and 2,600 females in Rutland living in the age gap between HLE and LE.[xii]

Gap between healthy life expectancy and life expectancy in Rutland

Healthy life expectancy measures the average number of years a person would expect to live in good health whereas life expectancy measures the average number of years a person would expect to live. These indicators are based on contemporary mortality rates and prevalence of self-reported good health. Please note, the figures reflect the prevalence of good health and mortality among those living in an area in each time period, rather than what will be experienced throughout life among those born in the area. These two indicators are extremely important summary measures of mortality and morbidity. The graph examines the population of Rutland in 2016 by single year of age. It estimates that 2,100 men and 2,600 women are living in the age gap between healthy life expectancy and life expectancy, potentially in poor health. This accounts for 12% of the population in the county.

HLE: 71.1   LE: 81.8

2,100 males

2,600 females

HLE: 70.6   LE: 85.2

<------ Single Year of Age -------->
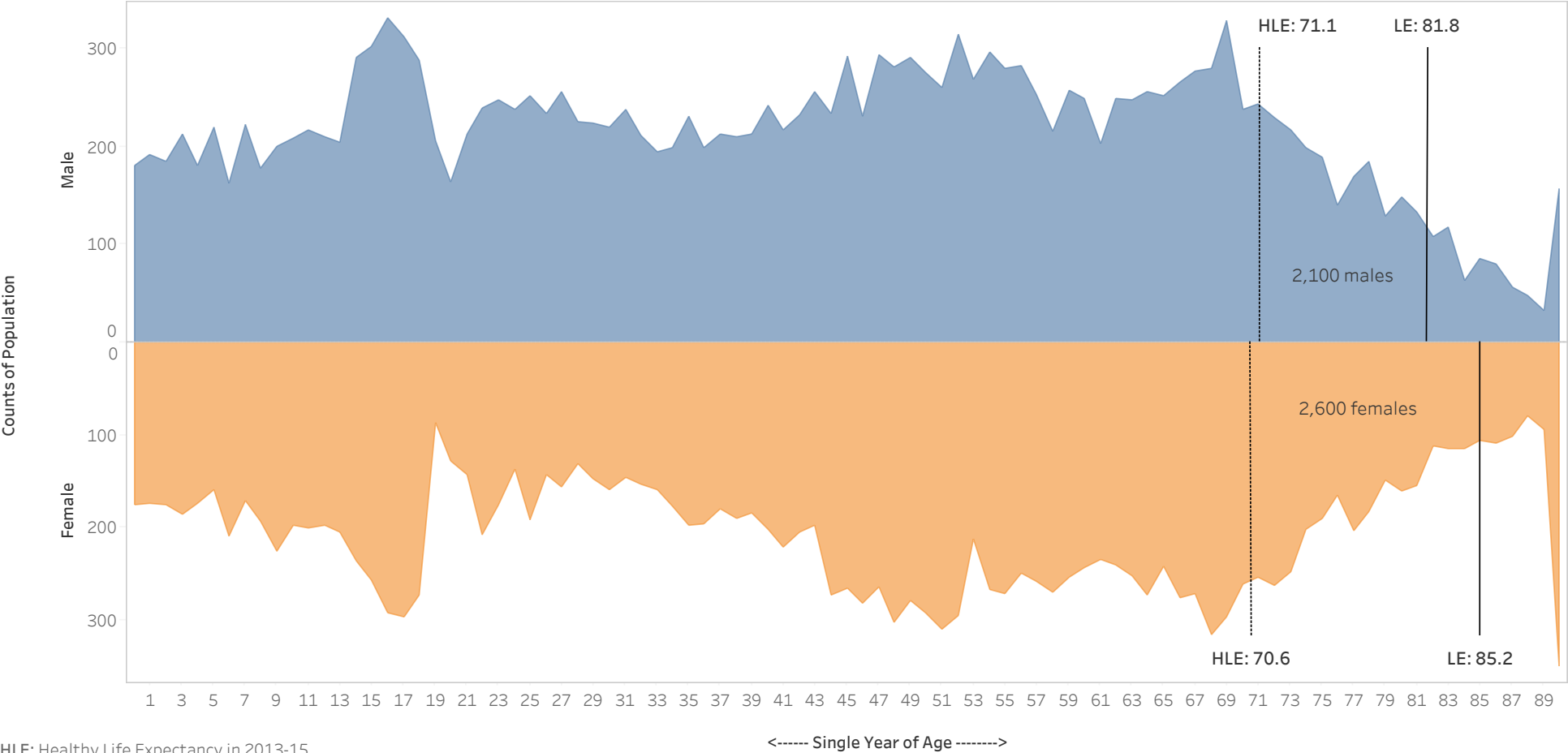
HLE: Healthy Life Expectancy in 2013-15
LE: Life Expectancy in 2013-15
Please note, the population estimates presented for 90 includes all individuals aged 90 and above.

Premature death

Approximately 1 in 4 deaths (26%) in Rutland occur among people are under the age of 75. 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. In females, over half of all premature deaths are caused by cancer, compared with 37% in males. Circulatory diseases account for over a quarter of all premature deaths in males (27%) compared with 17% in females. Many of the direct causes are due to lifestyle related factors and are preceded by long periods of ill‑health.[xiii]

Causes of premature death in Rutland

One in 4 deaths in Rutland occur among people are under the age of 75. 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.

