Inequalities in Life Expectancy - Northamptonshire

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Introduction

- **The Segment Tool**, produced by Public Health England, provides information on the causes of death and age groups that are driving inequalities in life expectancy at a local level. This report summarises the results in Northamptonshire for 2015-17, exploring both broad and detailed causes of death. Specific causes of death have been prioritised over the broad “other” category to give clear views on the diseases that contributed the most to the gap in life expectancy. Targeting these causes should have the biggest impact on reducing inequalities.

- The inequality gaps covered are:
  - The life expectancy gap in Northamptonshire (including the 7 district/boroughs) compared with the England average
  - The life expectancy gap between the most and least deprived areas within Northamptonshire (and within each district/borough)

- Hotspot areas with low life expectancy have been identified across the county at MSOA* level. In the absence of identifiable MSOA names, MSOAs were matched to the closest wards and ward names were used to describe these hotspot areas. Place names need to be interpreted with caution as ward boundaries do not match exactly with MSOA boundaries.

*Middle Layer Super Output Area* – geographical boundary with a population between 5,000 to 15,000
Key messages: life expectancy gap

**Greatest inequalities in life expectancy compared to the England average:**
1. Corby (2.8 years lower than England for males and 2.7 years for females)
2. Northampton (1.1 years lower than England for males and 0.6 years for females)
3. Wellingborough (0.7 years lower than England for males and 0.9 years for females)
4. Kettering (0.5 years lower than England for females)

**Greatest inequalities in life expectancy between the most and least deprived areas:**
1. Corby (9.8 years for males and 6.3 years for females)
2. Northampton (8 years for males and 5.2 years for females)
3. East Northants - Although East Northants had higher life expectancy for both males and females compared to the England average, the life expectancy gap between the “rich” and “poor” was the 3rd largest in the county (5.9 years for males and 4.5 years for females)
4. Kettering (5.9 years for males for 4.1 years for females)
5. Wellingborough (5.4 years for males and 3.1 years for females)
6. Daventry (4.2 years for males and 2 years for females)
7. South Northants (2.4 years for males and 2.3 years for females)

**Inequalities in life expectancy at Middle Layer Super Output Area (MSOA) level**

Billing in Northampton, had the lowest life expectancy for both males and females in the county.
- Males in Billing have 10 years’ shorter life expectancy than those living in Park, Northampton.
- Females in Billing have 15.5 years’ shorter life expectancy than those living in New Duston, Northampton.

On average, Northamptonshire females live 4 years longer than Northamptonshire males. Moulton is the only area in the county where females have a shorter life expectancy than males (2.3 years shorter).
Key messages: cause of death contributing to the life expectancy gap

The top 3 broad causes of death that contributed the most to the life expectancy gap between the most and least deprived areas across the 7 districts and boroughs were:
• Circulatory disease,
• Cancer
• Respiratory disease

The top 3 detailed causes of death that contributed the most to the life expectancy gap between the most and least deprived areas across the 7 districts and boroughs were:
• Heart disease
• Lung cancer
• Chronic lower respiratory disease
Alongside the top 3 common causes (detailed), the causes shown on the maps to the right had notable contributions to the gap between the “rich” and “poor” in each district.

(NB: For the purpose of the illustration, specific causes have been prioritised over broad “other” categories, with the exception of Northampton males where only the 3 common causes and “other” causes appeared in the top 5 contributors to the life expectancy gap. “Other cancer” includes all cancers other than lung, breast, colorectal, prostate cancer and leukaemia & lymphoma.)
Health Inequality in Northamptonshire

The life expectancies of Northamptonshire males and females were slightly lower than the England average (males: 79.5 vs. 79.6 years; females: 82.8 vs. 83.1 years).

The life expectancy for males living in the most deprived areas was 6.6 years lower than those living in the least deprived areas, while that for females living in the most deprived areas was 5.3 years lower than those living in the least deprived areas.

For Northamptonshire males, the top three broad causes of death contributing to the gap in life expectancy compared to England were respiratory disease, external causes and neonatal deaths. For females, the top three contributors (excluding “other” causes) were respiratory disease, neonatal deaths and cancer.

Three broad causes of death – circulatory disease, cancer and respiratory disease – contributed the most to the gaps in life expectancy between the most and least deprived areas within Northamptonshire for both males and females.

