Isle of Wight JSNA Briefing Note: Life Expectancy
### Life Expectancy

#### Background

Life Expectancy is an indicator of the general health of the population of an area.

**Definition:** Life Expectancy at a given age for an area is the average number of years a person would live, if he experienced the particular area’s age-specific mortality rates for that time period throughout his or her life. Life Expectancy is generally measured for the following ages:

- **At Birth:** i.e. the average number of years a new-born baby would live.
- **At age 65:** i.e. the average number of additional years a person aged 65 would live.

**Caveats:** in practice Life Expectancy cannot predict precisely the number of years someone could actually expect to live since:

- It makes no allowance for any later actual or projected changes in mortality rates.
- People may live in other areas for at least some part of their lives.

However it is a useful indicator of the health of an area over a specific period.

Life Expectancy is affected by the age at which people die and is therefore an indicator of health, since in very general terms, the healthier people are, the longer they are likely to live, and therefore the longer (better) an area’s life expectancy. Life Expectancy is shortened (worsened) by early (premature) deaths. Nationally, deaths before the age of 75 are regarded as ‘premature’. The main causes of premature death, nationally and on the IW, are:

- Cardiovascular Disease (including heart attacks and stroke)
- Cancer (particularly cancer of the lung and of the digestive organs, including bowel cancer).

**Healthy Life Expectancy** measures the number of years people spend in very good or good general health, and is a measure of quality of life and healthy ageing.

See also separate briefing note on **Mortality** — life expectancy and mortality rates are calculated using the same data about deaths and population.
Life Expectancy

Contents and Key Points

The data and charts below show, for the Isle of Wight:

**Life Expectancy at Birth:**
- **IW trends over time.** IW Life Expectancy has increased over time, but since 2005-07 the upward trend has flattened.
- **IW Life Expectancy compared with England and the South East region.** IW Life Expectancy is slightly longer (better) compared with England, and similar to the South East region, for both Males and Females.
- **IW Life Expectancy by gender (comparing Males and Females).** IW Life Expectancy is longer (better) among Females than among Males, reflecting the national and regional pattern.
- **IW Life Expectancy by Electoral Ward.** There is variation in life expectancy across the Island. The gap between the electoral wards with the longest (best) and the shortest (worst) life expectancy for this period is 10.1 years.
- **IW Life Expectancy by Deprivation.** There is a clear relationship between life expectancy and deprivation, with shorter (worse) life expectancy in the more deprived areas of the Island, and longer (better) life expectancy in the least deprived areas of the Island.

**Life Expectancy at Age 65:**
- **IW trends over time.** IW Life Expectancy has increased over time, but since 2005-07 the upward trend has flattened.
- **IW Life Expectancy compared with England and the South East region.** IW Life Expectancy is slightly longer (better) compared with England, and similar to the South East region, for both Males and Females.

**Healthy Life Expectancy at Birth**
- The most recent available data is from 2001 but is shown as the best available data which can still highlight the key issue that, as people age, they are more likely to be living in poor health, possibly arising from Long-Term Health Conditions.
- At this time the IW population was experiencing Unhealthy Life Expectancy (i.e. poor health) of 6.8 years among Males and 7.5 years among Females.

Data Source: Office for National Statistics
Life Expectancy at Birth: Comparisons with England and the South East region

The most recent Life Expectancy data available is for the period 2007-09. In this period Life Expectancy for Isle of Wight:

- Males was 79.1 years.
- Females was 83.2 years.

The charts below show the trends in Life Expectancy at Birth for Males and Females, comparing the IW with England and the South East region. IW Life Expectancy is slightly longer (better) compared with England, and similar to the South East region, for both Males and Females.

IW Life Expectancy has increased over time, but since 2005-07 the upward trend has flattened, reflecting an unusually high number of deaths from cancer, among all ages and in the under-75 age group, in 2008 (the number of deaths fell back in 2009).
**Life Expectancy at Birth: Inequalities by Gender**

The chart alongside shows Isle of Wight life expectancy by gender over time.

IW Life Expectancy is longer (better) among Females than among Males, reflecting the national and regional pattern.

Since 1995 IW Life Expectancy has increased faster among Males than Females, from a lower (worse) baseline. The recent flattening trend noted above is evident for both Males and Females.
Life Expectancy at Birth: Inequalities by Geography

Life Expectancy for Persons has been calculated for electoral wards on the Island for the 5-year period 2005-09. The ward boundaries are those introduced in 2009. The chart below shows life expectancy for those wards.