Males

Females

11%

7%

37%

27%

7%

51%

8%

5%

17%

6%

Disease Chapter

Cancers

Diseases of the circulatory system

Diseases of the digestive system

Diseases of the respiratory system

External causes of morbidity and mortality
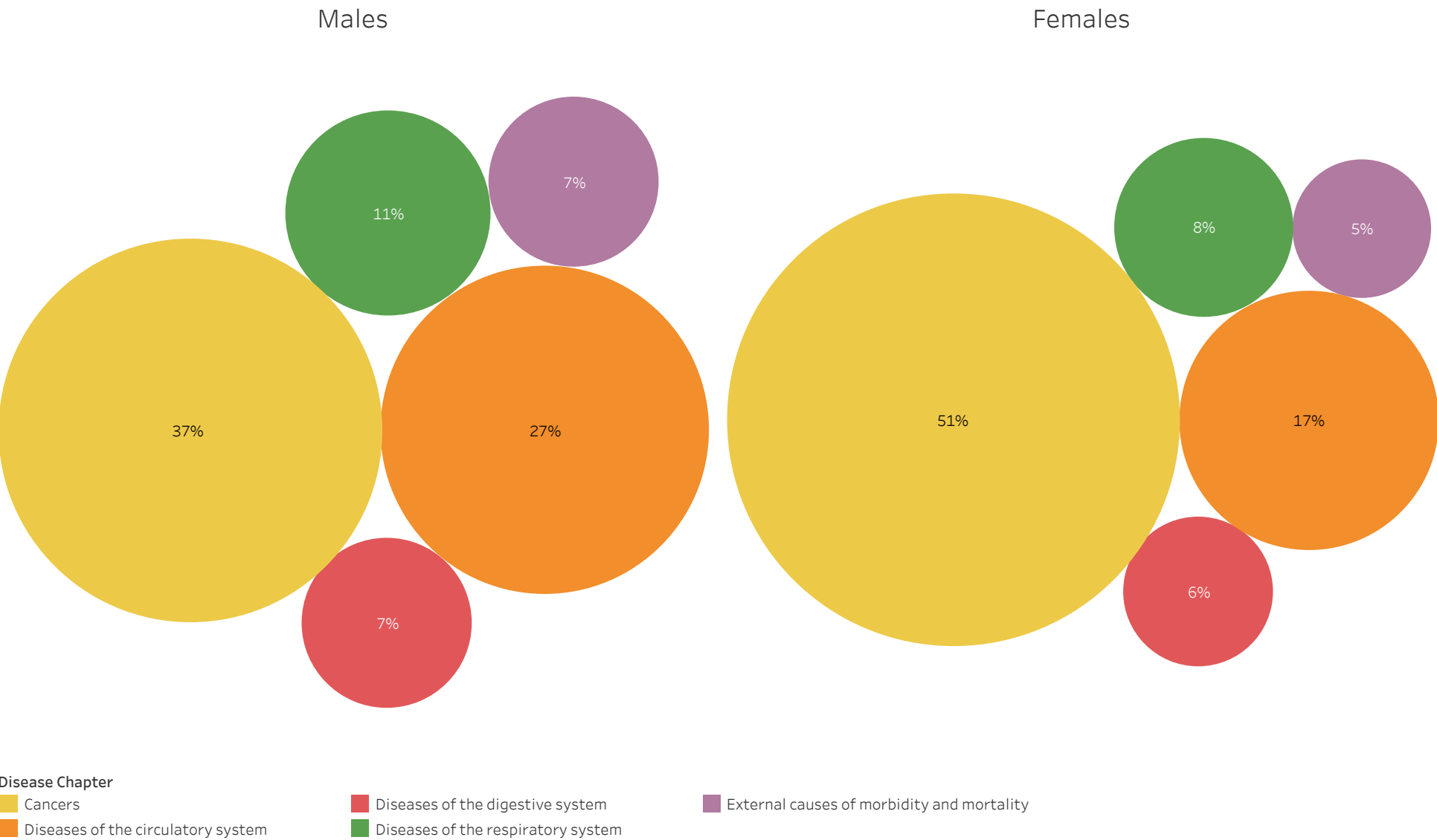
Difference in life expectancy

This infographic provides information on the causes of death that are driving inequalities in life expectancy in Rutland. Targeting the causes of death which contribute most to the life expectancy gap could have a large impact on reducing inequalities. The absolute gap in life expectancy between the most and least deprived areas in Rutland is 1.8 years in males and 2.7 years in females. The broad causes of death that contribute to difference have been examined in the infographics. In males, half of the gap in life expectancy between the most and least deprived areas in Rutland is due to excess deaths from circulatory disease (heart disease and stroke) and mental and behavioural disorders e.g. Dementia and Alzheimer's disease. In females, over half of the gap in life expectancy between the most and least deprived areas in Rutland is due to excess deaths from other causes, circulatory disease (heart disease and stroke) and cancer. This means that if people in the most deprived areas in Rutland had the same mortality rate for these causes as the least deprived areas, the gap in life expectancy would reduce by over a half.

The specific cause of death that accounts for the difference in life expectancy throughout Rutland has also been examined. The chart shows males and females in Rutland would gain 0.91 years and 0.97 years of life expectancy if Rutland's most deprived quintile had the same mortality rate for Dementia and Alzheimer's disease as Rutland's least deprived quintile. The most life expectancy years would be lost if Rutland's most deprived quintile had the same mortality rate as Rutland's least deprived quintile where the cause of death was other external causes e.g. suicides in females and other cancers in males.[xiv]

Difference in life expectancy by cause of death in Rutland

The gap in life expectancy between the most and least deprived areas in Rutland can be broken down by the broad causes of death that contribute to the years of difference. In males, over half of the gap in life expectancy between the most and least deprived areas in Rutland is due to excess deaths from circulatory disease (heart disease and stroke) and mental and behavioural disorders . In females, over half of the gap in life expectancy between the most and least deprived areas in Rutland is due to excess deaths from other causes, circulatory disease (heart disease and stroke) and cancer. This means that if people in the most deprived areas in Rutland had the same mortality rate for these causes as the least deprived areas, the gap in life expectancy would reduce by over a half.
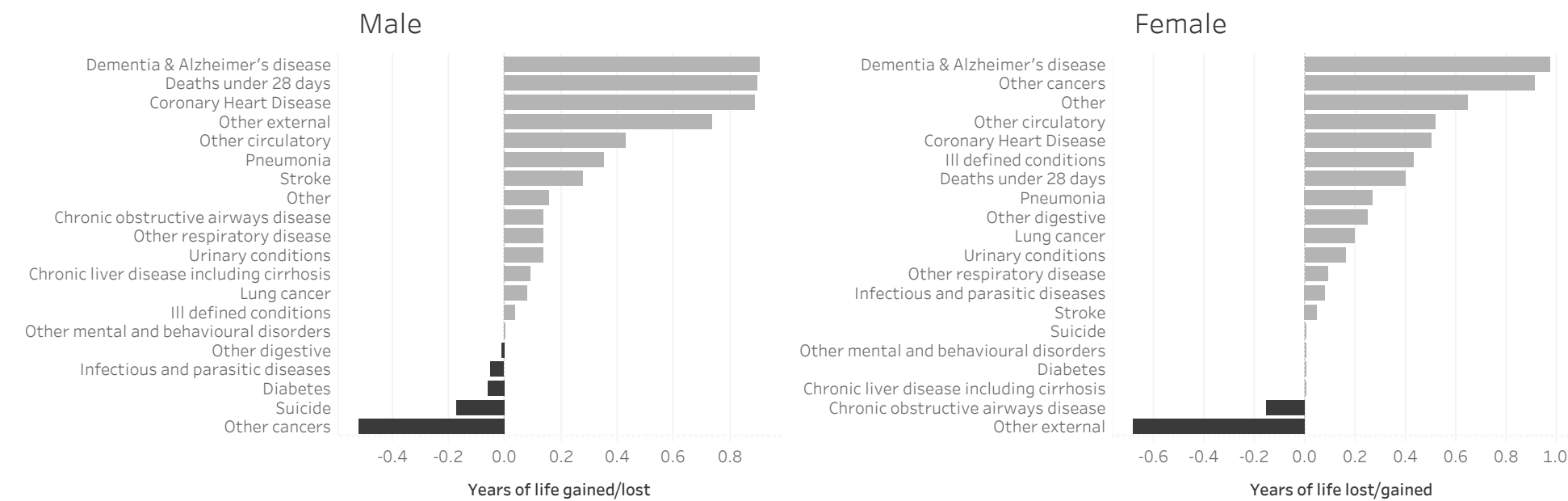
Male	12.3%	4.8%	18.0%	11.4%		17.9%	33.7%
Female	3.5%	26.1%	17.4%	4.5%	7.1%	21.7%	19.7%