Source: Public Health England Segment Tool 2019
Breaking down the broad causes of death into detailed causes showed that the top 3 causes contributing to the life expectancy gap between the most and least deprived areas in the county were:

1. Heart disease
2. Lung cancer
3. Chronic lower respiratory disease

When life expectancy at birth (2013-17) in Northamptonshire was mapped at MSOA level, it revealed that some areas in Corby, Northampton and Wellingborough had the lowest life expectancies in the county – maps shown overleaf.

Source: Public Health England Segment Tool 2019, Local health 2019
Health Inequality within Northamptonshire
Health Inequality in Corby

The life expectancies for males and females in Corby were 2.8 and 2.7 years lower than the England average, respectively.

The life expectancy for males living in the most deprived areas was 9.8 years lower than those living in the least deprived areas, whilst that for females living in the most deprived areas was 6.3 years lower than those living in the least deprived areas.

For Corby males, the top three broad causes of death contributing to the life expectancy gap compared to the England average were cancer, respiratory disease and external causes. For females, the top three contributors were respiratory disease, cancer and circulatory disease.

The top three broad causes of death contributing to the difference in life expectancy between Corby males living in the most and least deprived areas were circulatory disease, external causes and respiratory disease. For Corby females, the top three contributors to the life expectancy gap between the most and least deprived areas were circulatory disease, cancer and external causes.

Source: Public Health England Segment Tool 2019
Health Inequality in Corby

For Corby males the following detailed causes contributed the most to the life expectancy gap between those living in the most and least deprived areas:
1. Heart disease
2. Lung cancer
3. Neonatal deaths

For Corby females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:
1. Lung cancer
2. Other circulatory disease, excluding heart disease and stroke
3. Heart disease

To identify the “hotspot” areas that had low life expectancy in Corby, data was analysed at MSOA level. MSOAs were matched to the closest wards and ward names were used to describe these hotspot areas. As ward boundaries do not exactly match MSOA boundaries, comparisons between these geographies need to be interpreted with caution.

Examination of the life expectancy by MSOA in Corby showed that:
• Males living in Kingswood & Hazel Leys had the lowest life expectancy (73.9 years) in Corby (average 76.8 years). It was the 3rd lowest in the county and nearly 10 years lower than the males who lived in Park, Northampton (83.6 years).
• Females living in Central had the lowest life expectancy (79.1 years) in Corby (average 80.5 years). It was the 4th lowest in the county and 11.2 years lower than those living in New Duston, Northampton (90.3 years).
Health Inequality in Daventry

Although the life expectancy for Daventry males was 1.8 years higher than the England average and for Daventry females was the same as the England average, there is still inequality that exists within the area.

The life expectancy for males living in the most deprived areas was 4.2 years lower than those living in the least deprived areas, and that for females living in the most deprived areas was 2 years lower than those living in the least deprived areas.

There was a very small gap in life expectancy between Daventry and England for females, the majority of which was attributable to neonatal deaths.

For Daventry males, circulatory disease, cancer and respiratory disease contributed the most to the life expectancy gap between the most and least deprived areas. For Daventry females, the top three contributors to the life expectancy gap between the most and least deprived areas were cancer, mental and behavioural causes and respiratory disease.

Source: Public Health England Segment Tool 2019
Health Inequality in Daventry

For Daventry males the following detailed causes contributed the most to the life expectancy gap between those living in the most and least deprived areas:
1. Heart disease
2. Other cancer (excluding lung, breast, colorectal, prostate cancer and Leukaemia & lymphoma)
3. Lung cancer

For Daventry females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:
1. Dementia & Alzheimer’s disease
2. Other cancer (excluding lung, breast, colorectal, prostate cancer and Leukaemia & lymphoma)
3. Heart disease

Examination of the life expectancy by MSOA in Daventry showed that:
• **Drayton** had the lowest life expectancy for both males (77.1 years) and females (78.9 years) in Daventry.
  - For males, the life expectancy was the 20th lowest in the county (Northamptonshire average 79.5 years), and was 6.5 years lower than the males who lived in Park, Northampton (86.3 years).
  - For females, the life expectancy was the 2nd lowest in the county (Northamptonshire average 82.8 years) and was 11.4 years lower than those living in New Duston, Northampton (90.3 years).

