Inequalities in Life Expectancy between Oadby and Wigston

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Public Health Intelligence

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EXECUTIVE SUMMARY

- This paper explores the potential reasons why Oadby and Wigston has the 4th largest inequality in male life expectancy at birth in England, at 13.5 years. This is behind only Stockton-on-Tees (14.9 years), Kensington and Chelsea (13.8 years) and Blackpool (13.6 years).

- In 2015 the population of Leicestershire was 675,309, of these 24,011 residents (3.6%) lived in Oadby and 31,822 residents (4.7%) lived in Wigston. Wigston has an older population than Oadby and Leicestershire as a whole. In Wigston 22.7% of its residents are aged 65 years and over compared to 19.1% of the residents in Oadby.

- Oadby and Wigston has the 4th largest inequality in male life expectancy at birth in England, at 13.5 years. The inequality in male life expectancy has been increasing over time. In 2010-12, the inequality in life expectancy at birth was 5.2 years, increasing to 6.3 years in 2011-13, 8.7 years in 2012-14 and 13.5 years in 2014-16. Nationally, the inequality in life expectancy at birth (based on national deprivation deciles) was 9.3 years in males in 2014-16.

- In females the inequality in life expectancy at birth has increased year on year since 2010-12. In 2010-12, the inequality in life expectancy at birth was 2.4 years, increasing to 3.6 years in 2011-13, 4.4 years in 2012-14, 6.7 years in 2013-15 and the latest data for 2014-16, shows Oadby and Wigston has an inequality in female life expectancy at birth of 9.5 years. Nationally, the inequality in life expectancy at birth (based on national deprivation deciles) was 7.3 years in females in 2014-16.

- For both genders, life expectancy at birth has been increasing for those living in the least deprived decile while decreasing for those living in the most deprived decile, hence widening the gap of inequality in life expectancy. This rate of change in life expectancy in the most and least affluent areas in Oadby and Wigston is much faster than the pattern witnessed nationally. Over the last five time periods, the life expectancy in the least deprived decile in Oadby and Wigston has increased by 8.9 years in males and 3.7 years in females. This is substantially smaller than the increases witnessed nationally of 0.7 years in males and 0.4 years in females. In the most deprived decile, locally life expectancy has decreased by 1.9 years in males and decreased by 3.7 years in females, whereas at a national level, life expectancy has increased by 0.2 years in males and decreased by 0.1 years in females.

- Wigston has an older population than Oadby and Leicestershire as a whole. In Wigston
22.7% of its residents are aged 65 years and over compared to 19.1% of the residents in Oadby. Wigston has a higher percentage of its population aged 65 and above compared to Leicestershire (19.8%) whereas Oadby has a lower percentage.

- There are clear differences between Oadby and Wigston with regards to the ethnic groups living in the area. In Oadby almost half (47.5%) of the population are from a Black and Minority (BME) ethnic group compared to 11.6% in Wigston.

- Almost two-thirds (64.5%) of the population in Oadby live in the most affluent 20% areas nationally compared to 23.3% of the population in Wigston. Almost a quarter (24.6%) of the population in Wigston live in the 30% most deprived areas nationally compared to just 5.9% of the population in Oadby.

- Between 2011–2015 Wigston had a similar Standardised Mortality Ratio (SMR) of 100.5 for all causes compared to England, whereas Oadby performed significantly better (lower) than the national average. Examining broad cause of deaths in Wigston, Leicestershire and in England, all cancers were the leading cause of death followed by circulatory diseases and respiratory diseases. In Oadby, circulatory diseases were the leading cause of death followed by cancer and Coronary Heart Disease.

- Premature mortality examines all deaths under the age of 75 years. Between 2011–2015 when examining the SMRs of premature deaths from all causes compared to the national average, Oadby performed significantly better (lower) than the national average whereas Wigston performed similar to the national average. In Wigston, almost half (46.2%) of all premature deaths were from cancer, a higher proportion compared to Oadby (40.9%), Leicestershire (44.0%) and England (41.3%).

- The percentage of patients with cancer, as recorded on each GP practice disease registers, has been increasing both nationally and locally. Bushloe Surgery, situated in Wigston, is the only practice in the borough that has continued to have a significantly higher prevalence than the national average since 2009/10. All other practices in the borough have performed similar to the national prevalence over the last eight years.

- The prevalence of GP recorded COPD is increasing over time for all practices in Oadby and Wigston, apart from The Central Surgery, where the prevalence has been declining for the past three years. Bushloe Surgery, situation in Wigston, is the only practice in the borough that has a significantly higher prevalence than the national average since the recording (in 2009/10). Three practices in Oadby have continued to perform significantly lower than the national prevalence since 2009/10.

