INSTITUTE of HEALTH EQUITY

REDUCING HEALTH INEQUITIES THROUGH ACTION ON THE SOCIAL DETERMINANTS OF HEALTH

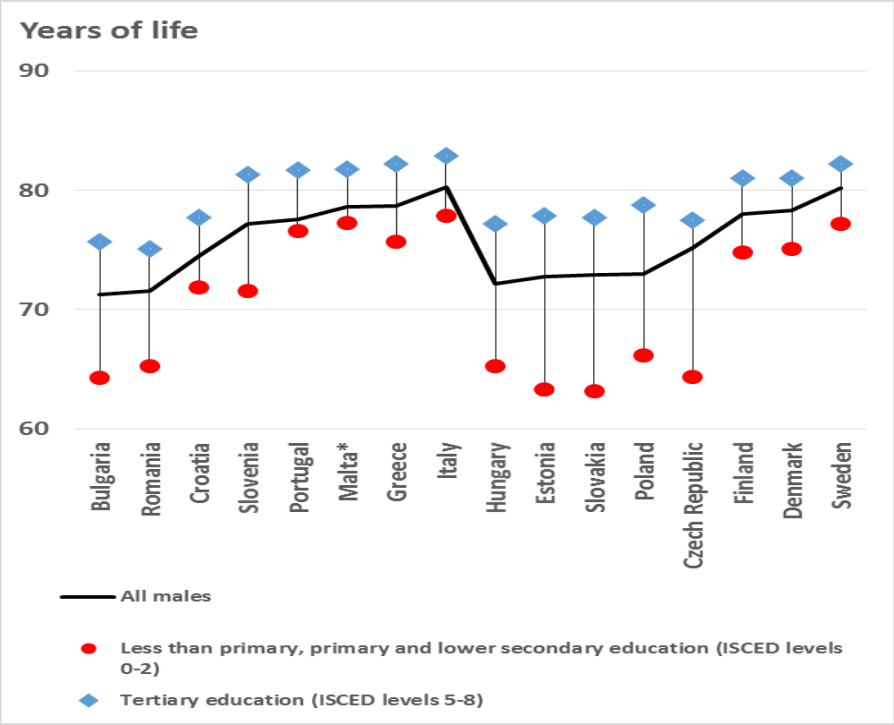
Social inequity in health – how do we close the gap?

Dr Angela Donkin

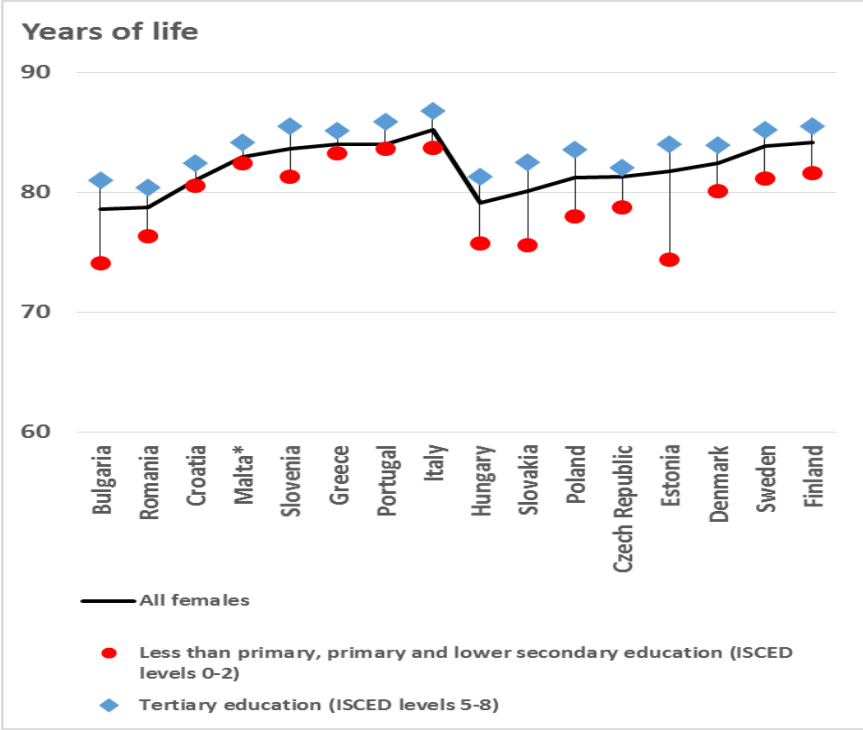
Levels of inequality and what they tell us

Life expectancy EU Member States by education 2014

MALES



FEMALES



1. Variation in life expectancy greater for men (invest in improving LE of lower educated males in Eastern Europe)
2. Variation in life expectancy greater in lower educated than in higher educated (more scope to improve life expectancy of lower educated)
3. Higher average life expectancy associated with smaller inequalities (improvements in average life expectancy require improvements in lower SES groups)

