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# Mind the Longevity Gap...

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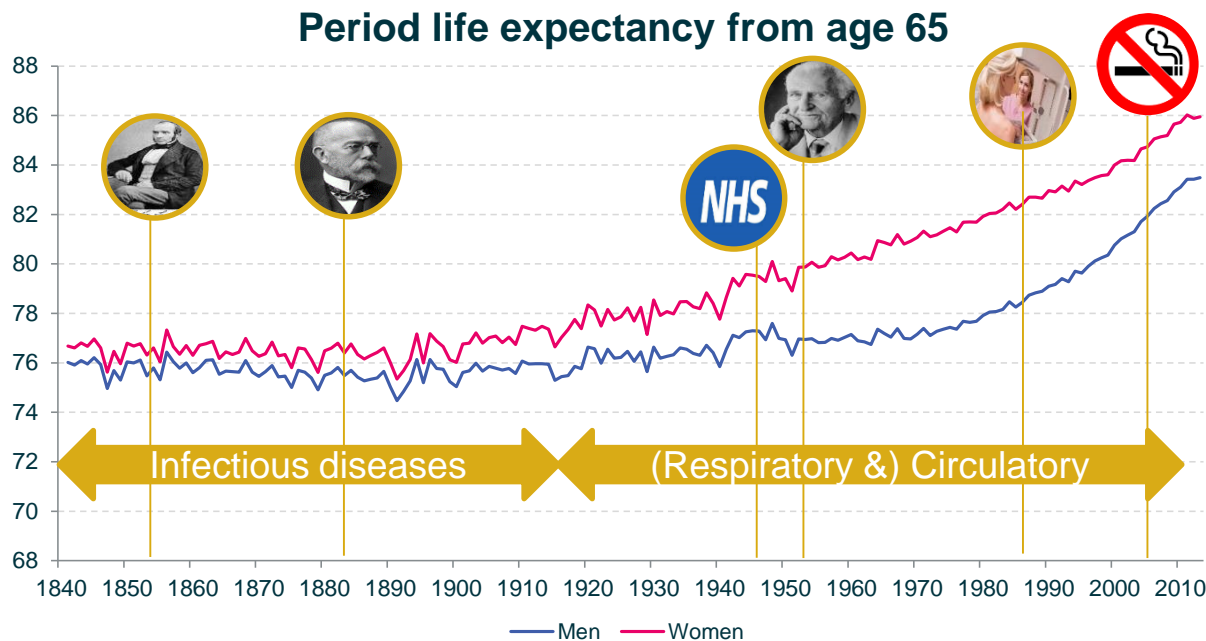


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# A history of longevity improvements

Does socio-economics matter?

