



Public Health  
England

Protecting and improving the nation's health

# A look back and a glimpse ahead - Risk reduction at scale and at pace

From modest ambitions to implementation: Public Health  
England – A Journey

Dr Charles Alessi, Senior Advisor  
5<sup>th</sup> June 2019

# Conflicts of interest

The presentation is done in total independence from the event organiser.

I am also lead for dementia at Public Health England and also Chief Clinical Officer of HIMSS ( a global “not for profit”) based in the US.

I have no link of interest to declare with the topic I am presenting

# From Research to Policy to the Coalface

- Whatever the outcomes and quality of evidence, there is no guarantee that anything will ensue, in fact the converse is the more common occurrence
- The delivery vehicle we assume will deliver, often fails to deliver
- Transparency and personalization may well be the most effective vehicles for delivering change

# Risk Factors



Blood Pressure



Mood



Physical Exercise



Diabetes



Heart Disease



Smoking



Drinking



Diet



Cognitive Ability



Chronic Kidney Disease

# Dementia Risk Reduction: A Priority

Around a **third** of Alzheimer's disease cases might be attributable to potentially modifiable risk factors.



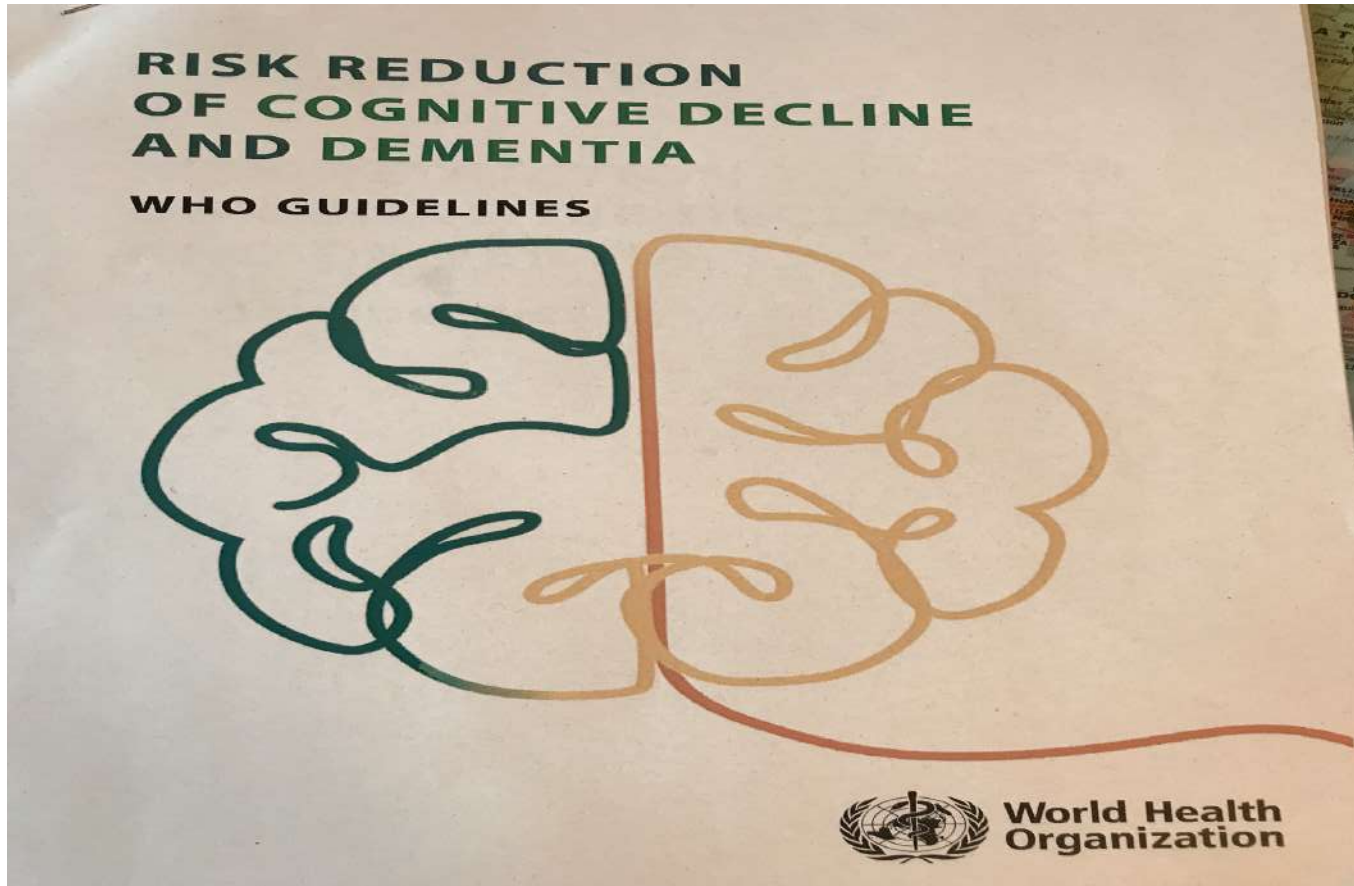
A **20% reduction** in risk factors per decade could reduce UK prevalence by **16.2%** (300,000 cases) by 2050