- The 2011 Census reported a higher percentage of the population were limited because of
health or disability problems in Wigston (18.8%) compared to Oadby (15.3%). Wigston performed significantly worse (higher) than the national average (17.6%) whereas Oadby performed significantly better (lower) than the national average.

- South Wigston Health Centre has the highest GP recorded smoking prevalence out of all practices in ELR CCG and is the only practice in the borough that has continued to perform significantly higher than the national average. All other GP practices have performed significantly lower than the national average. Over time, nationally the smoking prevalence is declining, a pattern which is largely reflected in the GP practices in the borough, apart from South Wigston Health Centre and The Central Surgery where the prevalence appears to have stabilised.

- Wigston has similar levels of binge drinking and obesity compared to England. Oadby has lower levels of each health behaviour compared to England.

- Wigston has a higher level of access to acute care than Oadby in the two indicators examined. The monthly trend in A&E attendances by GP practice between April 2016 to September 2018 shows all GP practices in Oadby have an A&E attendance rate lower than the Oadby and Wigston average, whereas all GP practices in Wigston have an A&E attendance rate higher than the Oadby and Wigston average. Examines the trend in emergency hospital admissions in the same time period shows South Wigston Health Centre has the highest emergency admission rate out of the borough followed by Bushloe Surgery, both in Wigston. The lowest rates were seen in Severn Surgery and Rosemead Drive Surgery in Oadby.
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1. **Purpose**

This paper explores the potential reasons why Oadby and Wigston has the 4th largest inequality in life expectancy at births in males nationally in 2014-16. This is due an increasing life expectancy at birth for those living in the least deprived decile and a decreasing life expectancy for those living in the most deprived decile. This divergence in Oadby and Wigston has occurred at a much faster rate than national and warrants attention.

The Local Authority Health Profiles are annual profiles published every July, available here: [https://fingertips.phe.org.uk/profile/health-profiles](https://fingertips.phe.org.uk/profile/health-profiles). The inequalities in life expectancy indicators are included in these profiles as supporting information. A paper examining this newly updated data was presented to Leicestershire County Council’s Public Health’s Senior Leadership Team (SLT) in August which highlighted the performance of Oadby and Wigston around this indicator. Public Health SLT appreciated the need for further understanding in this area and made contact with the partners to discuss this further. This paper is the output of discussions with various health and local government colleagues.

2. **Introduction/Background**

The inequality in life expectancy examines the range in years of life expectancy across the social gradient (from most to least deprived areas) within each local authority. The latest data for 2014-16, published as part of the Public Health Outcomes Framework ([https://fingertips.phe.org.uk/profile/public-health-outcomes-framework](https://fingertips.phe.org.uk/profile/public-health-outcomes-framework)) shows that Oadby and Wigston has the 4th largest inequality in male life expectancy at birth in England, at 13.5 years. This is behind only Stockton-on-Tees (14.9 years), Kensington and Chelsea (13.8 years) and Blackpool (13.6 years).

Nationally, the inequality in life expectancy at birth (based on national deprivation deciles) was 9.3 years in males and 7.3 years in females in 2014-16. The national trend of inequality in life expectancy has been slowly increasing for both genders. In males, the inequality has increased from 9.1 years in 2010-12 to 9.0 years in 2011-13, 9.1 years in 2012-14 and 9.2 years in 2013-15, and in females from 6.8 years in 2010-12 to 6.9 years in 2011-13, 6.9 years in 2012-14 and 7.1 years in 2013-15.

At a county level, the inequality in life expectancy at birth (based on national deprivation deciles) in Leicestershire is lower than nationally, at 6.2 years in males and 5.3 years in females in 2014-16. The trend of inequality in life expectancy has stabilised for males, at 6.1 years in 2010-12 to 6.2 years in 2011-13, 6.2 years in 2012-14 and 6.1 years in 2013-15. In females between 2010-12 to 2013-15 the rate stabilised at 4.9 years to 4.7 years to 4.8 years and 4.8 years. The inequality gradient increased to 5.3 years for the latest data in 2014-16.
Like nationally, the inequality in male life expectancy has been increasing over time in Oadby and Wigston, however at a much faster rate. In 2010-12, the inequality in life expectancy at birth was 5.2 years, increasing to 6.3 years in 2011-13, 8.7 years in 2012-14 and 13.5 years in 2014-16. Please note no data was available for 2013-15. It is important to note that this pattern is not confined to males. In females the inequality in life expectancy at birth has increased year on year since 2010-12 from 2.4 years to 3.6 years in 2011-13, 4.4 years in 2012-14, 6.7 years in 2013-15 and the latest data for 2014-16, shows Oadby and Wigston has an inequality in female life expectancy at birth of 9.5 years. This is 22\textsuperscript{nd} worse performing district/unitary authority out of 326 areas in England. Between 2010-12 and 2014-16, the inequality in life expectancy in Oadby & Wigston has increased by 8.3 years in males and 7.1 years in females. This year on year increase in inequality in life expectancy for both genders is not reflected in any other district in Leicestershire as shown by Figure 2 and Figure 3.