A key caveat is that, even using 5 years’ worth of data, the confidence intervals for most wards shown overlap with those of other wards and/or the Island average, indicating that the differences between their life expectancies might not be statistically significant. However the ranking order does indicate the variation in life expectancy across the Island. The gap between the wards with the longest (best) and the shortest (worst) life expectancy for this period is 10.1 years. (The gap in Life Expectancy between the best and worst Local Authority Districts in England is approximately 10 years for both males and females).

Data Source: ONS Annual Death Extracts / ONS Mid Year Population Estimates / SEFHO Life Expectancy Calculator
Life Expectancy at Birth: Inequalities by Geography (continued)

The map alongside shows the IW wards grouped into 5 quintiles (bands) according to their life expectancy measured for the period 2005-09.

Red signifies the wards with the shortest (worst) life expectancy. They are found in Cowes, East Cowes, Newport, Ryde and Sandown.

Data sources: ONS Annual Deaths Extracts; Ward-level population estimates based on ONS Local Authority Mid Year Population Estimates; South East Public Health Observatory Life Expectancy Calculator.
Life Expectancy at Birth: Inequalities by Deprivation

The draft Public Health Outcomes Framework proposes the **Slope Index of Inequality** in Life Expectancy within every Local Authority as one of the public health outcomes indicators for assessing health inequalities. The Slope Index is defined as the gap between the life expectancy in the most deprived and least deprived deciles of the Local Authority area.¹

The charts below show Isle of Wight life expectancy by deprivation decile and gender for the period 2005-09, the most recent period available. Deprivation is as measured by the 2007 Index of Multiple Deprivation (the 2010 Index was published recently but is not reflected in this data).

The IW life expectancy ‘gap’ (between the most and least deprived deciles) is 5.4 years for males and 3.8 years for females. These figures mean that the IW gaps for both males and females are among the lowest (best) 27% of all Local Authorities in England. Nonetheless for both males and females, the charts show a clear relationship between life expectancy and deprivation, with shorter (worse) life expectancy in the more deprived areas, and longer (better) life expectancy in the least deprived areas.

Life Expectancy at Birth – Inequalities by Deprivation (continued)

The map alongside shows the Island’s deprivation deciles according to the 2007 Index of Multiple Deprivation (on which the ‘Slopes’ above are based, although as noted above, the 2010 Index is now available).

**Dark red** indicates the highest (worst) deprivation on the Island, where residents generally experience the lowest (worst) life expectancy on the IW.

**White** indicates the lowest (best) deprivation on the Island, where residents generally experience the highest (best) life expectancy on the IW.

The life expectancy ‘gap’ is being measured between the most deprived and least deprived deciles.

Data Source: Index of Multiple Deprivation, 2007
Life Expectancy at age 65+

The most recent Life Expectancy data available is for the period 2007-09. In this period Life Expectancy for Isle of Wight:

- Males was 18.7 years.
- Females was 21.5 years.

The charts below show the trends in Life Expectancy at Birth for Males and Females, comparing the IW with England and the South East region. IW Life Expectancy has increased (improved) over the period shown and is slightly longer (better) compared with England, and similar to the South East region, for both Males and Females.

Data Source: Office for National Statistics
Life Expectancy at Age 65: Inequalities by Gender

The chart alongside shows Isle of Wight life expectancy at age 65+ by gender over time.

IW Life Expectancy is longer (better) among Females than among Males, reflecting the national and regional pattern. However the ‘gap’ has closed slightly over the period shown, from 3.6 years to 2.8 years.

Isle of Wight Life Expectancy at age 65: by Gender

Data Source: Office for National Statistics
Healthy Life Expectancy at Birth

Healthy Life Expectancy (HLE) is a measure of quality of life and healthy ageing. It measures the number of years people spend in very good or good general health, and is based upon self-perceived general health. An increase in HLE would indicate that older people were living longer but also healthier lives.

HLE is calculated using data on self-perceived health and mortality (deaths). The most recent data available for Local Authorities is still based on the 2001 Census, since this remains the most recent source of data on self-perceived health for Local Authorities. However it is shown as the best available data which can still highlight the key issues. In future it is intended nationally that lifestyle surveys will be used to update HLE data for Local Authorities more regularly.

The chart alongside shows Life Expectancy at Birth broken down by Healthy and Unhealthy Life Expectancy, for the Isle of Wight compared with England, by gender.

Key points are:
- For both Males and Females:
  - IW Healthy Life Expectancy was slightly longer (better) compared with England.
  - IW Unhealthy Life Expectancy was slightly shorter (better) compared with England.
- Nonetheless the IW population was experiencing:
  - 6.8 years of Unhealthy Life Expectancy (i.e. poor health) among Males.
  - 7.5 years of Unhealthy Life Expectancy (i.e. poor health) among Females.

Unhealthy Life Expectancy reflects the fact that, as people age, they are more likely to be living with Long-Term Health Conditions (see separate briefing note).

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