# 170 years of longevity..

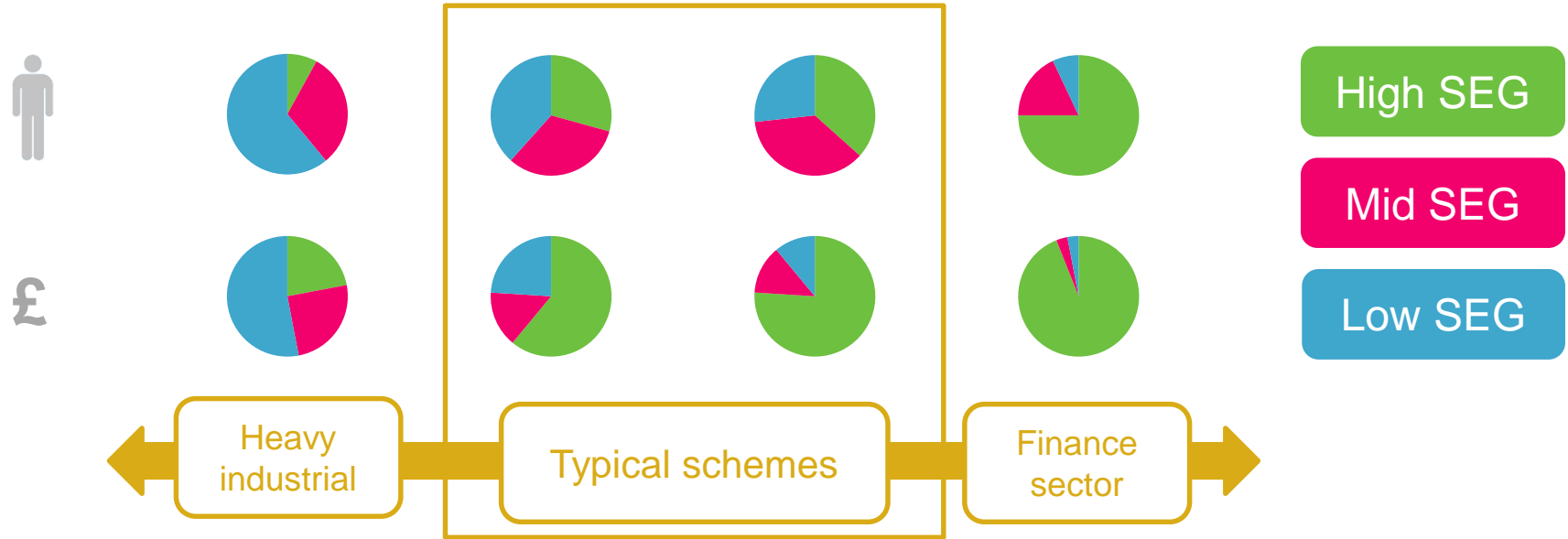


Source: Hymans Robertson using data from ONS and Human Mortality Database



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# Why socio-economics matter



Source: Club Vita. Coloured areas relate to Club Vita based socio-economic classes (VitaSegments)



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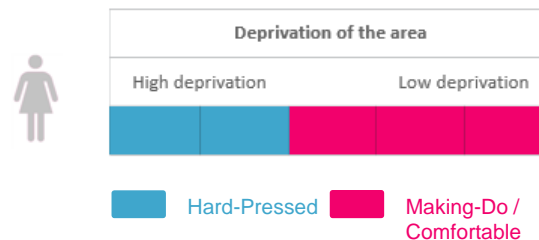
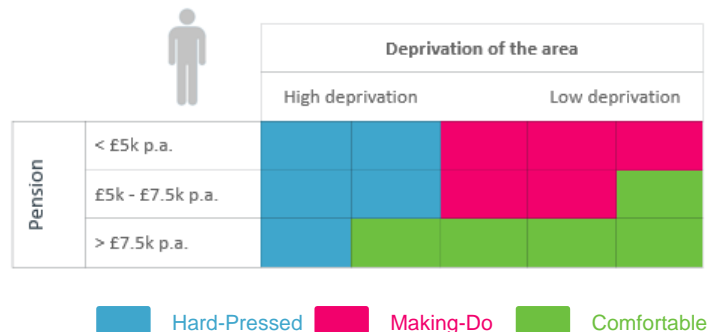
# Comfortable, Making-Do & Hard-Pressed

Introducing socio-economic groupings

# VITASEGMENTS

## Key features

1. Calibrated to over 20 years of pension scheme back history
2. Based on 2m+ lives / 60k annual deaths
3. Use widely available variables
4. Statistically credible groups capturing differences in historical mortality improvements



Source: Club Vita



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# Different behaviours



Source: "Longevity trends: Does one size fits all?" published by PLSA in collaboration with Club Vita and based upon data from the English Longitudinal Study of Ageing