**Figure 1: Trend in inequality in life expectancy at birth by gender**

![Figure 1: Trend in inequality in life expectancy at birth by gender](image-url)
To understand why the inequality in life expectancy is increasing, we can examine the trend in life expectancy at birth of those living in the most deprived decile and those living in the least deprived decile. Deprivation deciles are defined using the Index of Multiple Deprivation 2015. They are created...
by ranking lower super output areas (LSOA) within each area from most to least deprived and dividing these into ten categories with approximately equal numbers of LSOAs in each. Figure 4 broadly shows in Oadby and Wigston for both genders, life expectancy at birth has been increasing for those living in the least deprived decile while decreasing for those living in the most deprived decile, hence widening the gap of inequality in life expectancy locally. Figure 5 examines the national trend and shows life expectancy in the least deprived decile is increasing for both genders, while in the most deprived decile is stabilising in males and slowly decreasing in females.

The rate of change in life expectancy in the most and least affluent areas in Oadby and Wigston is much faster than the pattern witnessed nationally. Over the last five time periods, the life expectancy in the least deprived decile in Oadby and Wigston has increased by 8.9 years in males and 3.7 years in females. This is substantially smaller than the increases witnessed nationally of 0.7 years in males and 0.4 years in females. In the most deprived decile, locally life expectancy has decreased by 1.9 years in males and decreased by 3.7 years in females, whereas at a national level, life expectancy has increased by 0.2 years in males and decreased by 0.1 years in females.

Figure 4: Trend in life expectancy at birth by most deprived and least deprived decile in Oadby and Wigston, Males and Females

(i) Males

(ii) Females
Figure 5: Trend in life expectancy at birth by most deprived and least deprived decile in England, Males and Females

(i) Males

(ii) Females

In Oadby and Wigston the latest data for 2014-16 shows for both genders, life expectancy at birth in the most deprived decile performs significantly worse than the national average, whereas life expectancy at birth for the two least deprived deciles in Oadby and Wigston performs significantly higher than the national average. In males, life expectancy at birth in the least deprived decile is 90.0 years compared to 75.2 years in the most deprived decile. In females, life expectancy at birth in the least deprived decile is 90.0 years compared to 76.7 years in the most deprived decile.

3. Demographics of Oadby and Wigston

It is well known that the demographics between the populations living in Oadby and Wigston (separately) vary greatly. The following sections examine the differences in terms of population, health status and health service utilisation between the two areas.

3.1. Population by Age

In 2015 the population of Leicestershire was 675,309, of these 24,011 residents (3.6%) lived in Oadby and 31,822 residents (4.7%) lived in Wigston. Table 1 shows that Wigston has an older population than Oadby and Leicestershire as a whole. In Wigston 22.7% of its residents are aged 65 years and over compared to 19.1% of the residents in Oadby. Wigston has a higher percentage of its population aged 65 and above compared to Leicestershire (19.8%) whereas Oadby has a lower percentage. When examining those aged 85 years and above both Oadby and Wigston have a higher percentage than the Leicestershire average (2.5%) at 3.1% and 3.3% respectively.

Examining the younger age groups shows that both Oadby and Wigston have a similar proportion of the population aged under 16 years at 17.1% at 17.5%. Both areas have a lower proportion compared
to the county (17.7%) and the national average (19.0%). Differences lie between the two areas when examining the 16 to 24 years age range. In Oadby, almost one-fifth (18.1%) of the population is made up by this age group compared to 10.4% in Wigston. This difference is likely to reflect the student population of University of Leicester and De Montfort University living in the Oadby area. The population pyramids presented in Figure 6 show the five-year age structure of the two areas being examined.