Contribution to the gap (%)

- Respiratory
- Other
- Mental and behav.
- External causes
- Digestive
- Deaths <28 days
- Circulatory
- Cancer
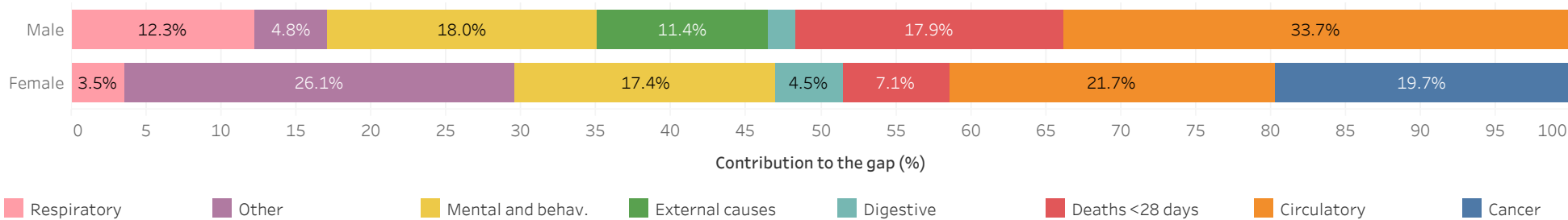
The graphs examine the specific diseases that accounts for the difference in life expectancy throughout Rutland. A positive figure indicates that life expectancy years would be gained and a negative figure indicates that life expectancy years would be lost if the Rutland's most deprived quintile had the same mortality rate as the Rutland least deprived quintile.

Male

Dementia & Alzheimer's disease
Deaths under 28 days
Coronary Heart Disease
Other external
Other circulatory
Pneumonia
Stroke
Other
Chronic obstructive airways disease
Other respiratory disease
Urinary conditions
Chronic liver disease including cirrhosis
Lung cancer
Ill defined conditions
Other mental and behavioural disorders
Other digestive
Infectious and parasitic diseases
Diabetes
Suicide
Other cancers

-0.4 -0.2 0.0 0.2 0.4 0.6 0.8

Years of life gained/lost

Female

Dementia & Alzheimer's disease
Other cancers
Other
Other circulatory
Coronary Heart Disease
Ill defined conditions
Deaths under 28 days
Pneumonia
Other digestive
Lung cancer
Urinary conditions
Other respiratory disease
Infectious and parasitic diseases
Stroke
Suicide
Other mental and behavioural disorders
Diabetes
Chronic liver disease including cirrhosis
Chronic obstructive airways disease
Other external

-0.6 -0.4 -0.2 0.0 0.2 0.4 0.6 0.8 1.0
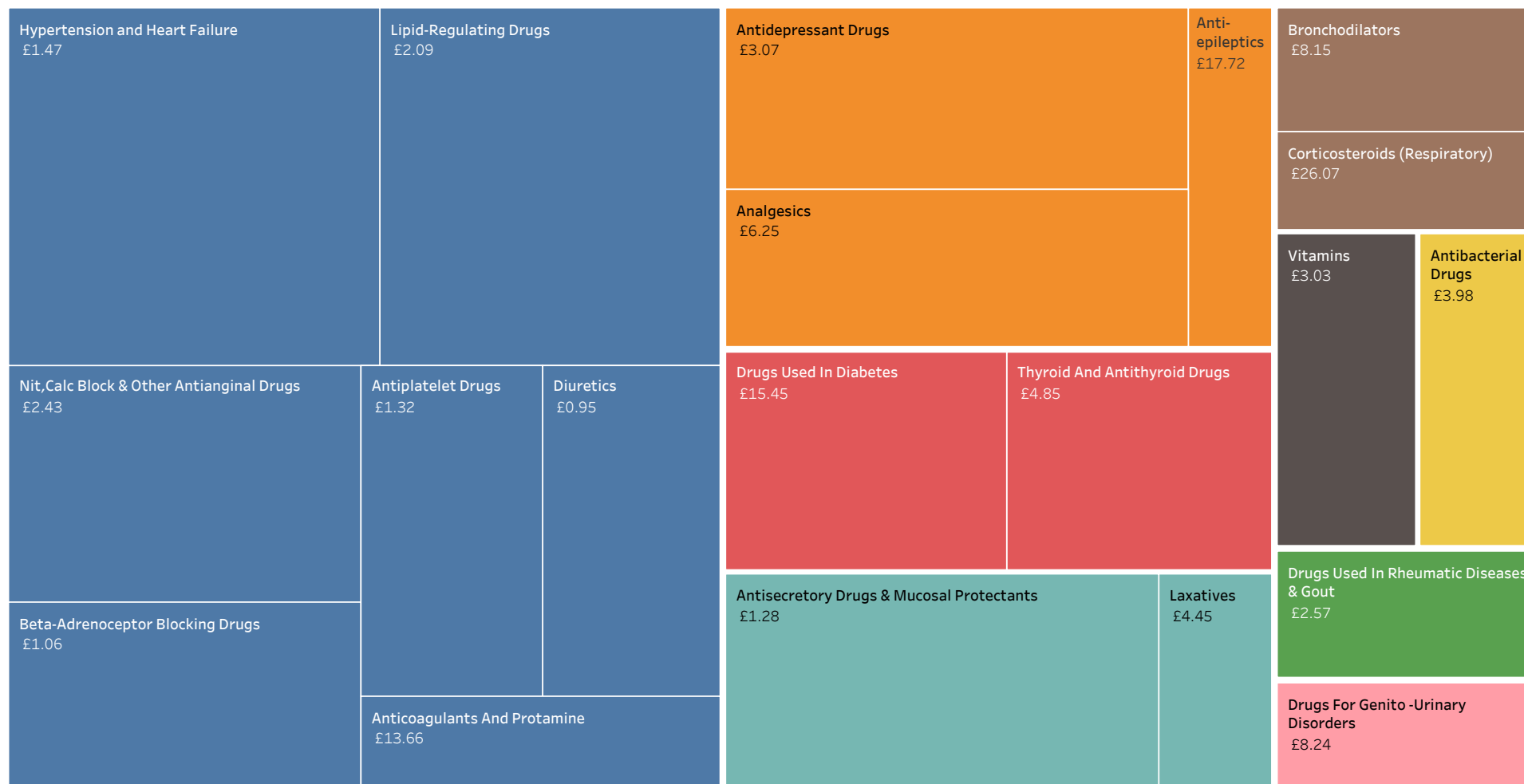
Years of life lost/gained

4.5 Prescribing

Prescribing – Items

The data presented in the infographic examines details of prescribing for GP practices in Rutland for each section of the British National Formulary (BNF) in 2016/17. It is important to note, the data does not include prescriptions written in hospitals or hospital clinics that are dispensed in the community, prescriptions dispensed in hospitals, prescribing by dentists and private prescriptions. Certain medicines, such as some of those in the treatment for rheumatoid arthritis, have a high proportion of prescriptions written in hospitals that are dispensed in the community.