• **Moulton** had one of the highest life expectancies for males (82.6 years) but one of the lowest for females (80.3). On average, the life expectancy for Northamptonshire females is 4 years higher than that for Northamptonshire males. However, the life expectancy for Moulton females was 2.3 years lower than that for Moulton males.
Health Inequality in East Northamptonshire

The life expectancy for East Northamptonshire males was 0.7 years higher than the England average, and the life expectancy for females was 0.2 years higher than the England average.

However, inequality in life expectancy exists between the most deprived and the least deprived areas within East Northamptonshire.

The life expectancy for males living in the most deprived areas was 5.9 years lower than those living in the least deprived areas, while that for females living in the most deprived areas was 4.5 years lower than those living in the least deprived areas.

The top three broad causes of death contributing to the life expectancy gap between the most and least deprived areas in East Northamptonshire for both males and females (excluding “other” causes) were circulatory disease, respiratory disease and cancer.

Source: Public Health England Segment Tool 2019
Health Inequality in East Northamptonshire

For East Northamptonshire males the following detailed causes contributed to most of the life expectancy gap between those living in the most and least deprived areas:
1. Heart disease
2. Stroke
3. Chronic lower respiratory disease

For East Northamptonshire females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:
1. Stroke
2. Other circulatory disease (excluding heart disease and stroke)
3. Heart disease

Examination of the life expectancy by MSOA in East Northamptonshire showed that:
• Males living in Rushden Hayden had the lowest life expectancy (76.5 years) in East Northamptonshire (average 80.2 years). It was the 16th lowest in the county (Northamptonshire average 79.5 years) and 7.1 years lower than the males who lived in Park, Northampton (86.6 years)
• Females living in Thrapston Market had the lowest life expectancy (81.7 years) in East Northants (average 83.3 years). It was the 25th lowest in the county (Northamptonshire average 82.8 years) and 8.6 years lower than those living in New Duston, Northampton (90.3 years)
Health Inequality in Kettering

The life expectancy for Kettering males was 0.5 years higher than the England average, but the life expectancy for females was 0.5 years lower than the England average. Cancer was responsible for half of the life expectancy gap between Kettering females and England as a whole.

The life expectancy for males living in the most deprived areas was 5.9 years lower than those living in the least deprived areas, while that for females living in the most deprived areas was 4.1 years lower than those living in the least deprived areas.

External causes, respiratory disease and circulatory disease were the top contributors to the gap in life expectancy between the most and least deprived areas for Kettering males. For females, the top three contributors to the gap in life expectancy between the most and least deprived areas (excluding “other” causes) were cancer, respiratory disease and circulatory disease.

Source: Public Health England Segment Tool 2019
Health Inequality in Kettering

For Kettering males the following detailed causes contributed the most to the life expectancy gap between those living in the most and least deprived areas:
1. Heart disease
2. Suicide & injury of undetermined intent
3. Chronic lower respiratory disease

For East Northamptonshire females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:
1. Lung cancer
2. Flu & pneumonia
3. Heart disease

Examination of the life expectancy by MSOA in Kettering showed that All Saints had the lowest life expectancy for both males and females in Kettering:
• For males, the life expectancy (76.0 years) was the 13th lowest in the county (Northamptonshire average 79.5 years) and was 7.6 years lower than the males who lived in Park, Northampton (83.6 years).
• For females, the life expectancy (79.3 years) was the 7th lowest in the county (Northamptonshire average 82.8 years) and was 11 years lower than those living in New Duston, Northampton (90.3 years).
Health Inequality in Northampton

The life expectancy for Northampton males was 1.1 years lower than the England average, and the life expectancy for females was 0.6 years lower than the England average.

Within Northampton, the life expectancy for males living in the most deprived areas was 8 years lower than those living in the least deprived areas, while that for females living in the most deprived areas was 5.2 years lower than those living in the least deprived areas.

The top three broad causes of death (excluding “other” causes) contributing to the life expectancy gaps between Northampton and England and between the most and least deprived areas of the borough were cancer, circulatory disease and respiratory disease. Digestive disease also contributed significantly to the life expectancy gap between the most and least deprived areas in Northampton males.