Table 1: Population by aged group, 2015

<table>
<thead>
<tr>
<th></th>
<th>Oadby</th>
<th>Wigston</th>
<th>Leicestershire</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>Under 16</td>
<td>4,117</td>
<td>17.1</td>
<td>5,557</td>
<td>17.5</td>
</tr>
<tr>
<td>16-24</td>
<td>4,334</td>
<td>18.1</td>
<td>3,307</td>
<td>10.4</td>
</tr>
<tr>
<td>25-64</td>
<td>10,962</td>
<td>45.7</td>
<td>15,728</td>
<td>49.4</td>
</tr>
<tr>
<td>65-84</td>
<td>3,843</td>
<td>16.0</td>
<td>6,189</td>
<td>19.4</td>
</tr>
<tr>
<td>85+</td>
<td>755</td>
<td>3.1</td>
<td>1,041</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Figure 6: Population pyramid for Oadby and Wigston, 2015

3.2. Population by Ethnic Group

Data from the 2011 Census shows there are clear differences between Oadby and Wigston with regards to the ethnic groups living in the area. In Oadby almost half (47.5%) of the population are from a Black and Minority (BME) ethnic group compared to 11.6% in Wigston. Both these percentages are higher than the county (8.6%) and national (14.6%) average. When examining the population whose ethnicity is not ‘White UK,’ 14.2% of all residents from Wigston fall into this category compared to over half in Oadby (50.1%). The proportion of the population who cannot speak English well or at all is higher in Oadby (2.5%) and Wigston (0.8%) compared to the Leicestershire average (0.7%).
Table 2: Ethnicity and language indicators, 2011

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<th>Wigston</th>
<th>Leicestershire</th>
<th>England</th>
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</thead>
<tbody>
<tr>
<td>BME population</td>
<td>11,324</td>
<td>3,835</td>
<td>55,722</td>
<td>7,731,314</td>
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<tr>
<td></td>
<td>47.5</td>
<td>11.9</td>
<td>8.6</td>
<td>14.6</td>
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<td>11,953</td>
<td>4,583</td>
<td>72,057</td>
<td>10,733,220</td>
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<td></td>
<td>50.1</td>
<td>14.2</td>
<td>11.1</td>
<td>20.2</td>
</tr>
<tr>
<td>Cannot speak English well or at all</td>
<td>588</td>
<td>235</td>
<td>4,426</td>
<td>843,845</td>
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<tr>
<td></td>
<td>2.5</td>
<td>0.8</td>
<td>0.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

3.3. Indices of Multiple Deprivation 2015

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) in England. Each LSOA in England are then ranked according to their overall score and split into national deciles, from the most deprived 10% areas nationally (National Decile 1) to the least deprived 10% areas nationally (National Decile 10). It is important to note that these statistics are a measure of relative deprivation, not affluence, and to recognise that not every person in a highly deprived area will themselves be deprived. Likewise, there will be some deprived people living in the least deprived areas.

Figure 7 examines which IMD 2015 national deciles each LSOA in Oadby and Wigston falls into. The purple areas represent more deprived areas and green areas represent the more affluent areas. The most deprived LSOAs in Oadby and Wigston are in the 30% most deprived areas nationally. Broadly speaking, the map shows Oadby has much fewer areas classified in the most deprived areas nationally compared to Wigston. There are six LSOAs in Oadby and Wigston that are in the 30% most deprived areas nationally, one of these LSOAs is in Oadby (Oadby Industrial Estate) whereas five are in Wigston (South Wigston Blaby Road and Saffron Road; South Wigston Countesthorpe Road; Guthlaxton College and Wigston Police Station; Wigston Rolleston; and Chartwell Drive Industrial Estate. It is worth noting that there are nine LSOAs in Oadby compared to five in Wigston that are ranked in the 20% least deprived areas nationally. Oadby is made up of 15 LSOAs whereas Wigston is made up of 21 LSOAs reflecting a larger proportion of LSOAs in Oadby in classified as least deprived areas nationally.

When examining each IMD 2015 deprivation domain, Figure 8 and Figure 9 show a higher level of deprivation is broadly witnessed throughout Wigston (highlighted yellow) compared to Oadby (highlighted red). In Wigston, there are several areas that appear to be in the most deprived deciles for several domains, these are mainly in South Wigston and the Wigston All Saints area. In Oadby, Oadby Industrial Estate looks to be the most deprived LSOA. Table 3 and Table 4 below show the counts of LSOA in each national decile split by Oadby and Wigston (separately). Despite the larger count of LSOAs in Wigston, the Barriers to Housing and Services domain is the only domain which has a higher count of LSOAs in the 20% least deprived areas in Wigston compared to Oadby.
Figure 7: Map of IMD 2015 National Deciles in Oadby and Wigston