The infographic presents the twenty drugs (by BNF Section Names) with the highest number of items prescribed in 2016/17 throughout GP practices in Rutland. It shows Hypertension and Heart Failure drugs have the most items prescribed, followed by Lipid-Regulating drugs and Antidepressants. Drugs for the Cardiovascular System account for seven out of the top twenty items prescribed. Out of all these drugs, Corticosteriods, used to provide relief for inflamed areas of the body e.g. in treatment for asthma, have the highest cost per item at £26.07, followed by Antiepileptics at £17.72 and drugs used in Diabetes at £15.45 per item.[xv]

Number of items prescribed throughout Rutland

This infographic examines the twenty drugs with the highest number of items prescribed by GP Practices in Rutland between April 2016 to March 2017. The size of the box relates to the total number of items prescribed and the average cost per item is stated.

Hypertension and Heart Failure £1.47	**Lipid-Regulating Drugs** £2.09

Antidepressant Drugs £3.07

Anti-epileptics £17.72

Bronchodilators £8.15

Corticosteroids (Respiratory) £26.07

Analgesics £6.25

Nit,Calc Block & Other Antianginal Drugs £2.43

Antiplatelet Drugs £1.32

Diuretics £0.95

Drugs Used In Diabetes £15.45

Thyroid And Antithyroid Drugs £4.85

Vitamins £3.03

Antibacterial Drugs £3.98

Beta-Adrenoceptor Blocking Drugs £1.06

Antisecretory Drugs & Mucosal Protectants £1.28

Laxatives £4.45

Drugs Used In Rheumatic Diseases & Gout £2.57

Anticoagulants And Protamine £13.66

Drugs For Genito -Urinary Disorders £8.24

BNF Chapter

- Cardiovascular System
- Gastro-Intestinal System
- Nutrition And Blood
- Central Nervous System
- Infections
- Obstetrics, Gynae & Urinary Tract Disorders
- Endocrine System
- Musculoskeletal & Joint Diseases
- Respiratory System

Prescribing – Costs

The following infographic presents the twenty drugs (by BNF Section Name) with the highest actual cost in 2016/17 throughout GP practices in Rutland. It shows drugs used in diabetes have the highest actual cost (£587,457), followed by Corticosteriods (£418,875) and Antiepileptics (£307,880). In this financial year, the actual cost of Oral Nutrition and Vitamins to the GP practices in Rutland was £277,275.[xv]

Locally in General Practice in Rutland we spend £5.7 million on prescribed drugs (excluding specialised drugs such as chemotherapy). Prescribing practice mirrors the burden of illness locally and the evidence suggests that the conditions that have the biggest and most sustained impact on residents and on services are heart disease, high blood pressure, diabetes, respiratory disease and depression. Many of these problems and their associated drug treatments require close monitoring and support from primary care. People with these long-term conditions now account for about 50 per cent of all GP appointments, 64 per cent of all outpatient appointments and over 70 per cent of all inpatient bed days.[xvi]

Clearly many patients get considerable health benefits from prescribed medication for long term conditions. However we also know that adopting and maintaining a healthy lifestyle will reduce the risk of many illnesses and thereby diminish or eliminate the need for medication in many cases.

Actual cost of prescribing throughout Rutland

This infographic examines the twenty drugs with the highest actual cost of prescribing in GP Practices in Rutland between April 2016 to March 2017. The size of the box relates to the total actual cost of prescribing in the financial year, this figure is stated.

Drugs Used In Diabetes £587,457	Thyroid And Antithyroid Drugs £173,706	Anticoagulants And Protamine £277,275	Nit,Calc Block & Other Antianginal Drugs £123,412	Oral Nutrition £213,952	Drugs For Genito-Urinary Disorders £147,888

