Life Expectancy Briefing 2013-2015

Key Points:

- Life expectancy at birth in Barnsley for men is 77.9 years; significantly lower than the Yorkshire and The Humber and England rates of 78.6 and 79.5 years respectively (see Figure 2).
- Although life expectancy at birth for men in Barnsley has increased by 0.2 years since 2010-2012, the gap between Barnsley and England has also increased by 0.2 years (see Figures 4 and 5).
- Life expectancy at birth in Barnsley for women is 81.6 years; significantly lower than the Yorkshire and The Humber and England rates of 82.3 and 83.1 years respectively (see Figure 6).
- For women in Barnsley, life expectancy at birth has increased by 0.2 years since 2010-2012, and the gap has remained the same (see Figures 8 and 9).
- Life expectancy at 65 for men in Barnsley is 17.8 years; significantly lower than the Yorkshire and The Humber and England rates of 18.1 and 18.7 years respectively (see Figure 10).
- Life expectancy at 65 for men in Barnsley has increased by 0.4 years since 2010-2012, and the gap between Barnsley and England has decreased by 0.1 year (see Figures 12 and 13).
- Life expectancy at 65 for women in Barnsley is 19.7 years; significantly lower than the Yorkshire and The Humber and England rates of 20.5 and 21.1 years respectively (see Figure 14).
- For women in Barnsley, life expectancy at 65 has decreased by 0.1 year since 2010-2012, and the gap between Barnsley and England has increased by 0.3 years (see Figures 16 and 17).

Figure 1. Life expectancy at birth and at age 65 for men and women in Barnsley and England in 2013-2015

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## Purpose & Context:
- The purpose of this briefing is to provide a summary of the 2013-2015 life expectancy (at birth and at age 65) data, released by ONS in November 2016.
- Life expectancy relates to the average number of years a person would live, at a particular age, if he or she experienced the particular area’s age-specific mortality rates for that time period throughout his or her life.

## CONTENTS:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth for men: Barnsley compared to statistical neighbours, Yorkshire and The Humber and England (2013-2015)</td>
<td>3</td>
</tr>
<tr>
<td>Differences in life expectancy at birth and the gap in life expectancy at birth for men: 2013-2015 compared with 2012-2014 (Barnsley and statistical neighbours)</td>
<td>4</td>
</tr>
<tr>
<td>Life expectancy at birth for women: Barnsley compared to statistical neighbours, Yorkshire and The Humber and England (2013-2015)</td>
<td>5</td>
</tr>
<tr>
<td>Differences in life expectancy at birth and the gap in life expectancy at birth for women: 2013-2015 compared with 2012-2014 (Barnsley and statistical neighbours)</td>
<td>6</td>
</tr>
<tr>
<td>Life expectancy at 65 for men: Barnsley compared to statistical neighbours and England (2013-2015)</td>
<td>7</td>
</tr>
<tr>
<td>Differences in life expectancy at 65 and the gap in life expectancy at 65 for men: 2013-2015 compared with 2012-2014 (Barnsley and statistical neighbours)</td>
<td>8</td>
</tr>
<tr>
<td>Life expectancy at 65 for women: Barnsley compared to statistical neighbours and England (2013-2015)</td>
<td>9</td>
</tr>
<tr>
<td>Differences in life expectancy at 65 and the gap in life expectancy at 65 for women: 2013-2015 compared with 2012-2014 (Barnsley and statistical neighbours)</td>
<td>10</td>
</tr>
<tr>
<td>Appendix</td>
<td>11</td>
</tr>
</tbody>
</table>
Life Expectancy at Birth: Men

Figure 2. Life expectancy at birth (men): Barnsley, statistical neighbours, Yorkshire and The Humber and England 2013-2015

- Life expectancy at birth for men in Barnsley (77.9 years) is significantly lower than the Yorkshire and The Humber and England rates of 78.6 and 79.5 years respectively (Figure 2).
- Compared to statistical neighbours, Barnsley’s 2013-2015 rate of 77.9 years is the eighth lowest (Figure 2).
- Barnsley is ranked 281 out of 324 local authorities in England, and is in quintile 4 (where 1 is the best).