**What's good for the heart is good for the brain**

# Dementia risk reduction timeline: England



# Global Risk Reduction Dementia - 14<sup>th</sup> May 2019





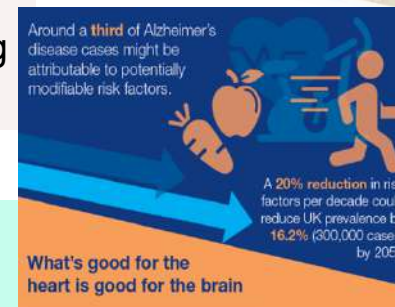
# Raising Public Awareness

***‘What’s good for your heart is good for your brain’***

## External promotion

- **Health Matters** on dementia (2016): a resource for public health professionals, brings together facts, figures and evidence of effective interventions
- **Social Marketing** activity – Dementia Friends and One You Campaign
- **NHS Health Check** – Expanded to include dementia risk reduction discussions with people in midlife, not just over 65s.
- **Leaflets**- NHS Health Check, Joint leaflet with ARUK
- **Ambassadors** for dementia risk reduction - e.g. Angela Rippon videos for NHS Health Check and Health Matters
- **Behavioural insights** approach for drafting all outward facing material

**Ambition** - Establish **metrics** to indicate public awareness levels of dementia and prevention



<https://www.youtube.com/watch?v=D965mN7uwY8>

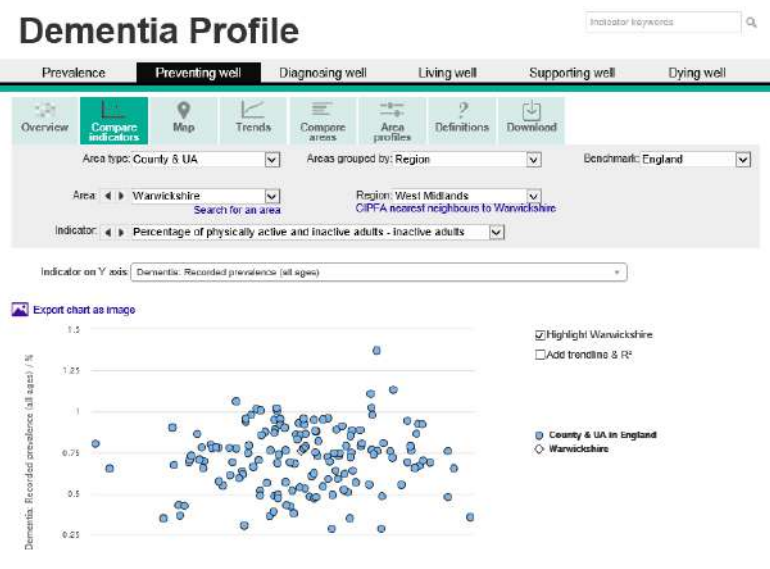
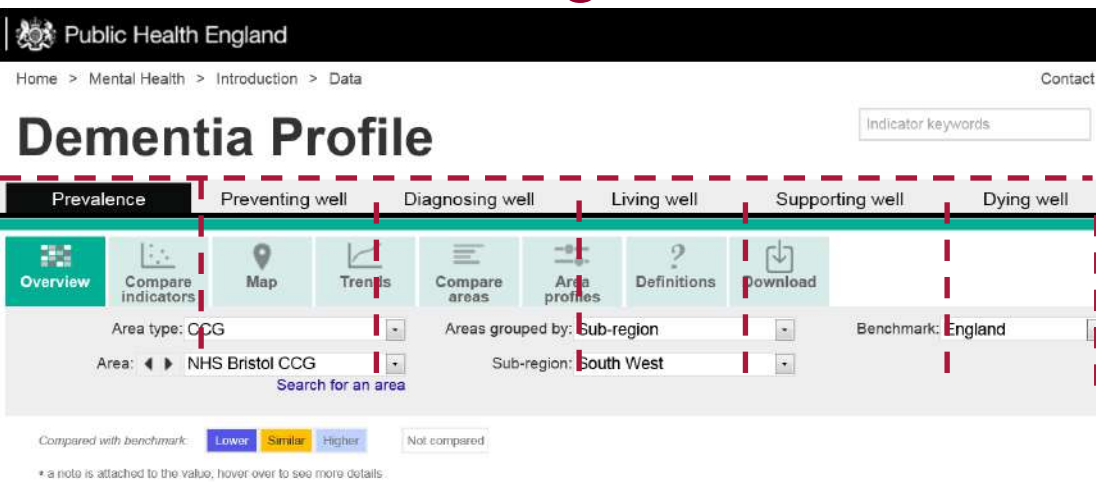


# Enhancing the Data and Evidence

## Dementia Intelligence Network

For the first time, we have made available, in one place, a suite of healthy behaviour dementia risk indicators through the Dementia Intelligence Network

UK piloted the WHO global observatory, to support better data globally

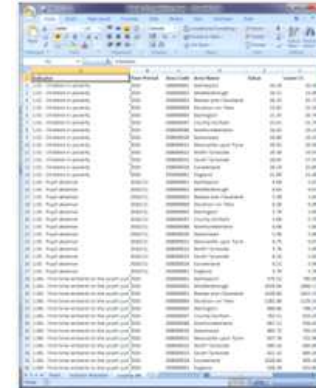
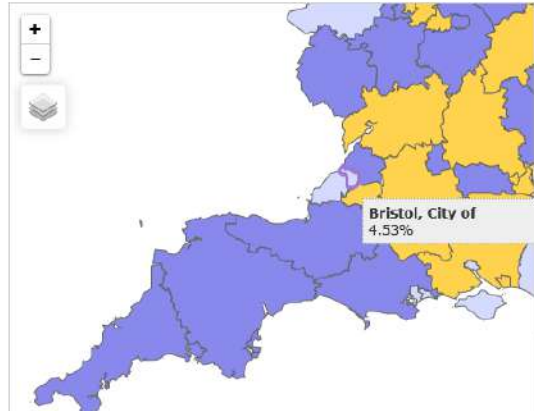
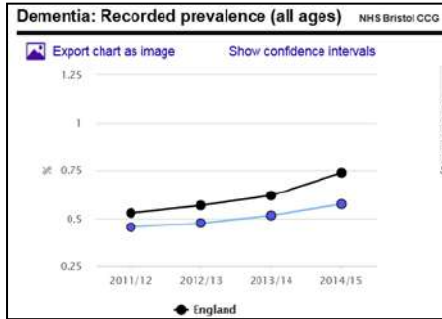


