Life Expectancy
A context for assessing successful intervention

Derbyshire County

The graph to the right shows how both life expectancy (the top line of red squares) and health life expectancy (the bottom line of green diamonds) are affected by deprivation.

The slope of the healthy life expectancy line is much greater than that of the total life expectancy line, implying that Healthy LE is more strongly influenced by deprivation.

Our aim must be not just to extend life (the ‘treatment and care’ effect) but also, through primary and secondary prevention, to reduce the time spent in poor health - the ‘prevention effect’ - and in so doing, reduce the burden on treatment and care services.

Deprived communities have most to gain from prevention and the biggest gain in health can be achieved in addressing it.

Life expectancy at birth is the average number of years a person would expect to live based on contemporary mortality rates.

In 2014-16 the average life expectancy at birth in Derbyshire was:-
for men: 79.1 years, significantly lower than for England (79.5); for women: 82.8 years, significantly lower than for England (83.1). The difference in life expectancy between the least and most deprived areas (deciles of LSOAs) of Derbyshire was: for men: 7.9 years, significantly lower than for England (9.3); for women: 6.8 years, lower than for England (7.3).

The maps show the range of life expectancies in census MSOAs at 2011-15.
Implications:
Increasing life expectancy in the 21st century is a sign of successful treatment and care services, as well as behavioural change. Unless it is accompanied by increasing healthy life expectancy it will result in increasing numbers of older people requiring care. Increasing healthy life expectancy can be achieved by primary and secondary prevention.

As the gap between total and healthy life expectancy increases with deprivation, the biggest health gains are to be achieved by targeting resources at the worst off.

Life expectancy represents the cumulative effect of the prevalence of risk factors, prevalence and severity of disease, and the effectiveness of interventions and treatment.

The graph to the right shows the average of the life expectancies and healthy life expectancies in 2009-13 of census MSOAs in Derbyshire grouped into deciles (tenths) of Index of Multiple Deprivation 2015 ranks, 1 being the most deprived.

Differences in life expectancy reflect health inequalities between different population groups e.g. between genders, social classes and ethnic groups.

Deprivation shortens lives overall, but it has a greater impact upon the length of time spent living with poor health and/or with disability.

In the most deprived areas of Derbyshire, it is estimated that the gap between total and healthy life expectancy stands at around 20 years for men and 25 years for women.

Healthy life expectancy at birth is 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 2014-16 the average HLE at birth in Derbyshire was:- for men: 63.9 yrs, higher than for England; for women: 63.5 yrs, lower than for England. The difference in HLE between the least and most deprived areas (deciles of LSOAs) of Derbyshire (2009-13) was:- for men: 13.7 yrs, significantly lower than for England (19.1, 2014-16); for women: 13.5 yrs, significantly lower than for England (also 19.1, 2014-16).

The maps show the range of HLEs in census MSOAs at 2009-13.

It is striking that HLE for both men and women remains significantly lower than retirement age.

Healthy life expectancy at birth is 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.

Life expectancy represents the cumulative effect of the prevalence of risk factors, prevalence and severity of disease, and the effectiveness of interventions and treatment.

The graph to the right shows the average of the life expectancies and healthy life expectancies in 2009-13 of census MSOAs in Derbyshire grouped into deciles (tenths) of Index of Multiple Deprivation 2015 ranks, 1 being the most deprived.

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