Social determinants of health

Contribution of social factors

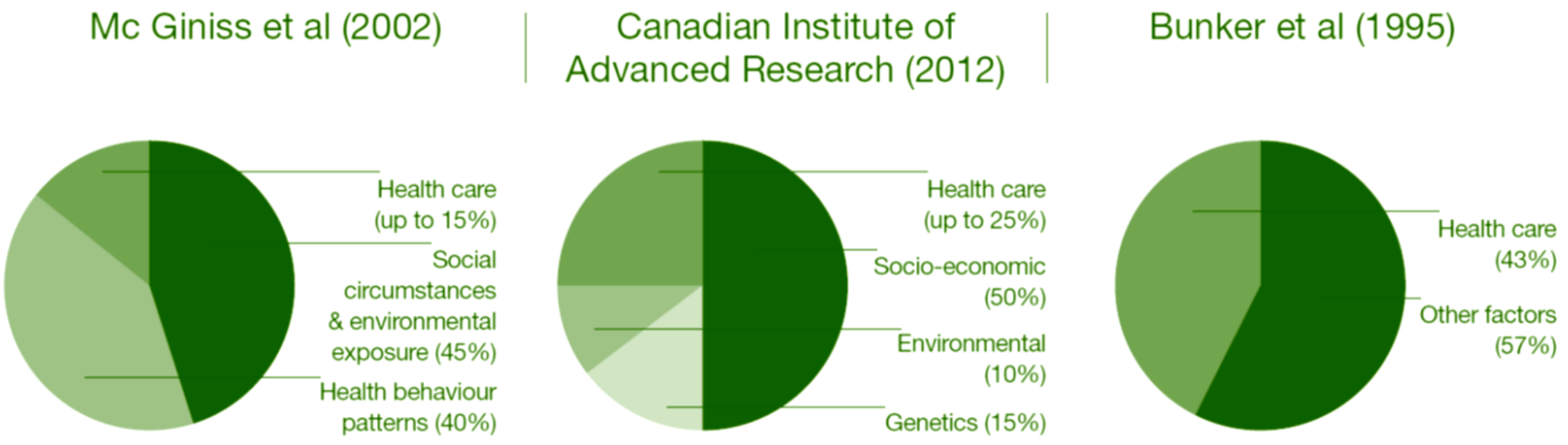


Figure 1: Estimates of the contribution of the main drivers of health status
Source: www.kingsfund.org.uk/time-to-think-differently/trends/broader-determinants-health

Drivers of inequitable health outcomes

A. Give every child the best start in life
B. Enable all children, young people and adults to maximise their capabilities and have control over their lives.
C. Create fair employment and good work for all
D. Ensure a healthy standard of living for all
E. Create and develop healthy and sustainable places and communities
F. Strengthen the role and impact of ill-health prevention
G. Tackle discrimination

Inequalities in the social determinants of health driven by inequitable distribution of power, money and resources

Approaches to reducing the gap

Distal

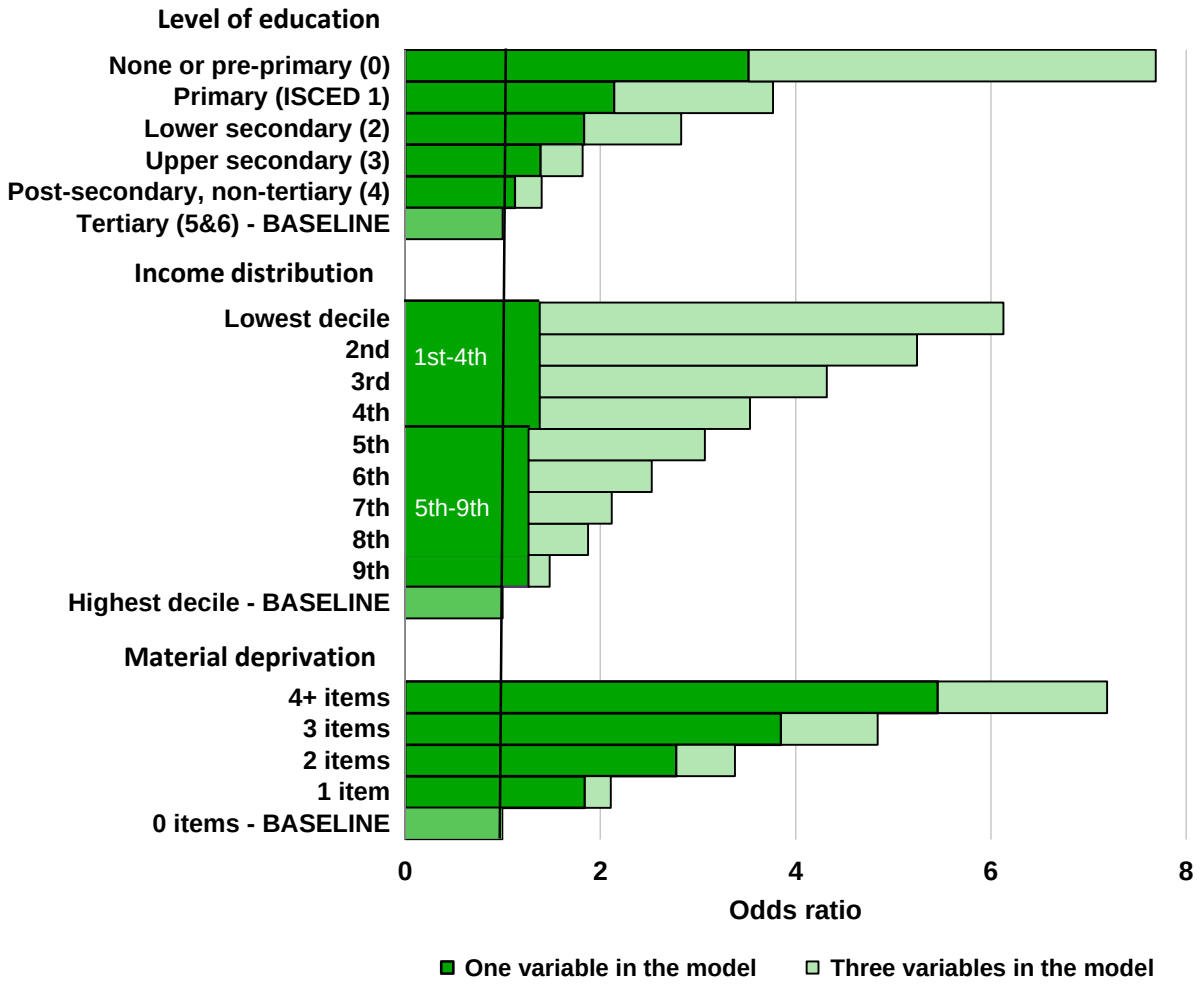
1. Reduce inequities in distribution of power, money and resources
2. Improve individual social determinants
3. Help people cope better with low levels of social determinants
4. Intervene on social determinant pathways to poor health, e.g. through reducing sub optimal health behaviour.
5. Intervene when people are ill/improve access to health care