**Academic Sub Group established on Productive Healthy Ageing and Dementia:**  
Providing leadership in bringing researchers together

**Ambition -** Continue to develop dementia **data and metrics** with a focus on developing ways to **evaluate meaningful care**, building on existing 'Patient Experience Measures', and data relating to carers

# Building the evidence

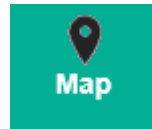
<https://fingertips.phc.org.uk/profile-group/mental-health/profile/dementia>



## Get the data

Download the data as an Excel spreadsheet for

- CCG in England
- CCG in South West region



Indicator	Period	Bristol		Region England		England		
		Count	Value	Value	Value	Lowest	Range	Highest
Directly Age-Standardised Rate of Mortality: People with dementia aged 20+	2013	506	104.2	173.5	187.2	104.0		362.8
Directly Age Standardised Rate of Mortality: People with dementia aged 65+	2013	503	774	690	748	419		1,461
Deaths in Usual Place of Residence: People with dementia aged 65+	2013	382	78.2%	75.6%	66.8%	25.0%		83.4%
Place of death - care home: People with dementia aged 65+	2013	322	64.0%	67.0%	58.8%	19.5%		77.0%
Place of death - hospital: People with dementia aged 65+	2013	111	22.1%	23.6%	32.8%	15.5%		66.2%
Place of death - home: People with dementia aged 65+	2013	60	11.9%	8.1%	7.4%	1.9%		17.2%

Dementia: Recorded prevalence (aged 65+) Sep 2015

Area	Count	Value
England	413,339	4.27
South West region	38,557	3.97*
NHS North Somerset CCG	2,260	4.72
NHS Bristol CCG	2,825	4.53
NHS Gloucestershire CCG	5,367	4.25
NHS Bath And North East S...	1,557	4.21
NHS Wiltshire CCG	4,144	4.14
NHS Somerset CCG	5,176	4.09
NHS Swindon CCG	1,349	3.98
NHS South Gloucestershire...	1,864	3.95
NHS Northern, Eastern And...	7,579	3.85
NHS South Devon And Torba...	2,722	3.82
NHS Kernow CCG	3,714	3.03

Source: Health and Social Care Information Centre (HSCIC)

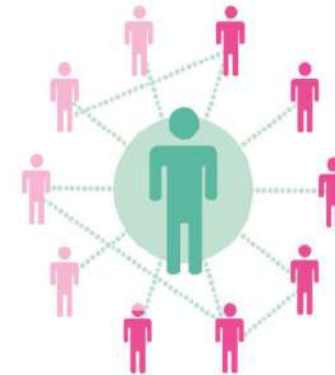
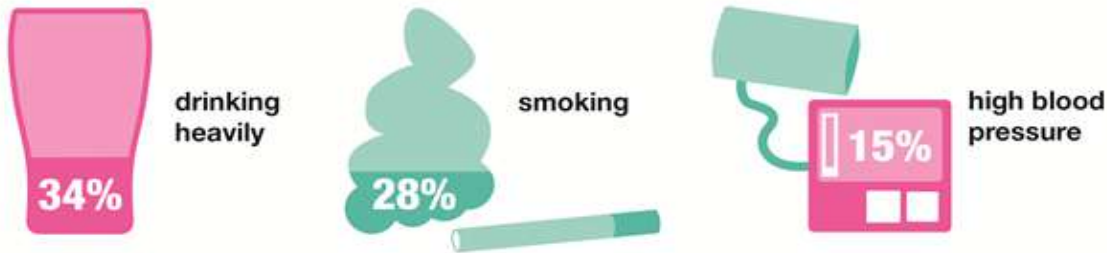


# Public perceptions of dementia risk

## British Social Attitudes Survey

While the majority of people have known someone with dementia and knowledge of the symptoms of dementia is high, there are **clear gaps in public knowledge of the *risk factors***.