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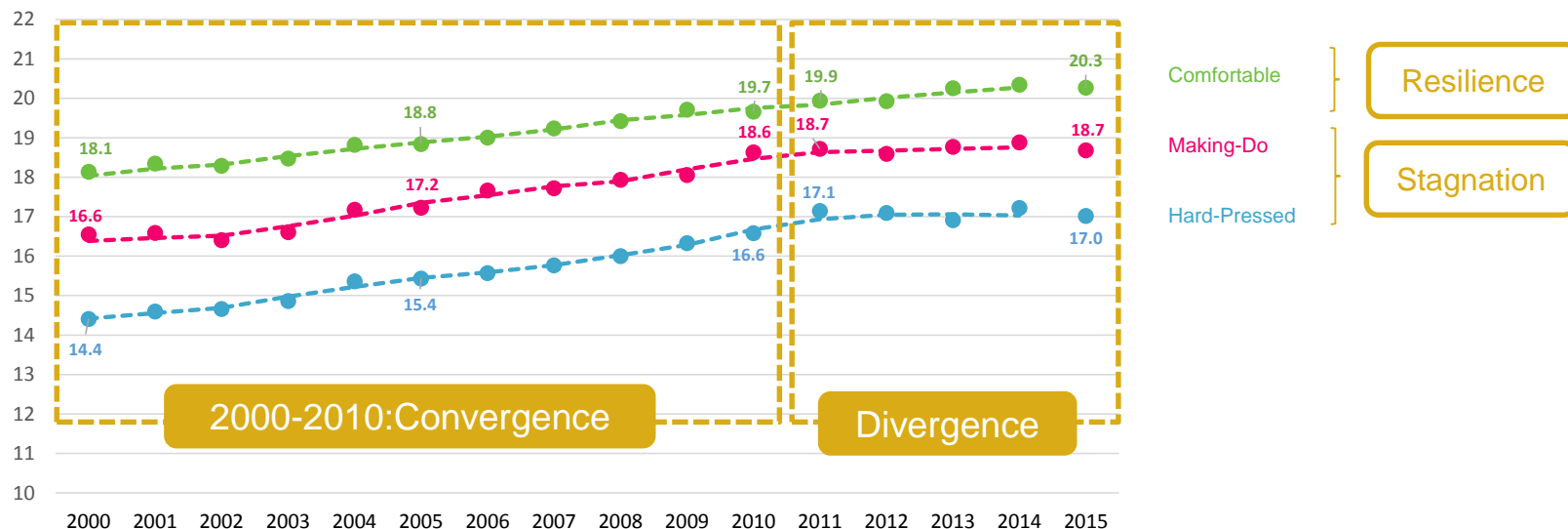
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# Has the longevity gap been narrowing?

Recent longevity trends

# Latest emerging evidence

Life Expectancy at age 65 (men)



## Notes to chart:

- (i) Points relate to life expectancy for the calendar year (using crude mortality smoothed over the age range via a Gompertz curve)
- (ii) Dashed lines apply three year smoothing i.e. calendar year and year prior and after
- (iii) Labels relate to the values for the points

Source: Club Vita analysis for PLSA longevity trends report 2017



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# Underlying improvements



Group	Annualised mortality improvement (age-standardised)		
	2000-2005	2005-2010	2010-2015
England & Wales	2.8% ( $\pm 0.1\%$ )	2.8% ( $\pm 0.1\%$ )	1.1% ( $\pm 0.1\%$ )
Club Vita	2.4% ( $\pm 0.5\%$ )	2.8% ( $\pm 0.3\%$ )	1.3% ( $\pm 0.4\%$ )
<b>Comfortable</b>	<b>2.4%</b> ( $\pm 1.1\%$ )	<b>2.1%</b> ( $\pm 0.8\%$ )	<b>2.1%</b> ( $\pm 0.7\%$ )
<b>Making-do</b>	<b>2.2%</b> ( $\pm 0.8\%$ )	<b>3.2%</b> ( $\pm 0.5\%$ )	<b>0.9%</b> ( $\pm 0.6\%$ )
<b>Hard-pressed</b>	<b>2.5%</b> ( $\pm 0.7\%$ )	<b>2.9%</b> ( $\pm 0.5\%$ )	<b>1.0%</b> ( $\pm 0.6\%$ )

1

2

3

- 1 Pension scheme improvements mirror national data on a **lives** basis (including recent slowdown)
- 2 Comfortable men who dominate liabilities seen **stabler** improvements and no recent slow down
- 3 Lower socio-economic groups had been catching-up (**convergence, 2005-2010**)...  
...but recently slowed down (**divergence, 2010-2015**)

Source: Club Vita / Hymans Robertson. Confidence intervals calculated consistently with the approach set out in CMI WP97