Corticosteroids (Endocrine) £110,295

Lipid-Regulating Drugs £155,815

Hypertension and Heart Failure £118,923

Vitamins £82,803

Anti- epileptics £307,880

Antidepressant Drugs £159,440

Analgesics £280,526

Drugs Used In Park'ism/Related Disorders £77,969

Corticosteroids (Respiratory) £418,875

Bronchodilators £164,991

Sex Hormones & Antag In Malig Disease £138,310

Catheters £105,639

Antibacterial Drugs £93,081

Treatment Of Glaucoma £87,401

BNF Chapter

- Appliances
- Cardiovascular System
- Central Nervous System
- Endocrine System
- Eye
- Infections
- Malignant Disease & Immunosuppression
- Nutrition And Blood
- Obstetrics, Gynae & Urinary Tract Disorders
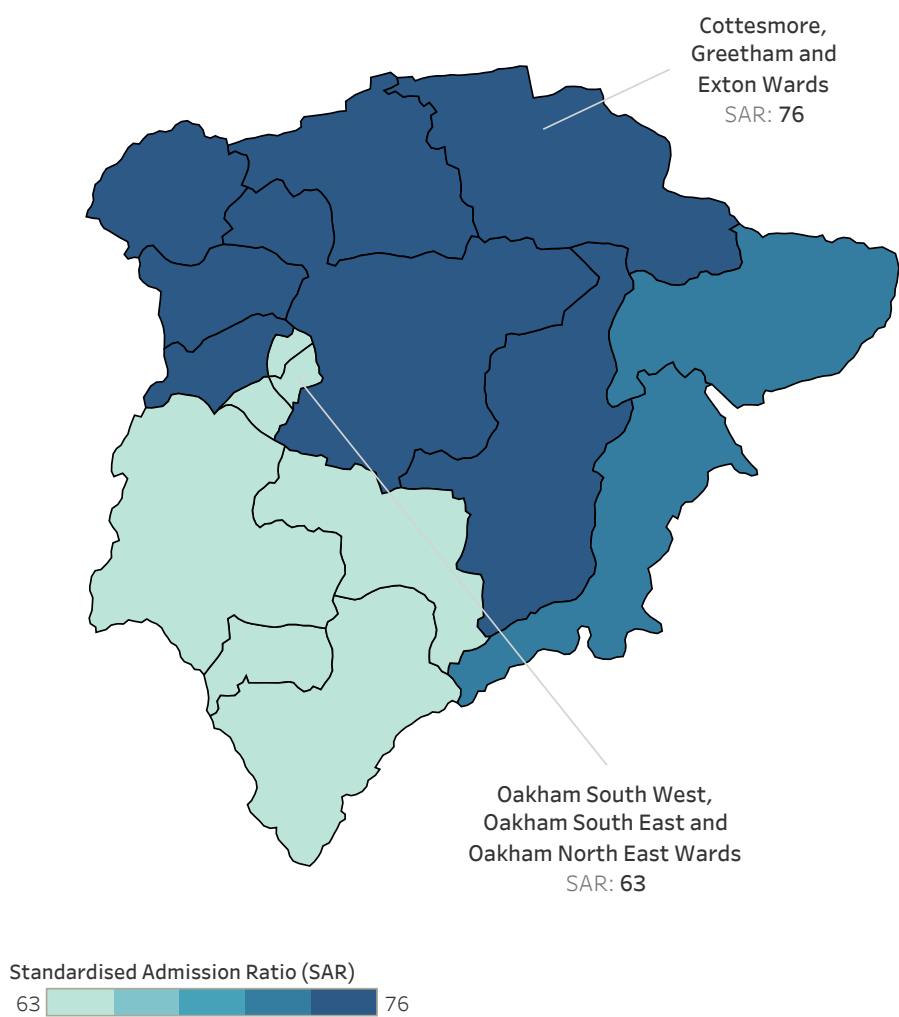- Respiratory System

4.6 Hospital admissions

These infographics demonstrate inequalities in important high-burden diseases throughout Rutland. They show each hospital admission indicator is strongly associated with income deprivation locally. Levels of emergency admissions are measured as a Standardised Admission Ratio (SAR). The SAR is a ratio of the number of emergency admissions in Rutland compared to the number expected if Rutland had the same age specific admission rates as England, multiplied by 100. A SAR of 100 indicates that Rutland has an average emergency admission rate, higher than 100 indicates that Rutland has a higher than average emergency admission rate, lower than 100 indicates a lower than average emergency admission rate. The standardised admission ratios are accompanied by 95% confidence intervals (shaded grey on the bar charts) to provide some indication of the margin of error around each estimate.

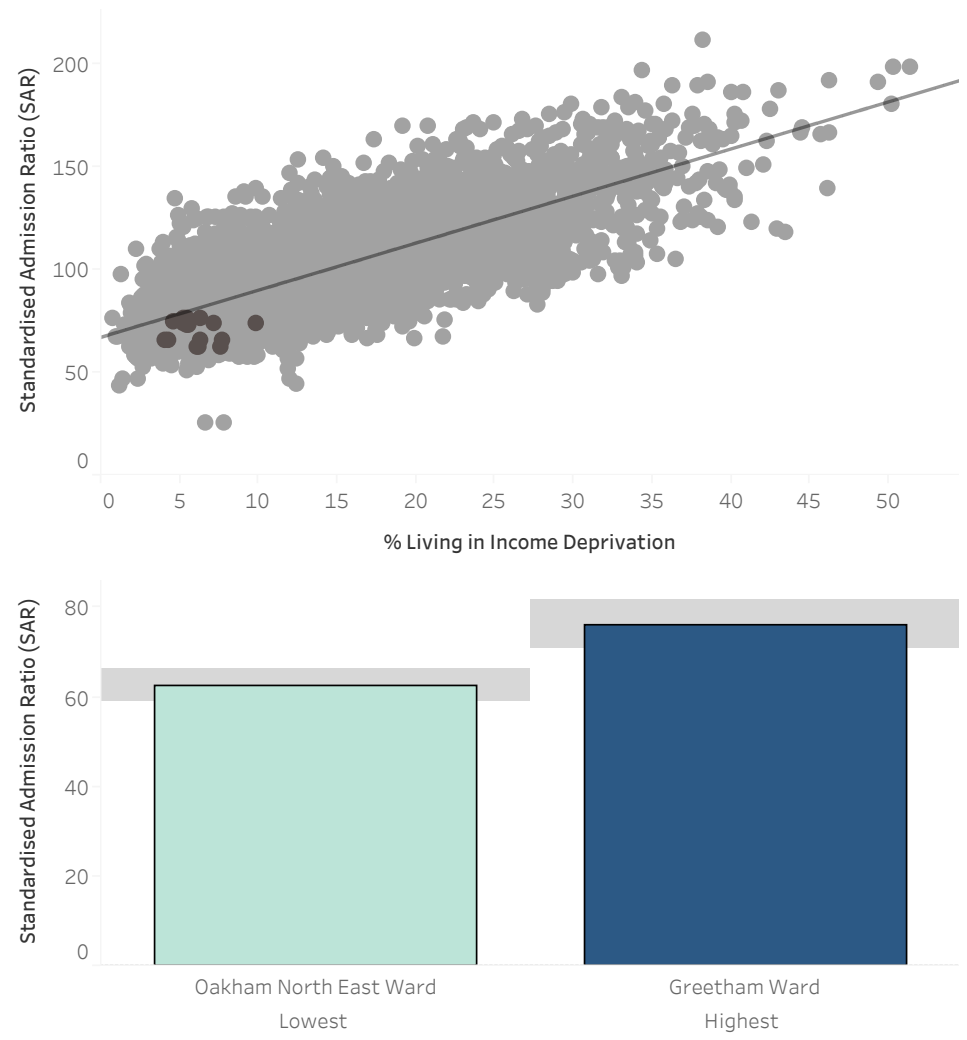## Emergency hospital admissions

The scatter graph shows there is a statistical linear relationship with income deprivation and emergency hospital admissions at ward level in Rutland; this relationship is also witnessed nationally. High levels of emergency admissions may be due to a variety of causes such as high levels of injury within a population or poor management of chronic conditions within Primary Care. It should be viewed as an indication of the levels of unplanned secondary care use within Rutland. Throughout the county, Oakham South West, Oakham South East and Oakham North East Wards have the lowest Standardised Admission Ratio (SAR) for emergency admissions and Cottesmore, Greetham and Exton Wards, the highest.[xvii]

Emergency hospital admissions for all causes

High levels of emergency admissions may be due to a variety of causes such as high levels of injury within a population or poor management of chronic conditions within primary care. It should be viewed as an indication of the levels of unplanned secondary care use within Rutland. The scatter graph shows there is a statistical linear relationship with income deprivation (2015) and emergency hospital admissions for all causes (2011/12-2015/16) in England by ward. The bar chart (with 95% confidence intervals shaded grey) highlights the wards with the highest and lowest admission ratios in Rutland.