Proximal

Reduce inequities in distribution of power, money and resources

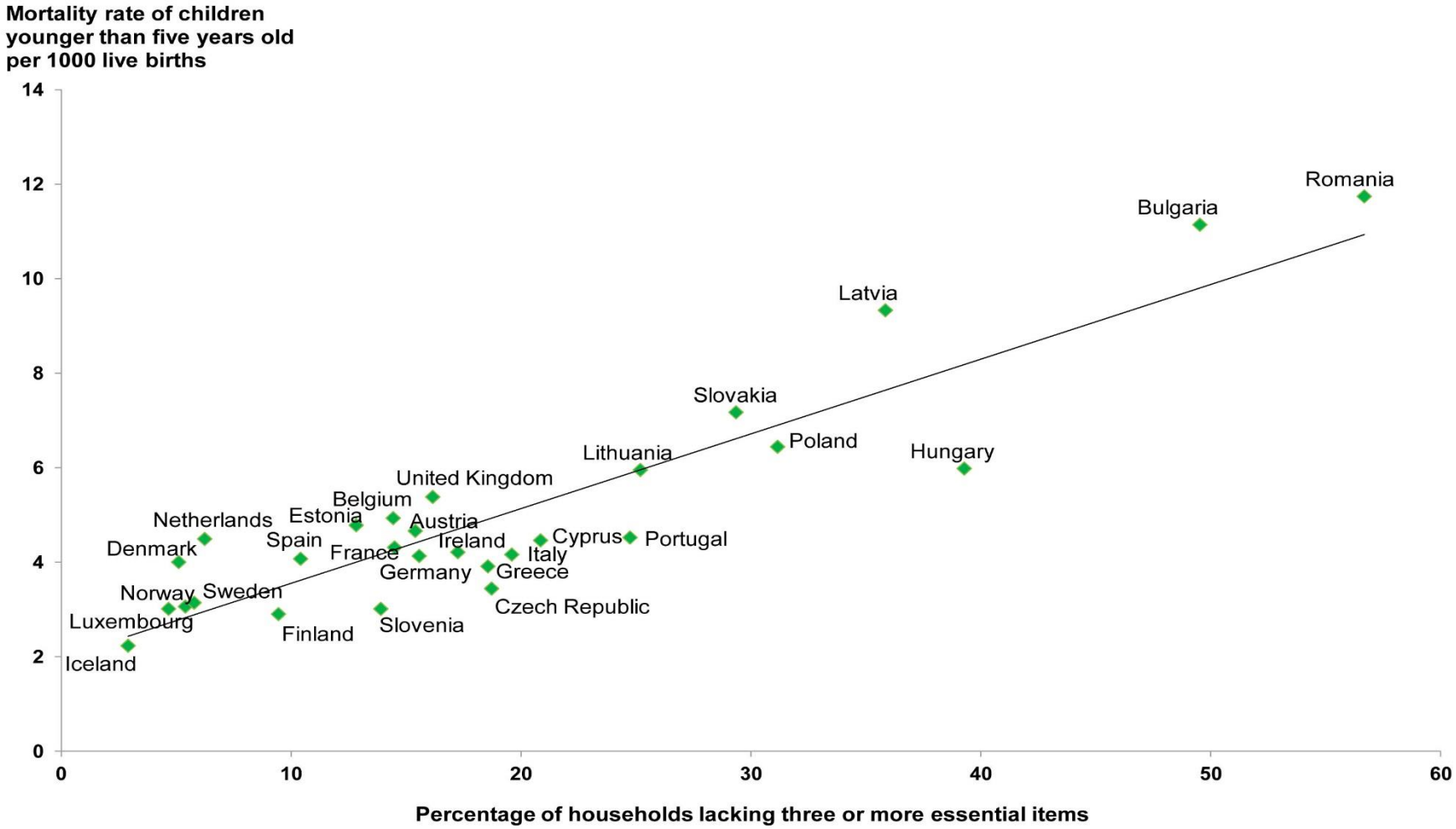
(Plus SD - ensure minimum income for healthy living)

Estimated odds of reporting poor or very poor general health by socioeconomic characteristics, 25 EU Member States*, 2010



Source: Health inequalities in the EU

Mortality among children younger than five years of age and percentage of deprived households (lacking three or more essential items) in selected countries in the WHO European Region