Figure 8: IMD 2015 National Deprivation Decile in Wigston LSOAs by Index of Multiple 2015 Deprivation Domains
Figure 9: IMD 2015 National Deprivation Decile in Oadby LSOAs by Index of Multiple 2015 Deprivation Domains

Table 3: Counts of LSOAs in Wigston by National Deprivation Decile and Index of Multiple 2015 Deprivation Domain

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<th>Domain</th>
<th>1 - Most Deprived</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10 - Least Deprived</th>
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</thead>
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<tr>
<td>IMD</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
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<tr>
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<td>3</td>
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<td>Education, Skills and Training</td>
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<td>2</td>
<td>2</td>
<td>5</td>
<td>3</td>
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<tr>
<td>Health Deprivation and Disability</td>
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<td>Barriers to Housing and Services</td>
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Table 4: Counts of LSOAs in Oadby by National Deprivation Decile and Index of Multiple 2015 Deprivation Domain

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<th>Domain</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10 - Least Deprived</th>
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<tr>
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<td>1</td>
<td>2</td>
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<td>1</td>
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<td></td>
</tr>
<tr>
<td>Crime</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Barriers to Housing and Services</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Environment</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 10 below highlights the difference in the percentage of the population living in each national deprivation decile in Oadby and Wigston. The graph shows almost two-thirds (64.5%) of the population in Oadby live in the most affluent 20% areas nationally compared to 23.3% of the population in Wigston. Almost a quarter (24.6%) of the population in Wigston live in the 30% most deprived areas nationally compared to just 5.9% of the population in Oadby.

Figure 10: Mid-2016 Population by IMD 2015 National Decile in Oadby and Wigston

Figure 11 below examines the percentage of the population split by age living in each national deprivation decile in Oadby and Wigston. The graphs shows over a quarter (28.4%) of children aged 16 and under live in the areas classified as the 30% most deprived nationally in Wigston. This is higher than the percentage for the entire population (24.6%) representing children and families from Wigston are more likely to live in these more deprived areas. Older people from Oadby were less likely to live in the most affluent areas than the entire population. Almost two-thirds (64.5%) of the population in Oadby live in the most affluent 20% areas nationally, compared with 55.9% of the 65 and over population and 52.9% of the 85 and over population.
4. Mortality

4.1. All Ages

Between 2011–2015 Wigston had a similar Standardised Mortality Ratio (SMR) of 100.5 for all causes compared to England, whereas Oadby performed significantly better (lower) than the national average. When examining the SMR for all cancers compared to the national average, Oadby performed significantly better (lower) than the national average whereas Wigston performed similar to the national average.

Table 5 below examines broad cause of deaths in Oadby, Wigston, Leicestershire and England between 2011-2015. In Wigston, Leicestershire and in England, all cancers were the leading cause of death followed by circulatory diseases and respiratory diseases. In Oadby, circulatory diseases were the leading cause of death followed by cancer and Coronary Heart Disease.

Table 5: Causes of deaths - all ages, 2011-2015

<table>
<thead>
<tr>
<th></th>
<th>Oadby</th>
<th>Wigston</th>
<th>Leicestershire</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>All causes</td>
<td>1,045</td>
<td>1,792</td>
<td>28,888</td>
<td>2,357,381</td>
</tr>
<tr>
<td>All cancer</td>
<td>274</td>
<td>26.2%</td>
<td>535</td>
<td>29.9%</td>
</tr>
<tr>
<td>All circulatory</td>
<td>292</td>
<td>27.9%</td>
<td>459</td>
<td>25.6%</td>
</tr>
<tr>
<td>CHD</td>
<td>136</td>
<td>13.0%</td>
<td>205</td>
<td>11.4%</td>
</tr>
<tr>
<td>Stroke</td>
<td>75</td>
<td>7.2%</td>
<td>124</td>
<td>6.9%</td>
</tr>
<tr>
<td>Respiratory diseases</td>
<td>125</td>
<td>12.0%</td>
<td>248</td>
<td>13.8%</td>
</tr>
</tbody>
</table>
4.2. Premature mortality (under 75)

Between 2011–2015 when examining the SMRs of premature deaths from all causes compared to the national average, Oadby performed significantly better (lower) than the national average whereas Wigston performed similar to the national average. The SMR for premature deaths from all cancers in Wigston was similar to the national average whereas Oadby performed significantly better (lower) than the national average.