Cottesmore, Greetham and Exton Wards
SAR: **76**

Oakham South West, Oakham South East and Oakham North East Wards
SAR: **63**

Standardised Admission Ratio (SAR)
63 — 76

Standardised Admission Ratio (SAR)

% Living in Income Deprivation

Standardised Admission Ratio (SAR)

Oakham North East Ward
Lowest

Greetham Ward
Highest

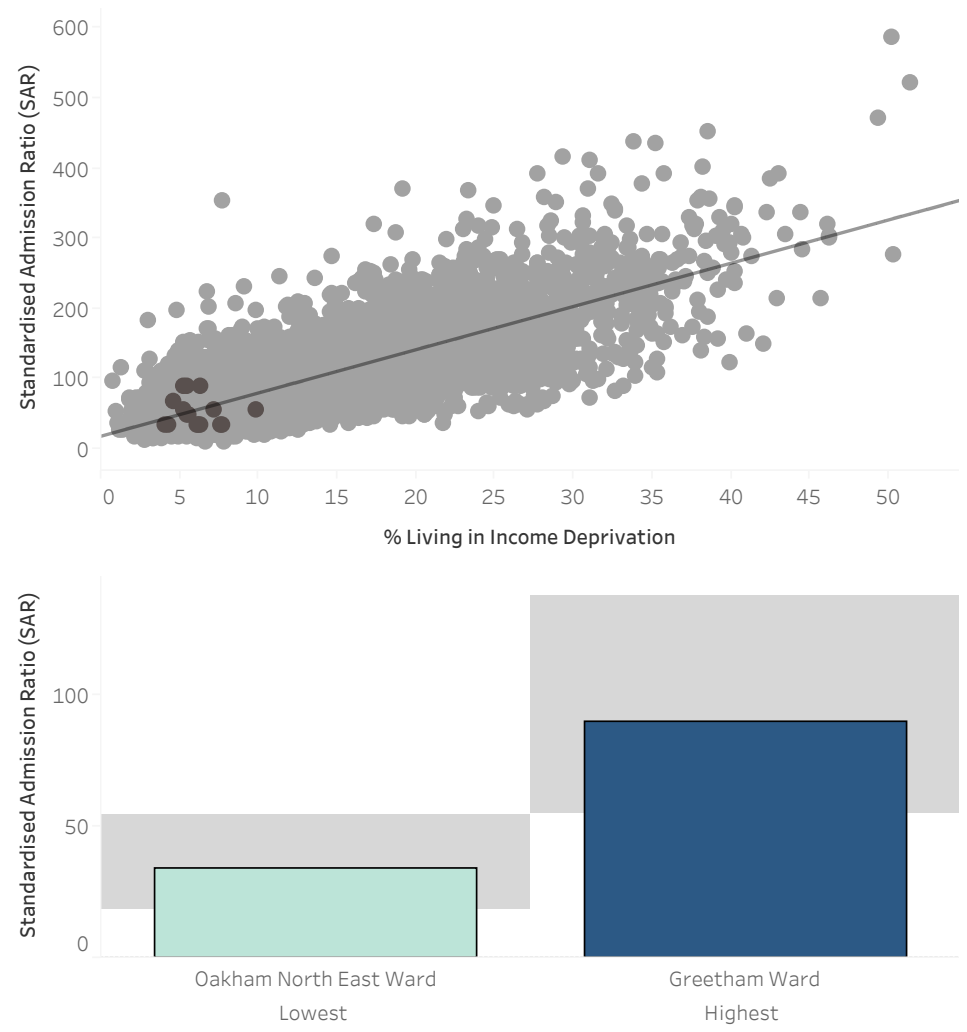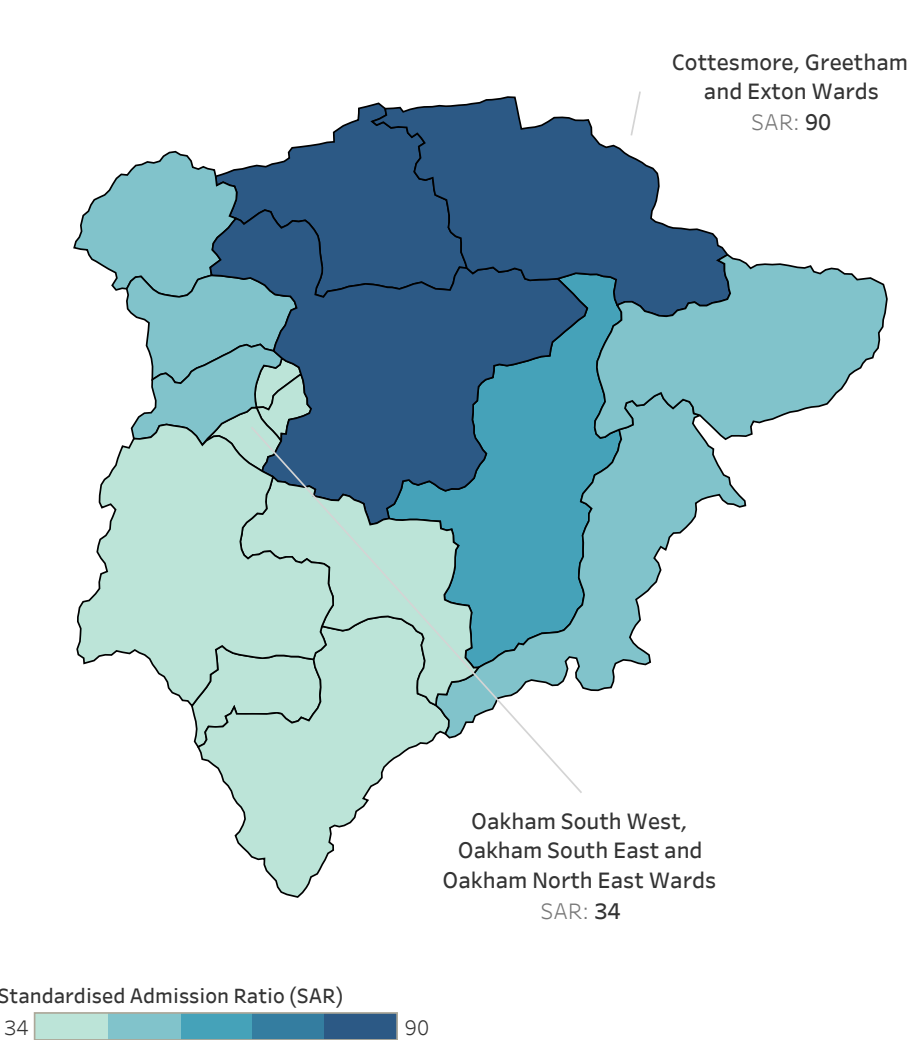## Emergency hospital admissions – Chronic Obstructive Pulmonary Disease (COPD)