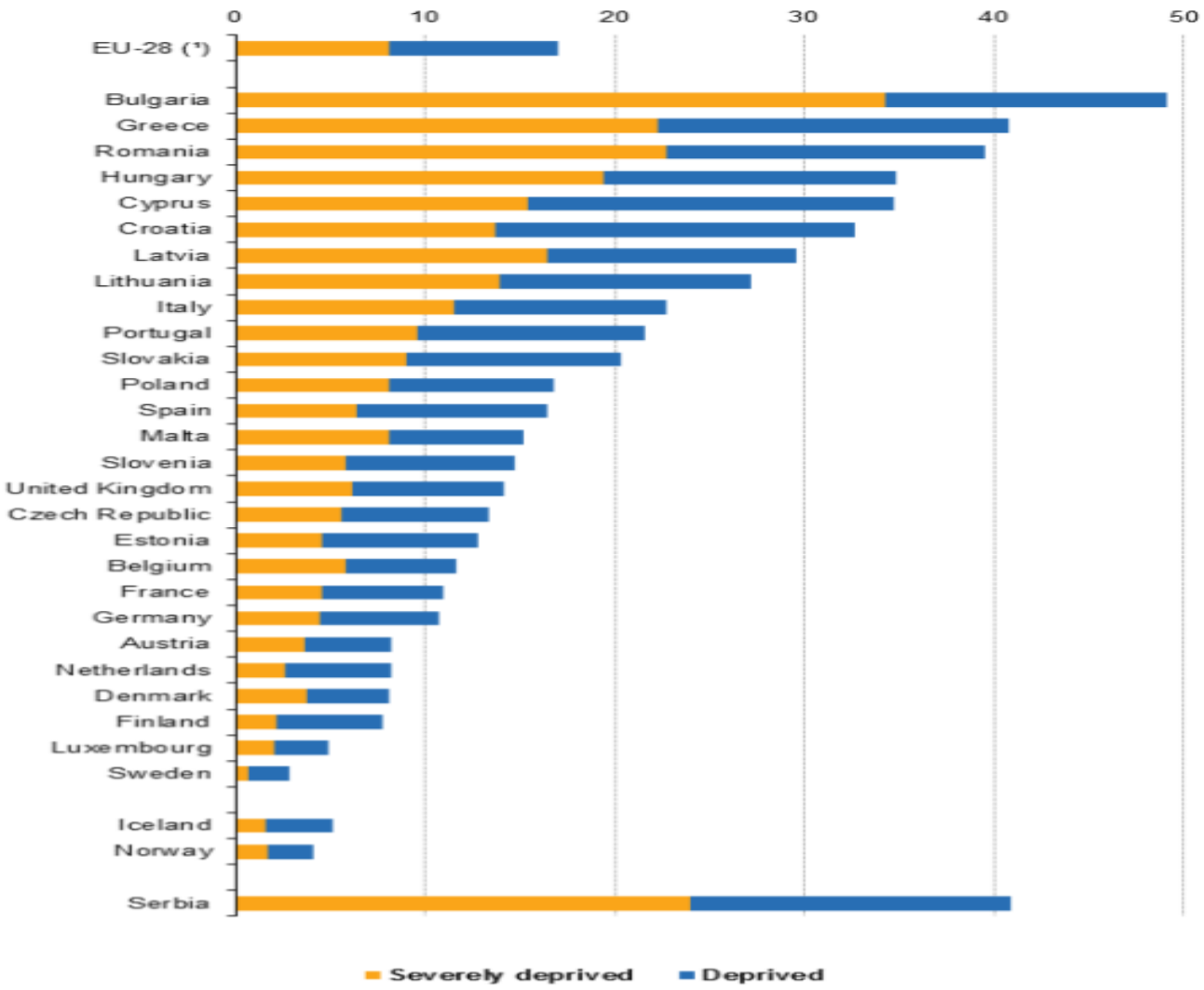


Jonathan Bradshaw and Emese Mayhew, University of York, personal communication, 2010: data from *The state of the world's children 2007 (7)* and Eurostat databases [online databases]

FOCUS: Sufficiency of income for health

- Fn of income from work, income from benefits, and the interaction between them, availability of resources from wealth, prices, household size, specific needs. Need a budget standards approach

- Redistribution through taxation/benefits
- Employment policy
- Subsidisation of essential goods



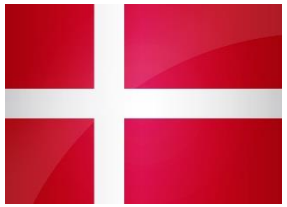
Note: ranked on material deprivation rate. Ireland: not available.
Severely deprived (cannot pay for at least four items out of nine).
Deprived of three items (cannot pay for three items out of nine).
(*) 2015: estimates.

Reducing material deprivation

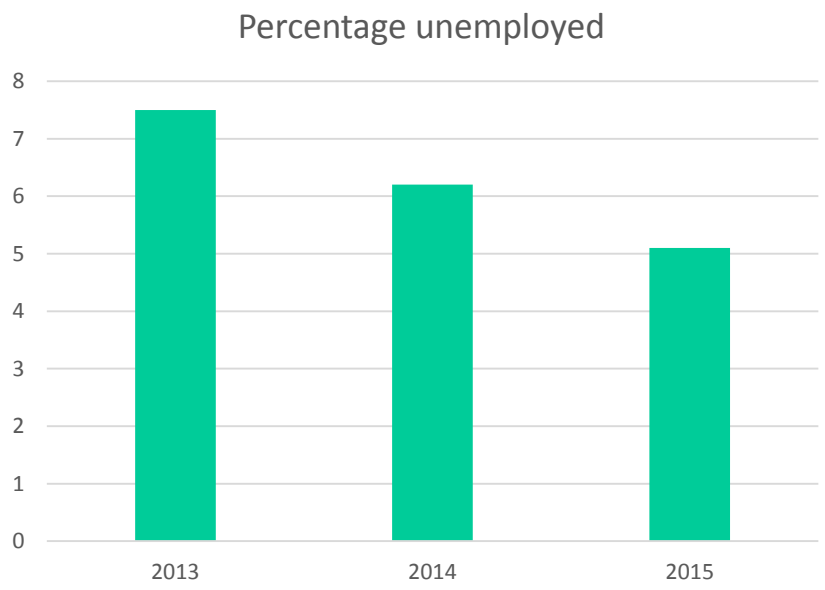
- We should copy Swedish income/redistribution/employment policies present in 2015.