Table 6 below examines broad cause of premature deaths in Oadby, Wigston, Leicestershire and England between 2011-2015. In Wigston, almost half (46.2%) of all premature deaths were from cancer, a higher proportion compared to Oadby (40.9%), Leicestershire (44.0%) and England (41.3%).

Table 6: Causes of deaths - under 75, 2011-2015

<table>
<thead>
<tr>
<th></th>
<th>Oadby</th>
<th>Wigston</th>
<th>Leicestershire</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Count</td>
<td>Count</td>
<td>Count</td>
</tr>
<tr>
<td>All causes (U75)</td>
<td>220</td>
<td>491</td>
<td>8,642</td>
<td>752,670</td>
</tr>
<tr>
<td>All cancer (U75)</td>
<td>90</td>
<td>40.9%</td>
<td>227</td>
<td>46.2%</td>
</tr>
<tr>
<td>All circulatory (U75)</td>
<td>50</td>
<td>22.7%</td>
<td>112</td>
<td>22.8%</td>
</tr>
<tr>
<td>CHD (U75)</td>
<td>33</td>
<td>15.0%</td>
<td>63</td>
<td>12.8%</td>
</tr>
</tbody>
</table>

To further understand the variation in premature mortality between the two areas, we have used local deaths data to examine the most prevalent underlying cause of death in Wigston and compared this to Oadby. Please note, as local data has been used, this is more readily available and so a more recent time period of 2013-2017 has been examined.

Table 7: Underlying cause of death - under 75, 2013-2017

<table>
<thead>
<tr>
<th></th>
<th>Oadby</th>
<th>Wigston</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Count</td>
</tr>
<tr>
<td>Malignant neoplasm of bronchus and lung</td>
<td>15</td>
<td>6.5%</td>
</tr>
<tr>
<td>Chronic ischaemic heart disease</td>
<td>19</td>
<td>8.2%</td>
</tr>
<tr>
<td>Acute myocardial infarction</td>
<td>11</td>
<td>4.7%</td>
</tr>
<tr>
<td>Other chronic obstructive pulmonary disease</td>
<td>9</td>
<td>3.9%</td>
</tr>
<tr>
<td>Malignant neoplasm of breast</td>
<td>13</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Total premature deaths</strong></td>
<td><strong>232</strong></td>
<td><strong>511</strong></td>
</tr>
</tbody>
</table>
The age-standardised mortality rates for premature deaths from lung cancer in Wigston was 35.4 per 100,000 population aged under 75, over twice the rate and significantly higher than the DSR in Oadby of 15.7 per 100,000 population aged under 75. The age-standardised mortality rates for premature deaths from chronic ischaemic heart disease, acute myocardial infarction and breast cancer showed no significant difference in rates between the two areas. The age-standardised mortality rates for premature death from other chronic obstructive pulmonary disease in Oadby was unable to be calculated due to the small numbers involved (counts <10).

5. Morbidity

5.1. Cancer

5.1.1. Suspected cancer

Two Week Wait (urgent GP) referrals are used where cancer is suspected for patients. The trend in the crude rate of two week wait referrals per 100,000 persons registered at each GP practice is examined in Figure 12. Since 2009/10, all three practices in Wigston and The Central Surgery and The Croft Medical Centre in Oadby have had significantly higher rates of two week wait referrals than the national average for a numerous time periods. The Rosemead Drive Surgery is the only GP practice that has performed not significantly different to the national average over time.

Figure 12: Rate of Two Week Wait (urgent GP) referrals where cancer in suspected (Number per 100,000 registered population)
5.1.2. Cancer prevalence

Figure 13 examines the percentage of patients with cancer, as recorded on each GP practice disease registers (register of patients with a diagnosis of cancer excluding non-melanotic skin cancers from 1 April 2003). It shows both nationally and locally, the trend in cancer prevalence is increasing. Bushloe Surgery, situation in Wigston, is the only practice in the borough that has continued to have a significantly higher prevalence than the national average. All other practices in the borough have performed similar to the national prevalence over the last eight years.

Figure 13: Cancer QOF prevalence (all ages) in Oadby & Wigston General Practices
5.1.3. Cancer incidence

Between 2011–2015, Wigston had a Standardised Incidence Ratio (SIR) of 98.7 for all cancer incidence which was similar to the national average. Oadby performed significantly better (lower) than the national average.

5.1.3.1. Lung cancer incidence

Between 2011–2015, Wigston had a similar SIR of 106.5 for lung cancer incidence compared to the national average. Oadby performed significantly better (lower) than the national average with a SIR of 64.9.