Source: Public Health England Segment Tool 2019
Health Inequality in Northampton

For Northampton males the following detailed causes contributed the most to the life expectancy gap between those living in the most and least deprived areas:

- Heart disease
- Other cancer (excluding lung, breast, colorectal, prostate cancer and leukaemia & lymphoma)
- Other circulatory (excluding heart disease and stroke)

For Northampton females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:

- Chronic lower respiratory disease
- Heart disease
- Lung cancer

Examination of the life expectancy by MSOA in Northampton showed that:

- Billing had the lowest life expectancy for both males (73.6 years) and females (74.8) in Northampton (78.5 for Northampton males and 82.5 for Northampton females). They were also the lowest in the county.
- Kingsley had the 2nd lowest life expectancy for both males (73.8 years) and females (78.9) in Northampton and the county as a whole.
- Brookside and Semilong had a large life expectancy gap between males and females (male life expectancy was 10 years lower than female life expectancy).
Health Inequality in South Northamptonshire

The life expectancy for South Northamptonshire males was 1.6 years higher than the England average, and the life expectancy for females was 1.7 years higher than the England average.

However, inequality in life expectancy still exists between the most deprived and the least deprived areas. The life expectancy for males living in the most deprived areas was 2.4 years lower than those living in the least deprived areas. The life expectancy for females living in the most deprived areas was 2.3 years lower than those living in the least deprived areas.

Circulatory disease, cancer and respiratory disease contributed the most to the life expectancy gap between males living in the most and least deprived areas of South Northamptonshire. For South Northamptonshire females, the top three contributors to the life expectancy gap between the most and least deprived areas (excluding “other” causes) were external causes, neonatal death and digestive disease.
For South Northamptonshire males the following detailed causes contributed the most to the life expectancy gap between those living in the most and least deprived areas:
1. Heart disease
2. Lung cancer
3. Other respiratory disease (excluding chronic lower respiratory disease and flu & pneumonia)

For South Northamptonshire females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:
1. Breast cancer
2. Other circulatory (excluding heart disease and stroke)
3. Neonatal deaths

Examination of the life expectancy by MSOA in South Northants showed that:
- **Towcester Brook** had the lowest life expectancy (78.7 years) for males. It was the 35th lowest in the county and was 4.9 years lower than the males who lived in Park, Northampton (83.6 years).
- **Middleton Cheney** had the lowest life expectancy (82.8 years) for females. It was the 36th lowest in the county and was 7.5 years lower than those living in New Duston, Northampton (90.3 years).
Health Inequality in Wellingborough

The life expectancy for Wellingborough males was 0.7 years lower than the England average, and the life expectancy for Wellingborough females was 0.9 years lower than the England average.

Within Wellingborough, the life expectancy for males living in the most deprived areas was 5.4 years lower than those living in the least deprived areas, while that for females living in the most deprived areas was 3.1 years lower than those living in the least deprived areas.

The top three broad causes of death contributing to the gap in life expectancy compared to the England average for Wellingborough males were neonatal deaths, respiratory disease and cancer. For Wellingborough females, the top three contributors were cancer, respiratory disease and circulatory disease, with cancer accounting for 59% of the gap.

Respiratory disease, circulatory disease and neonatal deaths were the top contributors to the gap in life expectancy between the most and least deprived areas for Wellingborough males. For Wellingborough females, the top three contributors to the life expectancy gap between the most and least deprived areas (excluding “other” causes) were mental and behavioural causes, circulatory disease and cancer.
Health Inequality in Wellingborough

For South Northamptonshire males the following detailed causes contributed the most to the life expectancy gap between those living in the most and least deprived areas:
1. Heart disease
2. Chronic lower respiratory disease
3. Flu & pneumonia

For South Northamptonshire females the top 3 detailed causes contributing to the life expectancy gap between the most and least deprived areas were:
1. Dementia & Alzheimer’s disease
2. Lung cancer
3. Cirrhosis & liver disease

Examination of the life expectancy by MSOA in Wellingborough showed that:
• Males living in Victoria had the lowest life expectancy (75.1 years) in Wellingborough. It was the 9th lowest in the county and was 8.5 years lower than the males who lived in Park, Northampton (83.6 years).
• Females living in Queensway and Swanspool had the lowest life expectancy (79.2 years) in Wellingborough. It was the 5th lowest in the county and was 11.1 years lower than those living in New Duston, Northampton (90.3 years).