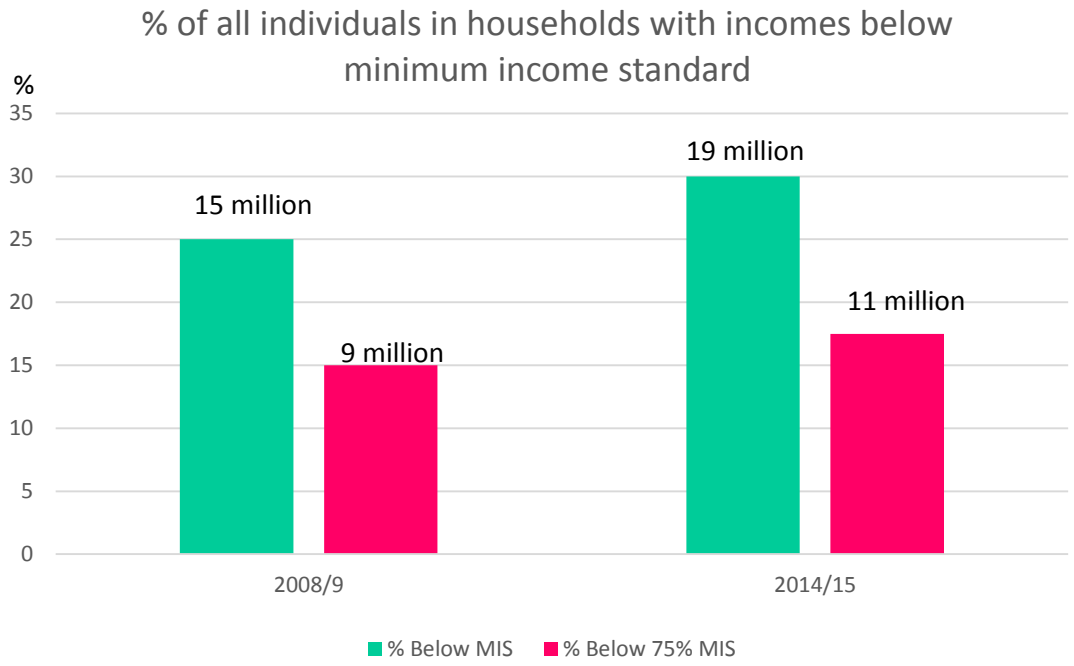
- Denmark – to note - report by Eurostat showed that Danes who were considered ‘Persons severely materially deprived’

  nearly doubled from 2.0 to 3.7 percent from 2008-2015



Create fair employment and good work for all and a minimum income for healthy living





Good

But increases in numbers of people with insufficient income of concern

Improving the social determinants of health

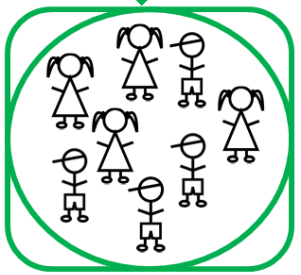
National strategy for neighbourhood renewal - UK

- *No one should be disadvantaged by where they live.*
- The Neighbourhood Renewal Fund (NRF), targeted the 86 most deprived local authority areas, covering the bottom 20 per cent of the population, and containing a large majority of the 10 per cent most deprived small areas.
- Floor targets for all basic services and conditions, a level below which no area should fall, wider service improvements with particular efforts directed toward the most needy areas were expected to close the gap.
- The Labour government combined area based targeting with wider public service reform and redistribution measures.
- Greater impacts in poorer areas, thereby in reality closing the gap in conditions, as the government set out to do.
- Of 86 local authorities receiving neighbourhood renewal funding - the 10 per cent poorest areas within them have closed the gap with the national average on key measures of disadvantage.

Preparing for Life Program Ireland

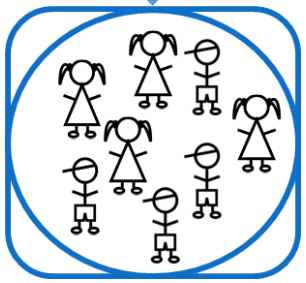
***PFL* Participants**
233

Random Assignment



HIGH TREATMENT
N = 115

1. €100 worth of child developmental materials annually & book packs
2. Facilitated access to enhanced preschool
3. Public health workshops
4. Facilitated access to local services
5. Access to local *PFL* events
6. Home visiting program
7. Baby Massage
8. Triple P Positive Parenting Program