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# Underlying improvements



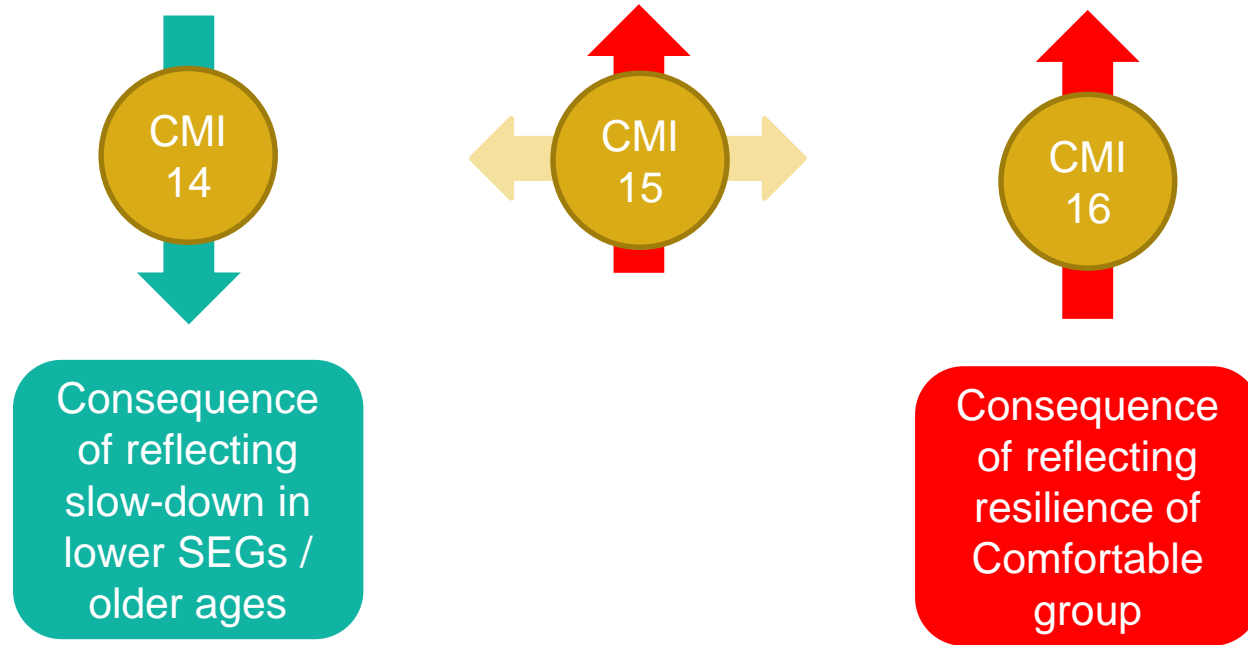
Group	Annualised mortality improvement (age-standardised)		
	2000-2005	2005-2010	2010-2015
England & Wales	1.6% ( $\pm 0.1\%$ )	2.4% ( $\pm 0.1\%$ )	0.3% ( $\pm 0.1\%$ )
Club Vita	0.7% ( $\pm 0.5\%$ )	2.7% ( $\pm 0.3\%$ )	0.6% ( $\pm 0.3\%$ )
<b>Making-do / Comfortable</b>	<b>0.7% (<math>\pm 0.7\%</math>)</b>	<b>2.1% (<math>\pm 0.5\%</math>)</b>	<b>0.5% (<math>\pm 0.5\%</math>)</b>
<b>Hard-pressed</b>	<b>0.6% (<math>\pm 0.8\%</math>)</b>	<b>3.2% (<math>\pm 0.5\%</math>)</b>	<b>0.7% (<math>\pm 0.6\%</math>)</b>

Source: Club Vita / Hymans Robertson. Confidence intervals calculated consistently with the approach set out in CMI WP97



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# What impact might this have on projections?