The scatter graph shows there is a statistical linear relationship with income deprivation and emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD) at ward level in Rutland; this relationship is also witnessed nationally. COPD is one of the most common respiratory diseases in England, usually affecting people over the age of 35. The main risk factor for COPD is smoking; with the risk increasing the longer a person has smoked. Lifestyle changes, such as stopping smoking, can have a marked improvement on the condition and there is therefore a need to identify areas where public health interventions may be targeted for prevention and management of the condition. Throughout the county, Oakham South West, Oakham South East and Oakham North East Wards have the lowest Standardised Admission Ratio (SAR) for emergency admissions for COPD and Cottesmore, Greetham and Exton Wards, the highest.[xvii]

Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD)

COPD is a common respiratory disease, usually affecting people over the age of 35. The main risk factor for COPD is smoking, with the risk increasing the longer a person has smoked. Lifestyle changes, such as stopping smoking, can have a marked improvement on the condition and there is therefore a need to identify areas where public health interventions may be targeted for prevention and management of the condition. The scatter graph shows there is a statistical linear relationship with income deprivation (2015) and emergency hospital admissions (2011/12-2015/16) for COPD in England by ward. The bar chart (with 95% confidence intervals shaded grey) highlights the wards with the highest and lowest admission ratios in Rutland.
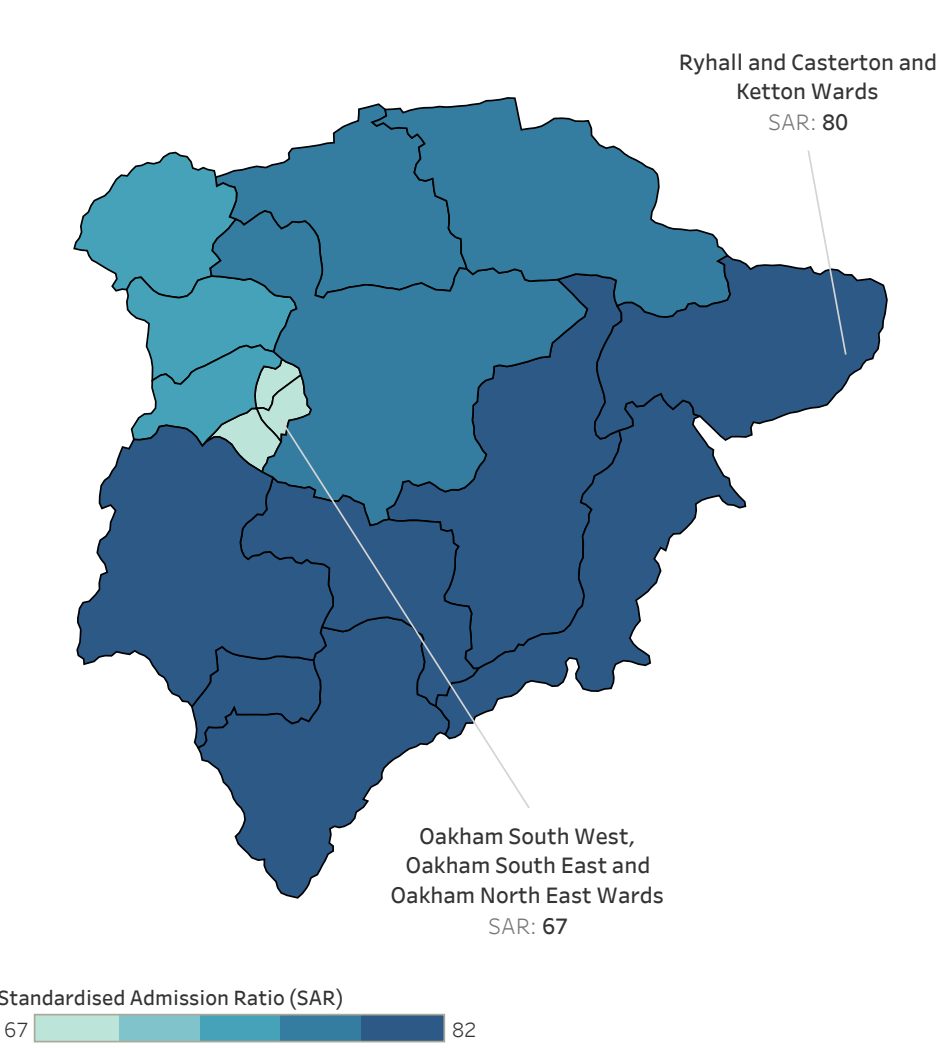

Cottesmore, Greetham and Exton Wards
SAR: **90**

Oakham South West, Oakham South East and Oakham North East Wards
SAR: **34**

Standardised Admission Ratio (SAR)
34 — 90

Standardised Admission Ratio (SAR)

% Living in Income Deprivation

Standardised Admission Ratio (SAR)

