

## UK 'austerity' since 2010 linked to tens of thousands more deaths than expected

*Findings echo other research on stalled life expectancy improvement*

*Extra social care spend more than twice as 'productive' as extra healthcare spend*

Central government austerity measures since 2010 are linked to tens of thousands more deaths than expected, finds research published in the online journal **BMJ Open** on the joint impact of social care, public health, and healthcare spend on death rates before and after 2010.

The findings echo those of other research on stalled improvements in life expectancy since 2010, when austerity measures came into force, and show that additional spend on social care is more than twice as productive in terms of saving lives as the equivalent additional spend on healthcare.

A slowdown in life expectancy improvement in England has coincided with government spending constraints on health and social care since 2010.

And a recent time trends analysis found that austerity measures applied to health and social care spend in England between 2010 and 2014 were associated with many more deaths than expected. But that study didn't include public health spend.

To redress this, the researchers used the spend on public health and on adult social services by each local authority in England for 2013-2014--the first financial year in which local authorities became responsible for public health.

Information on healthcare spend was obtained from the budget returns for the 212 bodies responsible for commissioning health services in 2013-14 - clinical commissioning groups.

The average local authority spend on adult social care was £307 per person, although this varied considerably, ranging from £209 in Barnsley to £660 in the City of London.

Equivalent average figures for healthcare and public health spend were, respectively, £1152 and £53 per person.

Total healthcare spend (£65 billion) was about four times that spent on social services (£17 billion), while the latter was six times the size of public health spend (£2.5 billion).

The joint impact of social care, public health, and healthcare spend on deaths in England was assessed, and changes in health and social care spend before and after 2010 were extracted from the previously published time trends study.

The difference between these levels of spend and the responsiveness of death rates to any changes in expenditure from 2013-14 were used to estimate the number of additional deaths associated with spending constraints after 2010.

The time trends study found that real social care spend rose by 2.20% per head of the population between 2001-02 and 2009-10, but fell by 1.57% between 2010-11 and 2014-15.

If this annual difference (3.77%) in social care spend before and after 2010 is applied to each of the 4 'austerity' years, then the total spending gap attributable to austerity is 15.08%.

In 2012, there were 467,000 deaths in England. And the analysis suggests that a 1% decrease in spend would generate 1569 extra deaths. So the 'loss' of 15.08% in social care spend between 2010-11 and 2014-15 will have caused 23,662 additional deaths, calculate the researchers.

The time trends study also found that real healthcare spend per head rose by 3.82% between 2001-02 and 2009-10, but only by 0.41% between 2010-11 and 2014-15.

If this annual difference (3.41%) is applied to each of the 4 austerity years, then the total spending gap attributable to austerity is 13.64%.

The analysis suggests that a 1% decrease in healthcare spend will generate 2484 additional deaths. So the 'loss' of 13.64% in healthcare spend between 2010-11 and 2014-15 will have caused 33,888 extra deaths, calculate the researchers.

In all, the calculations suggest that the constraints on health and social care spend during this period of 'austerity' have been associated with 57,550 more deaths than would have been expected had the growth in spend followed trends before 2010.

Similarly, the analysis suggests that a 1% change in healthcare spend either way changes the number of deaths by more than a 1% change in spend on social care or public health. But, point out the researchers, a 1% boost in the healthcare budget would cost about four times as much as a 1% boost in the social care budget.

This is possibly because social care has direct and indirect effects on deaths ---directly by staving off life threatening conditions, brought on by falls, for example, and indirectly, by freeing up access to other health services, such as hospital beds, suggest the researchers.

They acknowledge some limitations to their findings. The calculations assume that all health benefits occur contemporaneously with spend, which is unlikely to be the case.

And primary care and specialised commissioning spending weren't included in the measure of overall healthcare spend, because responsibility for these returned to central government in 2013, while data on local spend for these services isn't available.

"Austerity'-related reductions in the growth of healthcare and social care expenditure have been associated with a much larger number of deaths than would have been expected had pre-austerity expenditure trends continued," write the researchers.

And they conclude: "All three forms of public healthcare-related expenditure save lives and there is evidence that additional social care expenditure is more than twice as productive as additional healthcare expenditure.

"Our results are consistent with the hypothesis that the slowdown in the rate of improvement in life expectancy in England since 2010 is attributable to spending constraints in the healthcare and social care sectors."