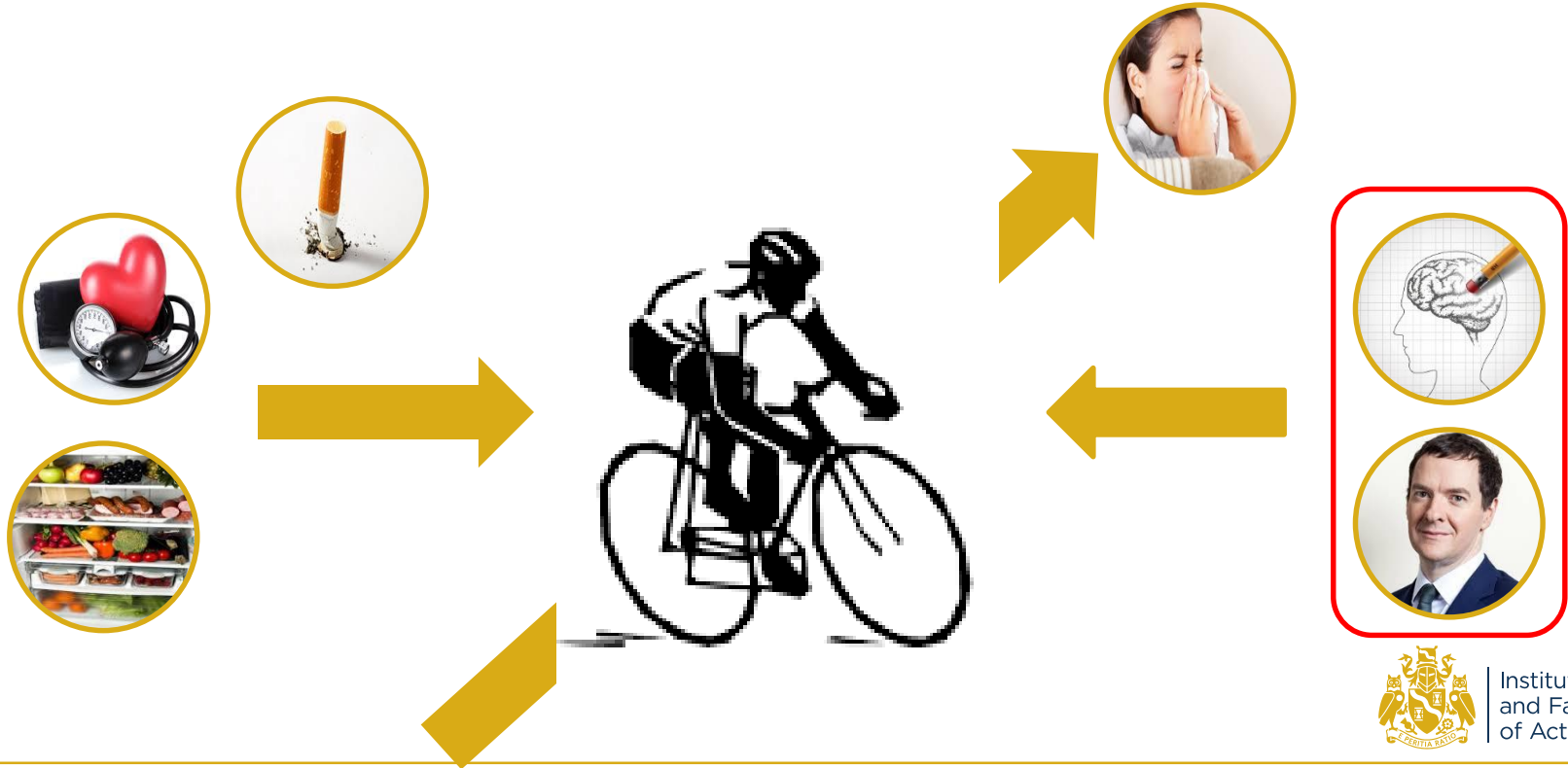


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# A guide for the future?...

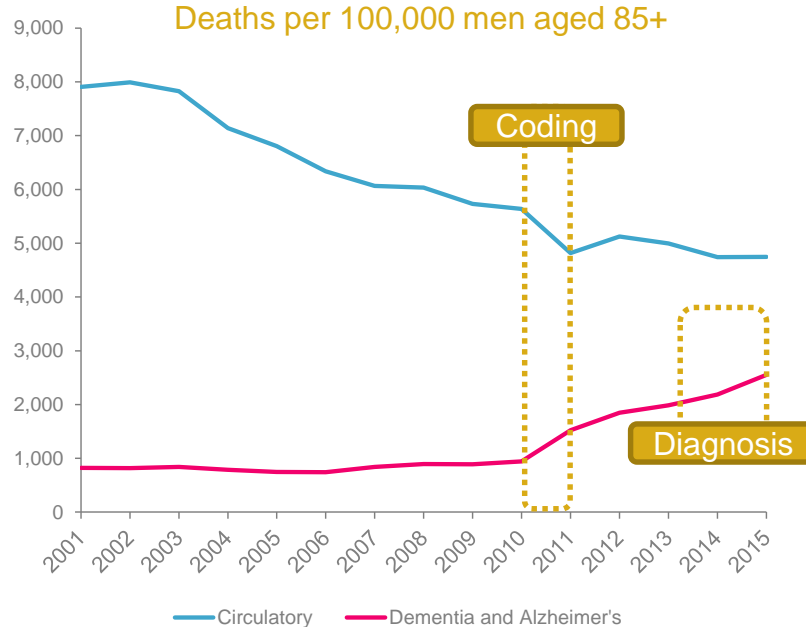
What do we understand about recent trends?