Oakham North East Ward
Lowest

Greetham Ward
Highest

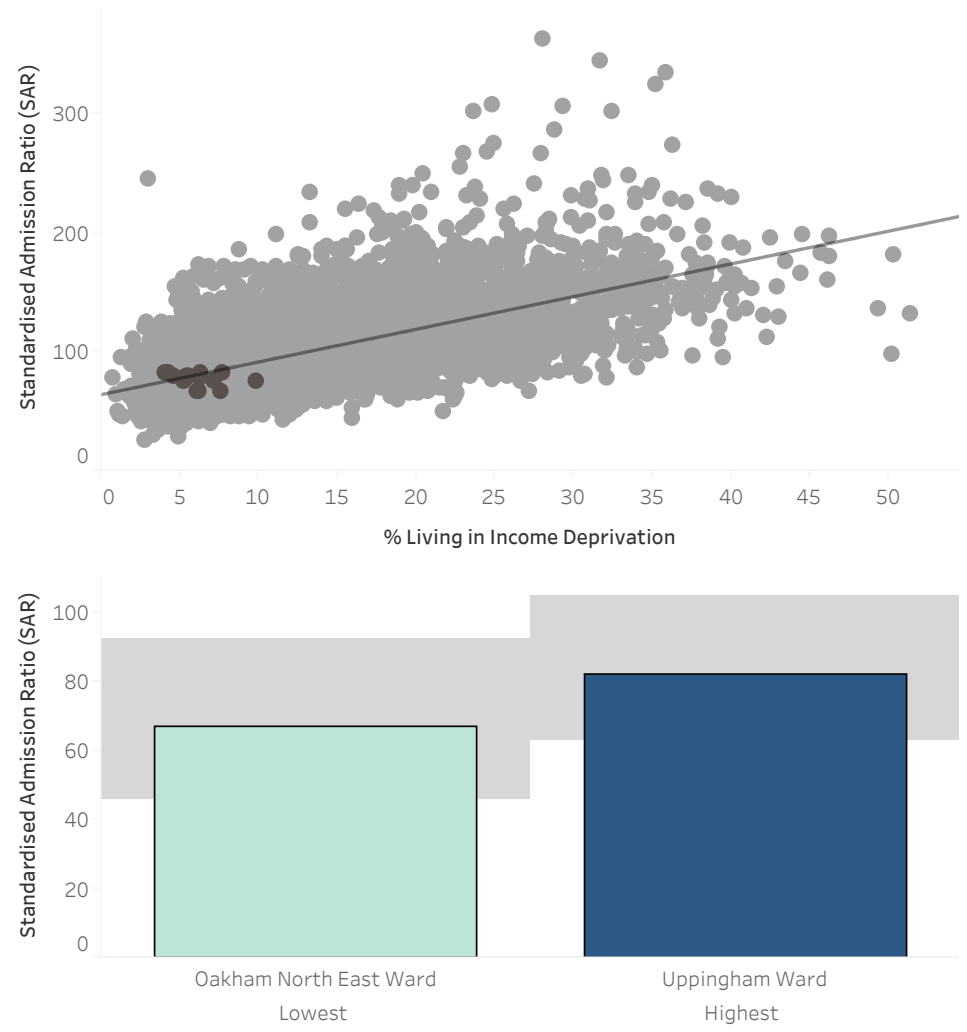# Emergency Hospital Admissions – Coronary Heart Disease (CHD)

The scatter graph shows there is a statistical linear relationship with income deprivation and emergency hospital admissions for Coronary Heart Disease (CHD) at ward level in Rutland; this relationship is also witnessed nationally. In 2015, heart disease was England's second biggest killer causing around 61,000 deaths, it is therefore important to understand variation in the level of CHD in the community and the resulting demand upon local secondary healthcare services. High levels of emergency admissions for CHD may reflect high levels of disease within a population or may be indicative of unsatisfactory primary healthcare. Throughout the county, Oakham South West, Oakham South East and Oakham North East Wards have the lowest Standardised Admission Ratio (SAR) for emergency admissions for CHD and Ryhall and Casterton and Ketton Wards, the highest. The bar chart shows the 95% confidence intervals overlap between the lowest and highest areas; this indicates there is no statistical difference in admission rates.[xvii]

Emergency hospital admissions for Coronary Heart Disease (CHD)

In 2015, heart disease was England's second biggest killer causing around 61,000 deaths. It is therefore important to understand variation in the level of CHD in the community and the resulting demand upon local secondary healthcare services. High levels of emergency admissions for CHD may reflect high levels of disease within a population or may be indicative of unsatisfactory primary healthcare. The scatter graph shows there is a statistical linear relationship with income deprivation (2015) and emergency hospital admissions for CHD (2011/12-2015/16) in England by ward. The bar chart (with 95% confidence intervals shaded grey) highlights the wards with the highest and lowest admission ratios in Rutland.

Ryhall and Casterton and
Ketton Wards
SAR: **80**

Oakham South West,
Oakham South East and
Oakham North East Wards
SAR: **67**

Standardised Admission Ratio (SAR)

67 | | | | | 82

5 Feedback on recommendations for 2016

We will refresh our strategic work on overweight and obesity in adults in 2017

Response:

Physical Activity Network meetings have brought a wide range of organisations together to better coordinate approaches, with a focus on helping sedentary people become more active.

The Community Wellbeing Service includes support and advice on weight management. The range of GP exercise on referral options has been extended to include a weight management programme. There are also plans to further extend the choice of activities that will appeal to people rather than just being Gym based.

Rutland Council has a key role to play in our work on the wider determinants of health. We will continue to provide specialist expertise on approaches to health impact assessment and health in all policies.

Response:

Public Health contributed to the local transport plan, highlighting issues around air quality.

As a partner to the NHS, we will work with University of Hospitals of Leicester Trust and Leicestershire Partnership Trust on joint approaches to workforce health as part of the Leicester, Leicestershire and Rutland (LLR) response to the NHS 5 Year Forward View.

Response:

Workforce health is a priority in the emerging Sustainability and Transformation Plan (STP) with an NHS employed clinical research fellow leading policy and interviews development across public sector organisations.

Endnotes

[i] Office for National Statistics (C) Crown Copyright. ONS Mid-2015 Population Estimates. at <
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

[ii] Population Projections Unit; Office for National Statistics. 2014-based Subnational Population Projections for Local Authorities in England. (2016). at
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandz1

[iii] Department for Communities and Local Government. English indices of deprivation 2015. www.gov.uk (2015). at
https://www.gov.uk/government/publications/english-indices-of-deprivation-2015

[iv] Office of National Statistics. Census 2011. (2013) at https://www.nomisweb.co.uk/census/2011

[v] Office of National Statistics. Local Area Migration Indications, 2016. (2017)
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/migrationwithintheuk/datasets/localareamigrationindicatorsunitedkingdom

[vi] Department for Environment Food & Rural Affairs. Background Mapping data for local authorities 2013. At: https://uk-air.defra.gov.uk/data/laqm-background-home

[vii] Leicestershire Police. Crime Statistics 2016/17 (2017)

[viii] NHS Digital. National Child measurement Programme. England 2016/17 school year (2017). At: http://digital.nhs.uk/catalogue/PUB30113

[ix] Public Health England. Child obesity and excess weight: small area level data (2017) at https://www.gov.uk/government/statistics/child-obesity-and-excess-weight-small-area-level-data

[x] Public Health England. Physical Activity profile in Fingertips (2017) at https://fingertips.phe.org.uk/profile/physical-activity

[xi] Public Health England. Public Health Outcomes Framework. (2017). at http://www.phoutcomes.info/

[xii] Office for National Statistics (C) Crown Copyright. ONS Mid-2016 Population Estimates. at < https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

[xiii] Public Health Mortality Files, 2014-16.

[xiv] Public Health England. Segment Tool. (2017). at https://fingertips.phe.org.uk/profile/segment

[xv] NHS Digital. Commissioning Group Prescribing Data. (2017) at http://content.digital.nhs.uk/article/2021/Website-Search?productid=25160&q=prescribing+ccg&sort=Relevance&size=10&page=1&area=both#top

[xvi] The King's Fund. Long-term conditions and multi-morbidity (2017) at https://www.kingsfund.org.uk/projects/time-think-differently/trends-disease-and-disability-long-term-conditions-multi-morbidity

[xvii] Public Health England. Local Health. (2017). At http://www.localhealth.org.uk