- Life expectancy at birth for men in Barnsley has fluctuated during the period 2001-2003 to 2013-2015, and has been significantly lower than England at each time point (Figure 3).
- Since 2001-2003, life expectancy at birth for men in Barnsley has increased by 3.3 years (from 74.6 years to 77.9 years). This is higher than the Yorkshire and The Humber increase of 3.1 years, and the same increase as England overall.
- The gap* in life expectancy at birth between Barnsley and England has remained the same during the period 2001-2003 to 2013-2015 (1.6 years).

* see appendix for definition of the gap in life expectancy

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Life Expectancy at Birth: Men


Figure 5. Difference in the gap* in life expectancy at birth (men): Barnsley and statistical neighbours, 2013-2015 compared with 2010-2012

- Figures 4 and 5 compare life expectancy at birth and the gap in life expectancy at birth for the two most recent independent (ie non-overlapping) time periods: 2010-2012 to 2013-2015.
- Life expectancy at birth for men increased in 11 of the 16 comparator authorities between 2010-2012 and 2013-2015. Barnsley’s increase of 0.2 years (from 77.7 years to 77.9 years) is 0.2 years lower than the overall England increase of 0.4 years (Figure 4).
- Barnsley’s performance, in terms of the gap in life expectancy at birth for men, is similar to the majority of authorities in its comparator group, ie between 2010-2012 and 2013-2015 the gap has increased. Barnsley’s gap increased by 0.2 years (from 1.4 to 1.6 years) (Figure 5). The gap in life expectancy at birth for men has narrowed in only four comparator authorities between 2010-2012 and 2013-2015.

* see appendix for definition of the gap in life expectancy

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Life Expectancy at Birth: Women

**Figure 6. Life expectancy at birth (women): Barnsley, statistical neighbours, Yorkshire and The Humber and England 2013-2015**

- Life expectancy at birth for women in Barnsley (81.6 years) is **significantly lower** than the Yorkshire and The Humber and England rates of 82.3 and 83.1 years respectively (Figure 6).
- Compared to statistical neighbours, Barnsley’s 2013-2015 rate of 81.6 years is the eighth lowest (Figure 6).
- Barnsley is ranked **289 out of 324** local authorities in England, and is in **quintile 4** (where 1 is the best).

**Figure 7. Trend in life expectancy at birth (women): Barnsley, Yorkshire and The Humber and England (2001-2003 to 2013-2015)**

- Life expectancy at birth for women in Barnsley has fluctuated during the period 2001-2003 to 2013-2015, and has been **significantly lower** than England at each time point (Figure 7).
- Since 2001-2003, life expectancy at birth for women in Barnsley has **increased by 2.0 years** (from 79.6 years to 81.6 years). This is **lower** than the England increase of 2.4 years; hence the **gap** between Barnsley and England has **widened** (from 1.1 years to 1.5 years).
**Figure 8. Difference in life expectancy at birth (women): Barnsley, statistical neighbours and England, 2013-2015 compared with 2010-2012**

- Figures 8 and 9 compare life expectancy at birth and the gap in life expectancy at birth for the two most recent independent (ie non-overlapping) time periods: 2010-2012 to 2013-2015.
- Life expectancy at birth for women increased in 10 of the 16 comparator authorities between 2010-2012 and 2013-2015. Barnsley’s increase of 0.2 years (from 81.4 years to 81.6 years) is the same as the overall England increase (Figure 8).
- The gap in life expectancy at birth for women between 2010-2012 and 2013-2015 has narrowed in only five comparator authorities, increased in nine and remained the same in two. The gap between Barnsley and England of 1.5 years remained the same during the period (Figure 9).

* see appendix for definition of the gap in life expectancy

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Life Expectancy at 65: Men

Figure 10. Life expectancy at 65 (men): Barnsley, statistical neighbours, Yorkshire and The Humber and England 2013-2015

- Life expectancy at 65 for men in Barnsley (17.8 years) is significantly lower than the Yorkshire and The Humber and England rates of 18.1 and 18.7 years respectively (Figure 10).
- Compared to statistical neighbours, Barnsley’s 2013-2015 rate of 17.8 years is the seventh lowest (Figure 10).
- Barnsley is ranked 277 out of 324 local authorities in England, and is in quintile 4 (where 1 is the best).


- Life expectancy at 65 for men in Barnsley has fluctuated during the period 2001-2003 to 2013-2015, and has been significantly lower than England at each time point (Figure 11).
- Since 2001-2003, life expectancy at 65 for men in Barnsley has increased by 2.9 years (from 14.9 years to 17.8 years). This is higher than the Yorkshire and The Humber and England increases of 2.2 and 2.4 years respectively; hence the gap between Barnsley and England has decreased (from 1.4 years to 0.9 years).