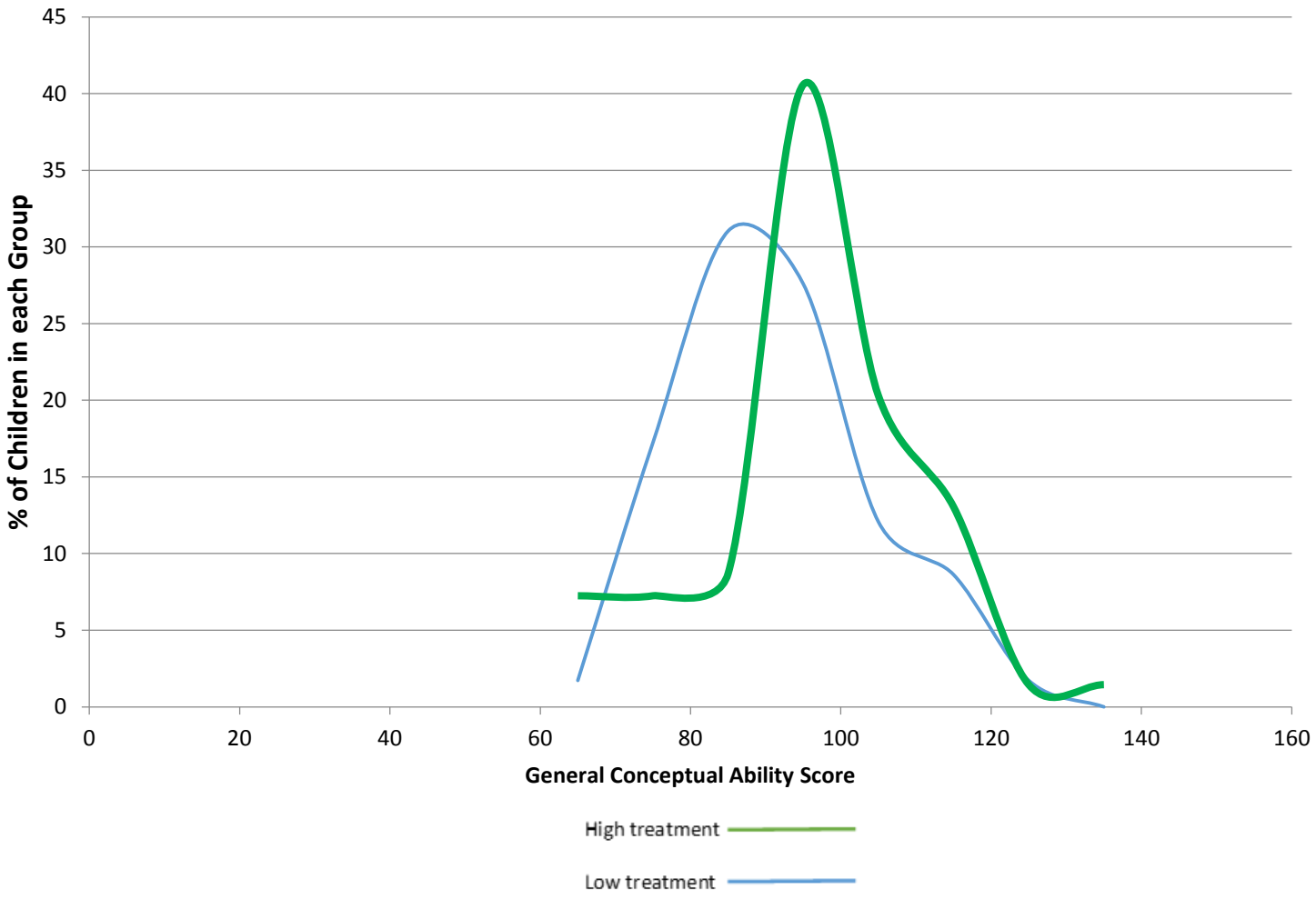


LOW TREATMENT
N = 118

1. €100 worth of child developmental materials annually & book packs
2. Facilitated access to enhanced preschool
3. Public health workshops
4. Facilitated access to local services
5. Access to local *PFL* events

Dr. Orla Doyle (University College Dublin)

Distribution of BAS GCA Cognitive Scores



Raised GCA, proxy for IQ, by 0.77 SDs (and some evidence reduced effect of intergenerational transmission of IQ)

Reduced incidence of externalizing & internalizing problems
Increased prosocial behaviour

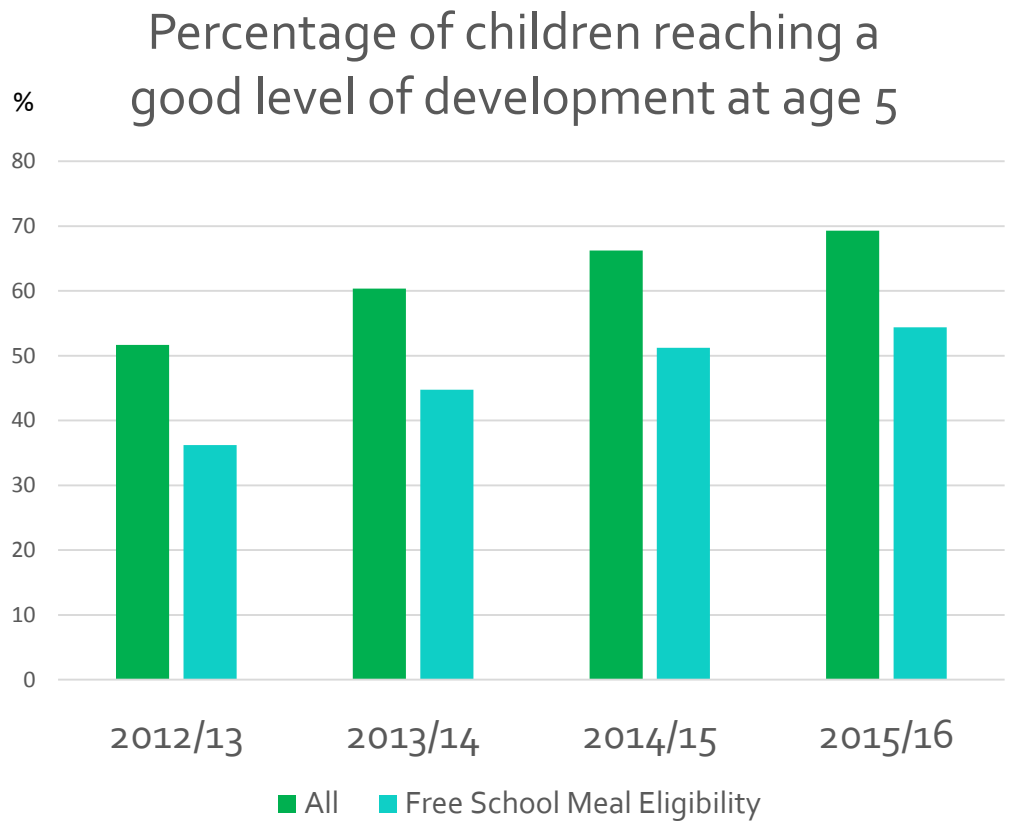
Effects larger than other US-based HVPs, but may be subject to fade-out (e.g. Heckman et al. 2010)

Intervention helped reduce socio-economic gap in skills

Robust

Dr. Orla Doyle (University College Dublin)