Only a minority are aware of the following risk factors of dementia:



**59%**  
know someone  
with dementia

- More than a quarter (28%) of the British public is unable to identify any potentially modifiable risk factor for developing dementia
- Just 2% can identify all the health and lifestyle factors that can increase risk of developing dementia
- 52% choose dementia as either their first, second or third priority from a list of health conditions for doctors and scientists to try to prevent. **12% see dementia as the highest priority for prevention.**
- Older people are more likely to agree that there is nothing anyone can do to reduce their risk of developing dementia: 33% of those aged 65 and over said this compared with 26% of those under 65.

# The aspiration – Productive Healthy Ageing

To **change the way people think about ageing** so that increasing longevity with good health is viewed as the norm for the majority of older people, accompanied by the many opportunities that older people can be productively engaged with, to **contribute to community/society**, and to **have a purpose in life.**

# Dementia Risk Reduction & Multi-Morbidity

# £995m

Untreated comorbidities of people living with dementia cost the UK health and care system **£377m due to diabetes, £116m due to urinary infections and £502m due to depression.**



**People living with dementia** who are over 65 **have on average four comorbidities**, while people without dementia have two on average.

Four of the five **most common comorbidities** people living with dementia are admitted to hospital for in the UK are **preventable** conditions: a fall, fractured hip or hip replacement, urinary infection and chest infection.

**PHE Report on dementia & co-morbidities** due for publication in Summer 2019

Source: ARUK & Scrutton, J and Brancati, CU (2016); Dementia and comorbidities; Ensuring parity of care from The International Longevity Centre supported by Pfizer

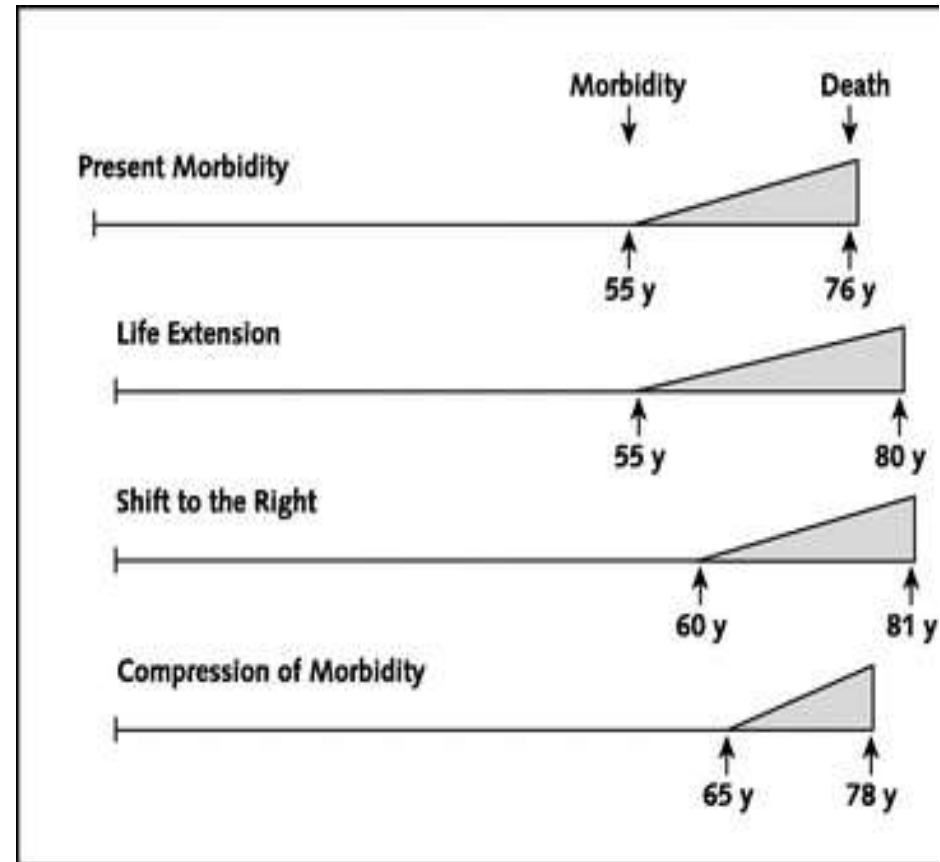
# Dementia Risk Reduction & Productive Healthy Ageing