# Tail winds, head winds and side winds...





# Rise in Dementia & Alzheimer's



Social care budgets?

Coincidence

Possible for SECs to respond differently?



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# The austerity dimension



QualityWatch

## Focus On: Social care for older people

Reductions in adult social services for older people in England

Shant Ismail, Ruth Thorby and Holly Hooper

March 2014

The Health Foundation | nuffieldtrust

Research

**Austerity and old-age mortality in England: a longitudinal cross-local area analysis, 2007–2013**

Rachel Looptm<sup>1</sup>, Mairi McKee<sup>2</sup>, Srinivas Vittal Kallimadd<sup>3</sup>, David Taylor-Robinson<sup>4</sup>, Ben Bar<sup>1</sup> and David Studdert<sup>1,5</sup>

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**Summary**  
**Objective:** There has been significant concern that austerity measures have negatively impacted health in the UK. We examined whether budgetary reductions in Pension Credit and social care have been associated with recent rises in mortality rates among pensioners aged 85 years and over.  
**Design:** Cross-local authority longitudinal study.  
**Setting:** Three hundred and twenty-four lower tier local authorities in England.  
**Main outcome measures:** Annual percentage change in mortality rates among pensioners aged 85 years and over.  
**Results:** Between 2007 and 2013, each 1% decline in Pension Credit spending (adjusted for low income pensioners) per beneficiary was associated with an increase in 0.08% in old-age mortality (95% CI: 0.01 to 0.16). Each reduction in the number of beneficiaries per 1000 pensioners was associated with an increase in 0.20% (95% CI: 0.05 to 0.34). Such 1% decline in social care spending was associated with a significant rise in old-age mortality (0.08%, 95% CI: 0.006–0.15) but not after adjusting for Pension Credit spending. Similar patterns were seen in both men and women. Welfare associations observed for those aged 75 to 84 years, and none among those 65 to 74 years. Categories of service expenditure not expected to affect old-age mortality, such as transportation, showed no association.  
**Conclusions:** Rising mortality rates among pensioners aged 85 years and over may reflect reductions in spending on income support for poor pensioners and social care. Policy responses to austerity measures in England have affected vulnerable old-age adults.

**Keywords:**  
 Old-age mortality, austerity, social security

**Introduction**  
 The long-term decline in mortality among those aged 85 years and over in England has reversed, since 2010 among men and 2011 among women (Figure 1). By

2013, rates for men were 4% higher than in 2010, while among women they were 6.1% higher. This was not seen in other older age groups, though the long-term decline among those aged 75 to 84 years recently plateaued. Among those aged 65 to 74 years, and those just under pension age, mortality rates continued to decline.

These unexplained increases have occurred in the context of a large-scale experiment with austerity measures in the UK. With a stated aim to reduce the deficit, the Coalition government sought cuts totalling £85 billion.<sup>1</sup> It reduced per capita spending on local services by 23.4% and made structural reforms to welfare administration and the generosity and conditions attached to receipt of benefits. In total, these changes resulted in a net reduction in welfare expenditure of £16.7 billion, about 7% less than would be expected prior to these reforms.<sup>2</sup> The consequence of rising mortality and budget cuts has led several commentators to speculate that there might be a causal relationship.

Healthcare professionals are in the front line when it comes to dealing with the health consequences of some of these policies. A survey published in the BMJ in 2013 found that, among over 1000 GPs surveyed, 60% indicated that they had seen evidence of their patients' health being affected by reductions to their benefits, and 94% said their workload had increased to some degree due to increasing financial hardship among their patients.<sup>3</sup> Rising claims for household income support have been linked to reduced spending on housing services and welfare support.<sup>4</sup> Food bank use has been highest in areas facing largest cuts to benefit spending and where most claimants have had their benefit payments stopped for failing to meet certain conditions.<sup>5</sup> Fit-for-work tests have coincided with rising suicides, prescriptions for anti-depressants and declining mental health.<sup>6</sup> In turn, there have been calls for medical professionals to be involved