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Figure 12. Difference in life expectancy at 65 (men): Barnsley, statistical neighbours and England, 2013-2015 compared with 2010-2012

Figures 12 and 13 compare life expectancy at 65 and the gap in life expectancy at 65 for the two most recent independent (ie non-overlapping) time periods: 2010-2012 to 2013-2015.

- Life expectancy at 65 for men increased in 13 of the 16 comparator authorities between 2010-2012 and 2013-2015. Barnsley’s increase of 0.4 years (from 17.4 years to 17.8 years) is 0.1 year higher than the overall England increase of 0.3 years (Figure 12).
- The gap in life expectancy at 65 for men between 2010-2012 and 2013-2015 has narrowed in eight comparator authorities, increased in seven and remained the same in one. Barnsley’s gap has decreased by 0.1 year (Figure 13).

* see appendix for definition of the gap in life expectancy

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Life expectancy at 65 in Barnsley (19.7 years) is significantly lower than the Yorkshire and The Humber and England rates of 20.5 and 21.1 years respectively (Figure 14).

Compared to statistical neighbours, Barnsley’s 2013-2015 rate of 19.7 years is the third lowest (Figure 14).

Barnsley is ranked 304 out of 324 local authorities in England, and is in quintile 5 (where 1 is the best).

Life expectancy at 65 for women in Barnsley has fluctuated during the period 2001-2003 to 2013-2015, and has been significantly lower than England at each time point (Figure 15).

Since 2001-2003, life expectancy at 65 for women in Barnsley has increased by 1.6 years (from 18.1 years to 19.7 years). This is the same as the increase in Yorkshire and The Humber, but lower than the England increase of 1.9 years; hence the gap between Barnsley and England has increased (from 1.1 years to 1.4 years).
Life Expectancy at 65: Women


- Figures 16 and 17 compare life expectancy at 65 and the gap in life expectancy at 65 for the two most recent independent (ie non-overlapping) time periods: 2010-2012 to 2013-2015.
- Life expectancy at 65 for women increased in 6 comparator authorities, remained the same in four and decreased in six between 2010-2012 and 2013-2015. Barnsley’s rate decreased by 0.1 year (from 19.8 years to 19.7 years (Figure 16).
- Barnsley’s performance, in terms of the gap in life expectancy at 65 for women, is similar to the majority of authorities in its comparator group, ie between 2010-2012 and 2013-2015 the gap has increased. Barnsley’s gap has increased by 0.3 years (from 1.1 to 1.4 years (Figure 17). The gap in life expectancy at 65 for women has narrowed in only three comparator authorities between 2010-2012 and 2013-2015.

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**Definition of Life Expectancy:**

It is important to note that “life expectancy at a given age for an area is the average number of years a person would live, if he or she experienced the particular area’s age-specific mortality rates for that time period throughout his or her life. It makes no allowance for any later actual or projected changes in mortality. In practice, death rates of the area are likely to change in the future, so period life expectancy does not therefore give the number of years someone could actually expect to live. Also, people may live in other areas for at least some part of their lives.” (ONS, 2016).

**Life Expectancy Gap:**

This indicator measures inequalities in life expectancy between the local authority area and that of England as a whole. The life expectancy gap shows the absolute difference in years in life expectancy between the local authority and England for the given time period. A desirable trend for local authorities with lower life expectancy than England, is a reduction in the size of the gap.

**Confidence Intervals:**

Confidence intervals are a statistical method of accounting for variability in data. Variability means that data collected under the same circumstances can yield different results. The confidence interval is therefore used to represent with a confidence of 95% the range in which the true value will lie. Where confidence intervals do not overlap, we say that the difference is statistically significant. Statistically significant differences will indicate that there is a real underlying difference between the proportions.

**Statistical Neighbours:**

Statistical neighbours are local authorities that are deemed to have similar characteristics. Comparing against statistical neighbours provides an initial guide as to whether performance is above or below the level that might be expected. CIPFA statistical neighbours have been used in this briefing, as recommended by Public Health England.

**Changes in Methodology**

Due to changes in ONS methodologies for the calculation of life expectancy and the subsequent revision of trend data, some data in this briefing may not compare to previous briefings.