# Compression of Morbidity to Disease free life years

- James Fries (Stanford NEJM 1973)
- Life expectancy now increasing more slowly but the “extra years” not healthy
- Male and female differences in life expectancy narrowing with women having greater increase in unhealthy years and HLE remaining static
- Marked socio economic differences in HLE from 3.3 years for a woman aged 65 in poorest areas as against 16.7 years in affluent ones



# Further interventions to enhance Dementia RR

- Managing Social Isolation pays dividends (R.O.I. of £1.26 over 5 years for every £1 spent) *Commissioning Effective Interventions 2017 – London School of Economics*
- Promoting Salutogenic approaches (Antonovsky 1946)
- Instituting “Patient Activation” programmes to encourage people to better manage their health
- Utilise personalised digital interventions to better target healthy messaging and reduce inequalities

# The Future

## Four pillars of Precision Predictive Personalised Prevention



**Data**

**Targeting**

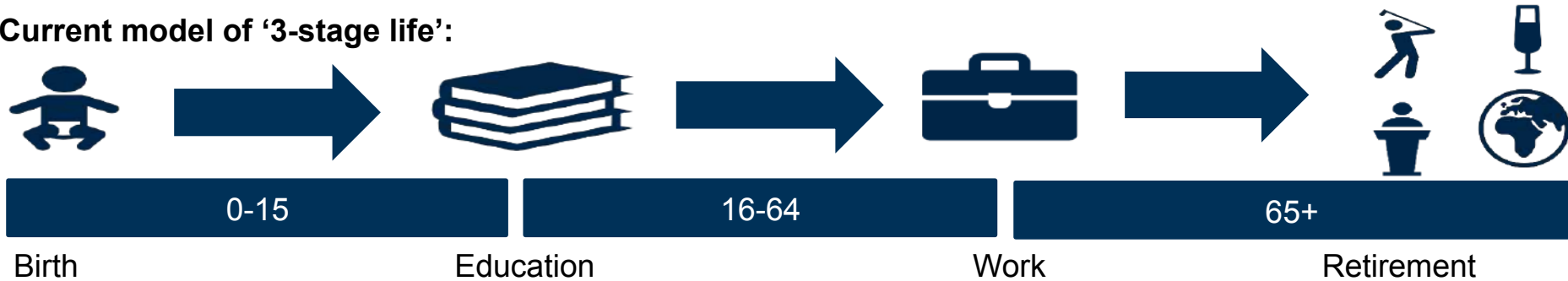
**Personalisation**

**Insight**

Combining these elements will allow us to better engage, activate, support and intervene

# Longer Lives require a different approach

## Current model of '3-stage life':



## How work might change in a 100-year life

- Current life structures, career paths, educational choices, and social norms are out of alignment with the emerging reality of longer lifespans
- The three-stage life of full-time education, followed by continuous work, and then complete retirement may have worked for our parents or even grandparents, but it is not relevant today.
- If longevity pushes back the age of retirement, likely that the traditional three-stage life will morph into multiple stages containing two, three, or even more different careers e.g. Impossible that a single shot of education administered in childhood and early adulthood will be able to support a sustained, 60 year career.
- Each of these stages could be different and traverse sectors– in one you might build financial success in another create a better work/life balance, another on making a social contribution or marked by sabbaticals to rest and recharge.

## A hundred year life might see a shift to a 'multi-stage life':