Give every child the best start in life – learning from other areas



GAP

2012/13	15.5
2013/14	15.6
2014/15	15.1
2015/16	14.9

Good level of Development and eligible for FSM

>67% Haringey, Lewisham, Bexley, Greenwich

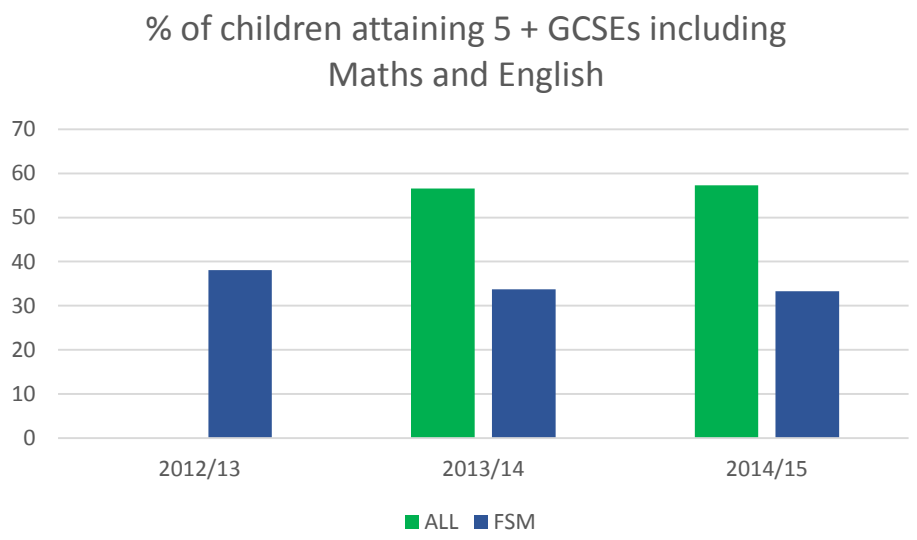
c. 40% Stockton on Tees, Blackburn and Darwen, and Leicestershire

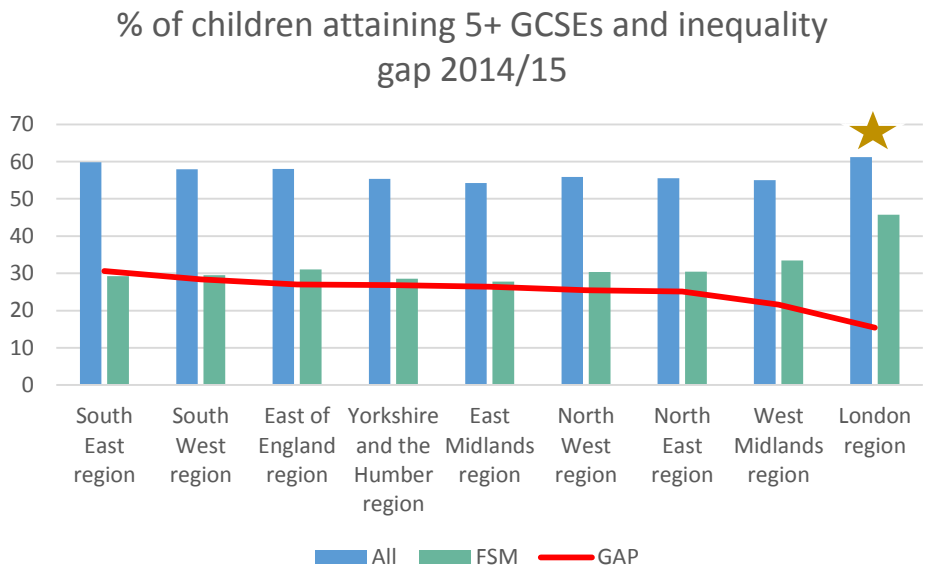
GOOD

But room for improvement

Percentage of children achieving 5 or more GCSEs*, all and children eligible for free school meals

* No GCSEs count as more than one, taken first time. New criteria for statistic introduced in 2014





Of concern

And room for improvement

Reducing education attainment gaps. Tower Hamlets Story

- Higher educational levels associated with **better health behaviours**.

- Tower Hamlets has some of the best urban schools in the world – but in 1997 they were rated the UK's worst.

- NOW - Marmot indicators - Inequalities in educational attainment in Tower Hamlets, are among lowest in the country - 4.6 percentage points between those eligible for FSMs and all. In Rutland, the attainment gap of 46.7 percentage points.

- **Invest in professional development for headteachers**
- **The best heads have a consistent focus on specific goals**
- **Data is shared and acted upon**
- **Have a spirit of friendly competition between schools**
- **Recruit and retain the best staff**
- **School staff should reflect the student population**
- **Maintain good relationships with local faith groups**
- **Embed schools in community life**

Help people cope with low social determinants of health

- Resilience
- Empowerment
- Reduce social isolation – Networks
- Community sharing systems – time banking
- Asset based approaches

Intervene on social determinant pathways to poor health, e.g. through reducing sub optimal health behaviour.

LIFEPATH data

- Participants with low socioeconomic status had greater mortality compared with those with high socioeconomic status (HR 1·42, 95% CI 1·38–1·45 for men; 1·34, 1·28–1·39 for women); this association remained significant in mutually adjusted models that included the 25 × 25 factors (HR 1·26, 1·21–1·32, men and women combined).
- The population attributable fraction was highest for smoking, followed by physical inactivity then socioeconomic status.
- Low socioeconomic status was associated with a 2·1-year reduction in life expectancy between ages 40 and 85 years, the corresponding years-of-life-lost were 0·5 years for high alcohol intake, 0·7 years for obesity, 3·9 years for diabetes, 1·6 years for hypertension, 2·4 years for physical inactivity, and 4·8 years for current smoking.