5.1.4. Emergency admissions with cancer

Figure 14 examines the trend in the crude rate of inpatient or day-case emergency admissions with a diagnostic code that includes cancer by GP practice in the borough. Although three of the highest four latest rates in the borough are from the Wigston practices, examining statistical significance compared to the national average shows no consistent trend over time exists in all GP practices in Oadby & Wigston.
5.2. Chronic Obstructive Pulmonary Disease (COPD)

5.2.1. COPD Prevalence

Chronic Obstructive Pulmonary Disease (COPD) is a common disabling condition with a high mortality. The most effective treatment is smoking cessation. Figure 15 examines the trend in the percentage of patients with COPD, as recorded on each GP practice disease registers. It shows the trend in COPD prevalence is increasing for all practices in Oadby and Wigston, apart from The Central Surgery, where the prevalence has been declining for the past three years. Bushloe Surgery, situation in Wigston, is the only practice in the borough that has a significantly higher prevalence than the national average since the recording (in 2009/10). Three practices in Oadby have continued to perform significantly lower than the national prevalence since 2009/10.
5.2.2. Emergency hospital admissions for COPD

Between 2013/14 – 2015/16, Wigston had a significantly worse (higher) Standardised Admission Ratio (SAR) of 117.8 for emergency hospital admissions for COPD compared to the national average. Oadby performed significantly better (lower) than the national average in this time period.

5.3. Hip and knee replacements (planned)

Between 2011/12 – 2015/16, Wigston had a similar SAR of 96.5 for elective hospital admissions for hip replacement compared to the national average. Oadby performed significantly better (lower) the national average.

Between 2011/12 – 2015/16, Wigston had a significantly worse (higher) SAR of 114.4 for elective hospital admissions for knee replacement compared to the national average. Oadby performs similar to the national average.
6. **Wider Determinants of Health**

6.1. **Education**

Examining the available education indicators shows that Oadby performs better than Wigston with regards to this subject area. In 2013/14, the percentage of children in Wigston with a good level of development (including communication, language, physical development, literacy, maths, personal, social and emotional development) was 48.4%, this was significantly worse than the national average of 60.4%. In Oadby, the figure was 65.5%, which was similar to the national average. In the same time period, the percentage of children achieving GCSEs (5A*-C inc. English and Maths) in Oadby and Wigston was 58.5%. When broken down by area, Wigston (46.7%) performed significantly worse than the national average (56.6%) for GCSE achievement, whereas Oadby (74.4%) performed significantly better than the national average. At a county level, Leicestershire performs similar to the national average with 57.7% of pupils achieving GCSEs (5A*-C inc. English and Maths).

6.2. **Provision of unpaid care**

As the population ages, the provision of unpaid care is becoming increasingly common. The 2011 Census reported that 10.9% of the population of Leicestershire, 11.5% of the population in Oadby and 11.1% of the population in Wigston reported they were providing at least one hour per week of unpaid care. All areas are significantly worse (higher) than the national average of 10.2%. However in Wigston a higher proportion of the population (2.6%) reported providing 50 hours or more unpaid care per week compared to Oadby (2.1%). This proportion in Oadby was significantly better (lower) than the England average (2.4%) whereas Wigston performed significantly worse (higher) than the national average (2.4%). In Leicestershire, 2.2% of the population reported providing 50 hours or more unpaid care per week, this is significantly better (lower) than the national average.

6.3. **Health Status**

As part of the 2011 Census, data was collected regarding people’s health status and whether it was very bad or bad or very bad (combined). In Leicestershire, 4.3% of the population stated their health was very bad or bad, this is significantly better (lower) than the national average (4.3%). In Wigston a higher percentage of the population (5.4%) stated their health was bad or very bad compared to Oadby (4.0%). The same pattern is true when examining very bad health status only at 1.3% and 0.8% of the population respectively. For both indicators, Wigston performed similar to the national average while Oadby performed significantly better (lower) than the national average.

The 2011 Census reported a higher percentage of the population were limited because of health or disability problems in Wigston (18.8%) compared to Oadby (15.3%). Wigston performed significantly worse (higher) than the national average (17.6%) whereas Oadby performed significantly better (lower) than the national average. At a Leicestershire level, the percentage of the population limited because of health or disability problems was 16.2%, also significantly better (lower) than the national average.
average.

6.4. Lifestyle behaviours

6.4.1. Smoking

Figure 16 examines the smoking prevalence from QOF as the proportion of patients recorded as smokers on GP practice disease registers. South Wigston Health Centre has the highest smoking prevalence out of all practices in ELR CCG and is the only practice in the borough that has continued to perform significantly higher than the national average. All other GP practices have performed significantly lower than the national average. Over time, nationally the smoking prevalence is declining, a pattern which is largely reflected in the GP practices in the borough, apart from South Wigston Health Centre and The Central Surgery where the prevalence appears to have stabilised.