TheKingsFund> Ideas that change health care

## Understanding NHS financial pressures

### How are they affecting patient care?

Authors  
 Ruth Robertson  
 Lillie Wenzel  
 James Thompson  
 Anna Charles

March 2017

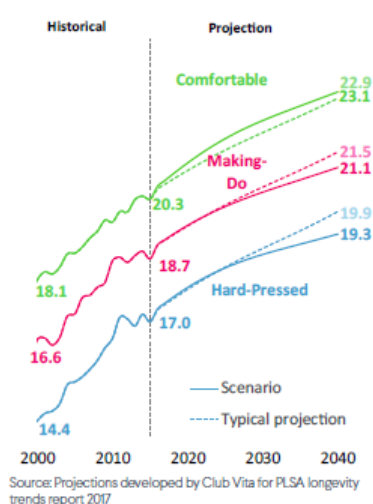
Do the additional resources of the 'Comfortable' buffer them?



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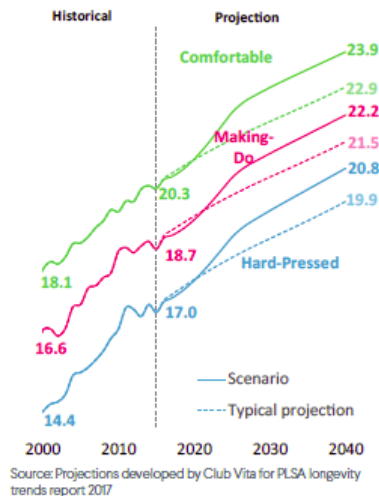
# Some alternative views of the future

## Low for longer



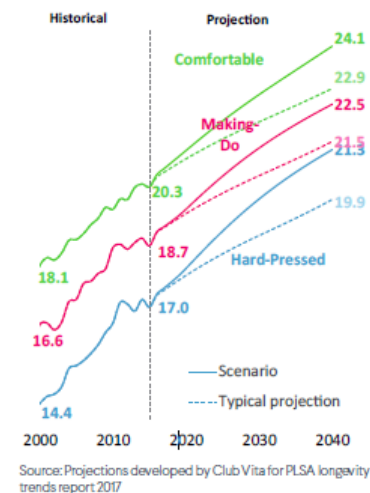
**3½%-5% reduction**

## Alzheimer's Wave



**0%-1% reduction**

## Health Cascade



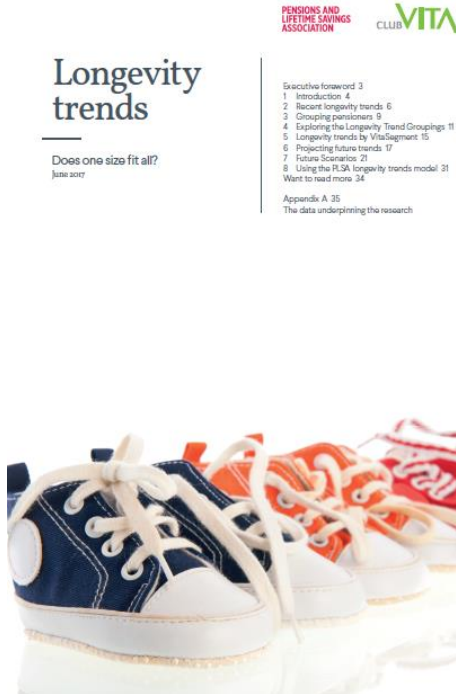
**1½%-2½% increase**

Graphs show projections of life expectancy from age 65. Typical projection CMI 2015 1.5% long term rate  
Percentages change in present values vs CMI 2015, 1.5% long term rate. Based on 4 illustrative schemes. See "Longevity Trends: Does one size fit all?", PLSA 2017, for additional information



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# Want to read more?



This presentation draws heavily upon “Longevity Tends: Does one size fit all?” published by the PLSA in collaboration with Club Vita.

The report is available for download from:

<https://www.clubvita.co.uk/Documents/Longevity-model-Jun-17.pdf>

The report also considers the impact of a number of other deterministic scenarios for the future on some illustrative pension schemes, along with providing more detailed insights into the characteristics of each of the VitaSegments.



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# Questions

# Comments

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