Socioeconomic status and the 25 × 25 risk factors as determinants of premature mortality: a multicohort study and meta-analysis of 1·7 million men and women

The Lancet, January, 2017

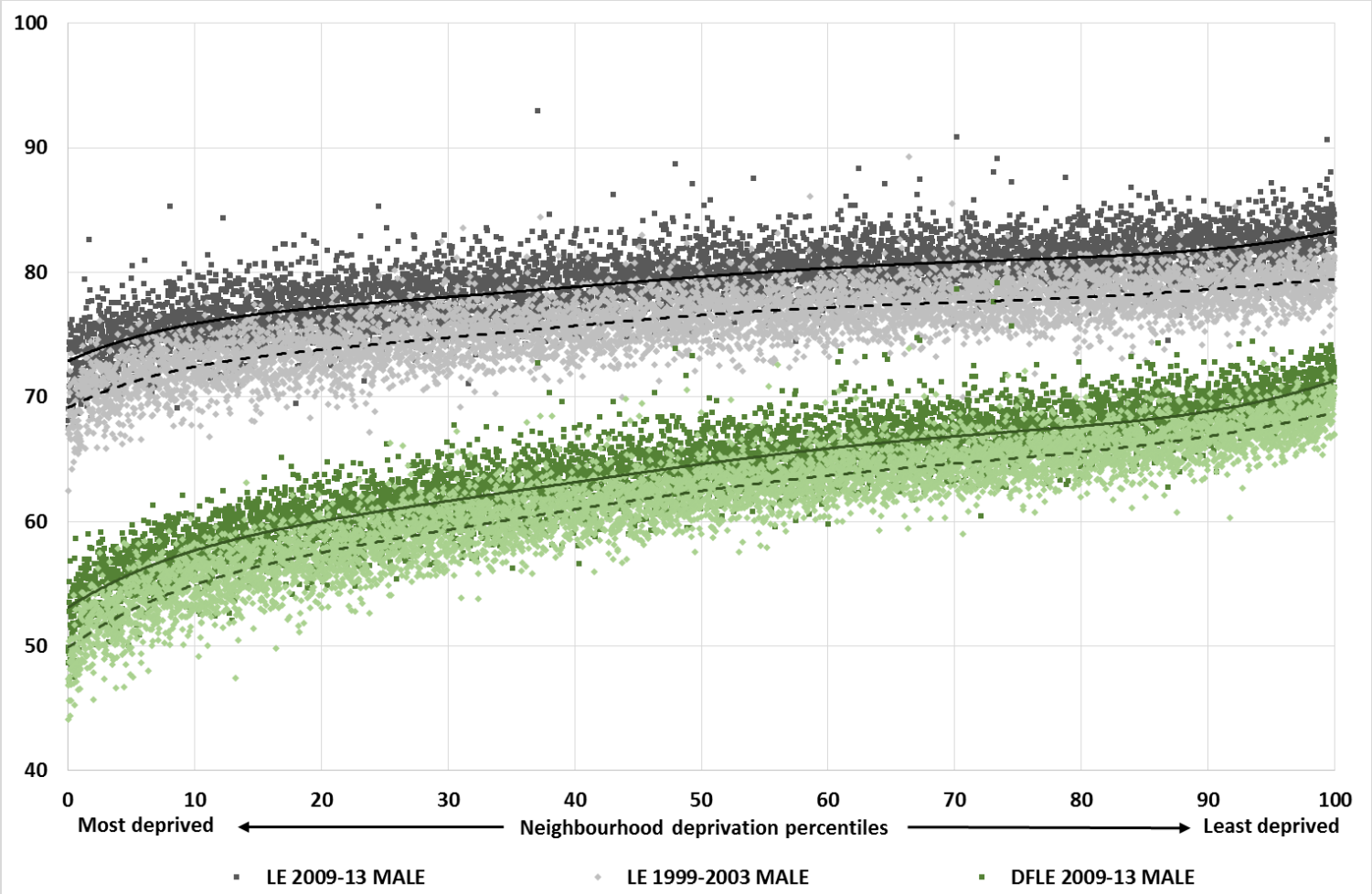
Smoking – Cessation services England

- Mean estimated 12-month quit rate of 13.6%
- Life-years gained mean estimate of 3.59 life-years per quitter for those not smoking after 8 years (long term quitters).
- Cost per QALY gain was £684 (95% CI 557–811) falling to £438 when savings in future health-care costs were counted. With worst case assumptions, the estimate of cost-effectiveness rose to £2693 per QALY gained (£2293 including future health-care costs) and fell to £227 (£102) under the most favourable assumptions.

Intervene once health issue presented

Intervening when people are ill

Life expectancy and disability-free life expectancy (DFLE) at birth, males by neighborhood deprivation, England, 1999–2003 and 2009-2013



Intervening when people are ill

- Universal access to good health care necessary but not sufficient
- Costly – current model
- Increasing years spent in ill health – increasing demands on health service
- Life expectancy rises in European countries slowing. Needs investigation – possible causes – demographics and inability to fund, austerity, dementia, obesity.

Conclusions – reducing the gap in Europe

- Many ‘levels’ that can act on.
- Focus on need – use data visualisation - improve LE of poorly educated, esp men.
- Reduce material deprivation and copy Sweden
- Utilise best practice examples, and areas as exemplars. Can improve IQ, reduce area deprivation, reduce gaps in attainment etc etc.
- Illustrate the data to policy makers that shows that reductions in the gap are achievable
- To improve health need to focus on prevention not access to services.

Resources on effective interventions

http://www.instituteofhealthequity.org/

INHERIT database

LIFEPATH

Help us to disseminate best practice

If the success of children eligible for free school meals in London is shared across the country….

More get 5+ GCSEs if copy London

Copying London formula to reduce inequalities

School funding per pupil has been frozen in cash terms between 2015–16 and 2019–20, resulting in a real-terms cut of 6.5%. London the largest loser. (IFS)

Thank you

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