Figure 16: Estimated QOF smoking prevalence (aged 15+) in Oadby & Wigston General Practices
6.4.2. Obesity

Estimates from Middle Super Output Area (MSOA) level data in 2006-2008 showed the population aged 16 years and above who were regarded as obese (with a body mass index of 30 or more) was 23.7% in Oadby and Wigston. Examining this indicator by each area showed 27.1% of the population (7,363 adults) were obese in Wigston, higher than Oadby where 19.0% of the population (3,632 adults) were obese. Wigston performed similar to the national average (24.1%) whereas Oadby performed significantly better (lower) than the national average. At a county level, almost a fifth (24.3%) of residents in Leicestershire were classified as obese adults, similar to the national percentage.

6.4.3. Drinkers

Binge drinking is a significant public health problem in the UK and is associated with a wide range of health problems. Estimates from Middle Super Output Area (MSOA) level data in 2006-2008 showed almost a fifth (19.2%) of adults in Leicestershire were binge drinkers. This is similar to the national percentage (20.0%). In Wigston had almost a fifth (18.2%) of its adult (16 years and above) population were classified as binge drinkers compared to 11.7% in Oadby. For this indicator, Wigston performed similar to the national average (20.0%) whereas Oadby performed significantly better (lower) than the national average.

6.4.3.1. Hospital admissions for alcohol related harm

Between 2013/14 – 2015/16, Wigston had a similar Standardised Admission Ratio (SAR) of 105.7 for hospital stays for alcohol related harm compared to the national average. Oadby and Leicestershire as a whole performed significantly better (lower) than the national average.

7. Access to Services

7.1. General Practice

There are four General Practices situated in Oadby and three practices situated in Wigston. These are:

- C82048 - Rosemead Drive Surgery, Oadby
- C82021 - The Central Surgery, Oadby
- C82067 - The Croft Medical Centre, Oadby
- C82112 - Severn Surgery, Oadby
- C82013 - Bushloe Surgery, Wigston
- C82079 - South Wigston Health Ctr., Wigston
- C82071 - Wigston Central Surgery, Wigston

The GP Practice Profile for each of these practices can be found in the Appendix.
7.2. A&E attendances

Examining the trend in A&E attendances by GP practice between April 2016 to September 2018 shows all GP practices in Oadby have an A&E attendance rate lower than the Oadby and Wigston average, whereas all GP practices in Wigston have an A&E attendance rate higher than the Oadby and Wigston average.

7.2.1. A&E attendances in the under 5s

Between 2013/14 – 2015/16, Leicestershire had a significantly better (lower) rate of A&E attendances of 0-4 year olds compared to the national rate. However, both Oadby and Wigston had a significantly worse (higher) rate of A&E attendances of 0-4 year olds compared to the national rate. When comparing the two areas, in Wigston the rate was 740.2 per 1,000 population aged 0-4 years, higher than the rate in Oadby of 626.5 per 1,000 population aged 0-4 years. The national rate was 551.6 per 1,000 population aged 0-4 years.

7.3. Emergency hospital admissions

Examining the trend in emergency hospital admissions by GP practice between April 2016 to September 2018 found that the two highest rates of emergency admissions in the borough were found in GP practices in Wigston and the two lowest rates were seen in GP practices in Oadby.

Between 2013/14 – 2015/16, Wigston had a similar SAR of 101.1 for emergency hospital admissions for all causes compared to the national average. Oadby and Leicestershire as a whole performed significantly better (lower) than the national average.

8. Conclusion and Recommendations

- Commissioners and providers should be aware of the high level of inequality throughout the Oadby and Wigston district and raise awareness of the relative invisibility of this statistic to colleagues.

- Oadby and Wigston Health and Wellbeing Board and CCG to support the ongoing partnership work to increase the life expectancy of residents living in the most deprived quintile of the borough.

- LCC Public Health department to consider how uptake of key prevention services (including NHS health checks and the Stop Smoking Service) can be improved by residents of Wigston.

- To review the equity of access and resource to health services for Oadby and Wigston residents and ensure health budgets are aligned to these findings.

- Arrange a half day workshop in February/March 2019 for all wider health partners of Oadby & Wigston to attend. Feedback from all partners will be sought and a tangible action plan will be
drafted from the findings of this event.