Reducing health inequalities: insights from theory and practice

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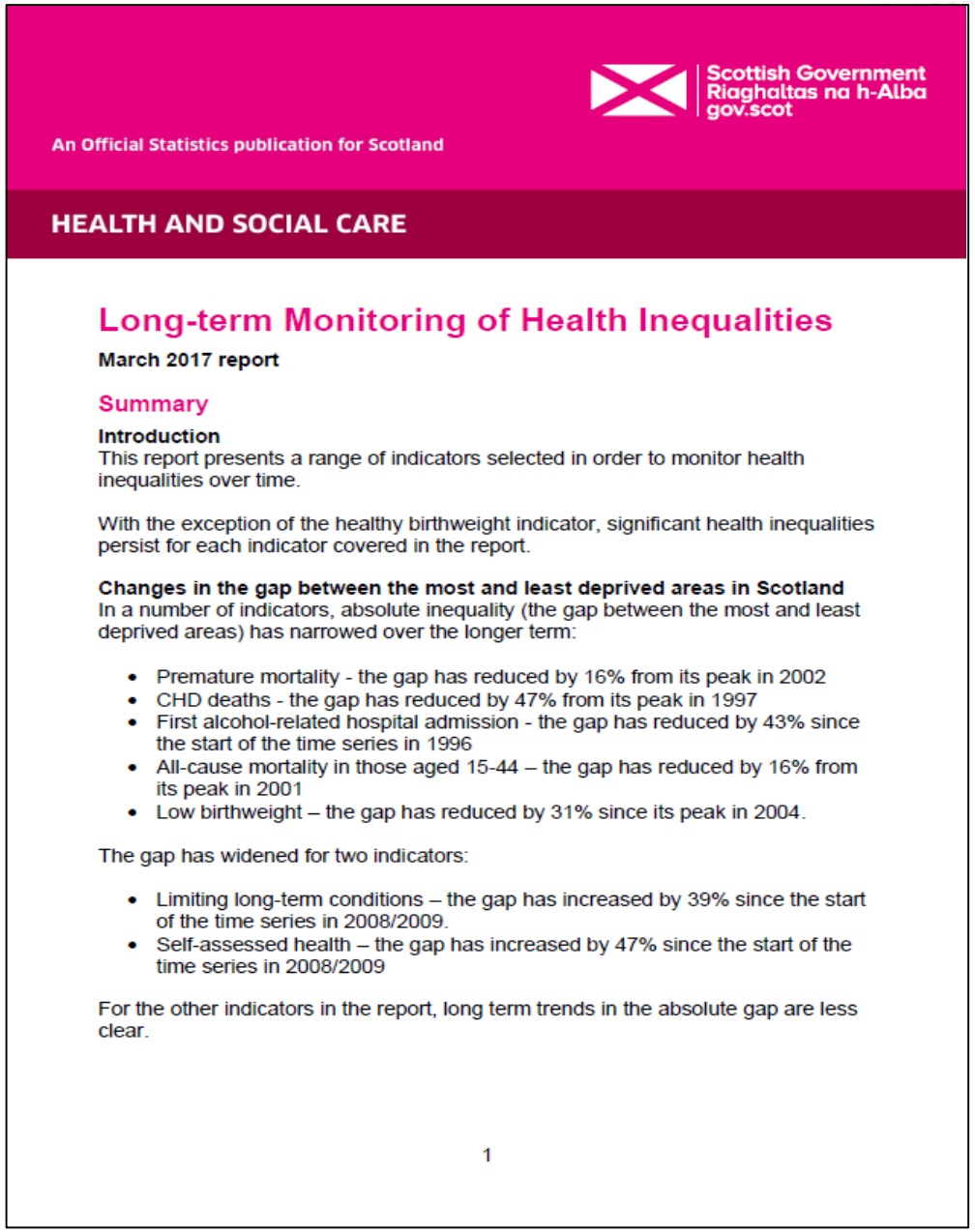
Of all inequalities, injustice in health is the most shocking and inhumane

Martin Luther King



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HEALTH AND SOCIAL CARE

Long-term Monitoring of Health Inequalities

March 2017 report

Summary

Introduction
This report presents a range of indicators selected in order to monitor health inequalities over time.

With the exception of the healthy birthweight indicator, significant health inequalities persist for each indicator covered in the report.

Changes in the gap between the most and least deprived areas in Scotland
In a number of indicators, absolute inequality (the gap between the most and least deprived areas) has narrowed over the longer term:

- Premature mortality - the gap has reduced by 16% from its peak in 2002
- CHD deaths - the gap has reduced by 47% from its peak in 1997
- First alcohol-related hospital admission - the gap has reduced by 43% since the start of the time series in 1996
- All-cause mortality in those aged 15-44 – the gap has reduced by 16% from its peak in 2001
- Low birthweight – the gap has reduced by 31% since its peak in 2004.

The gap has widened for two indicators:

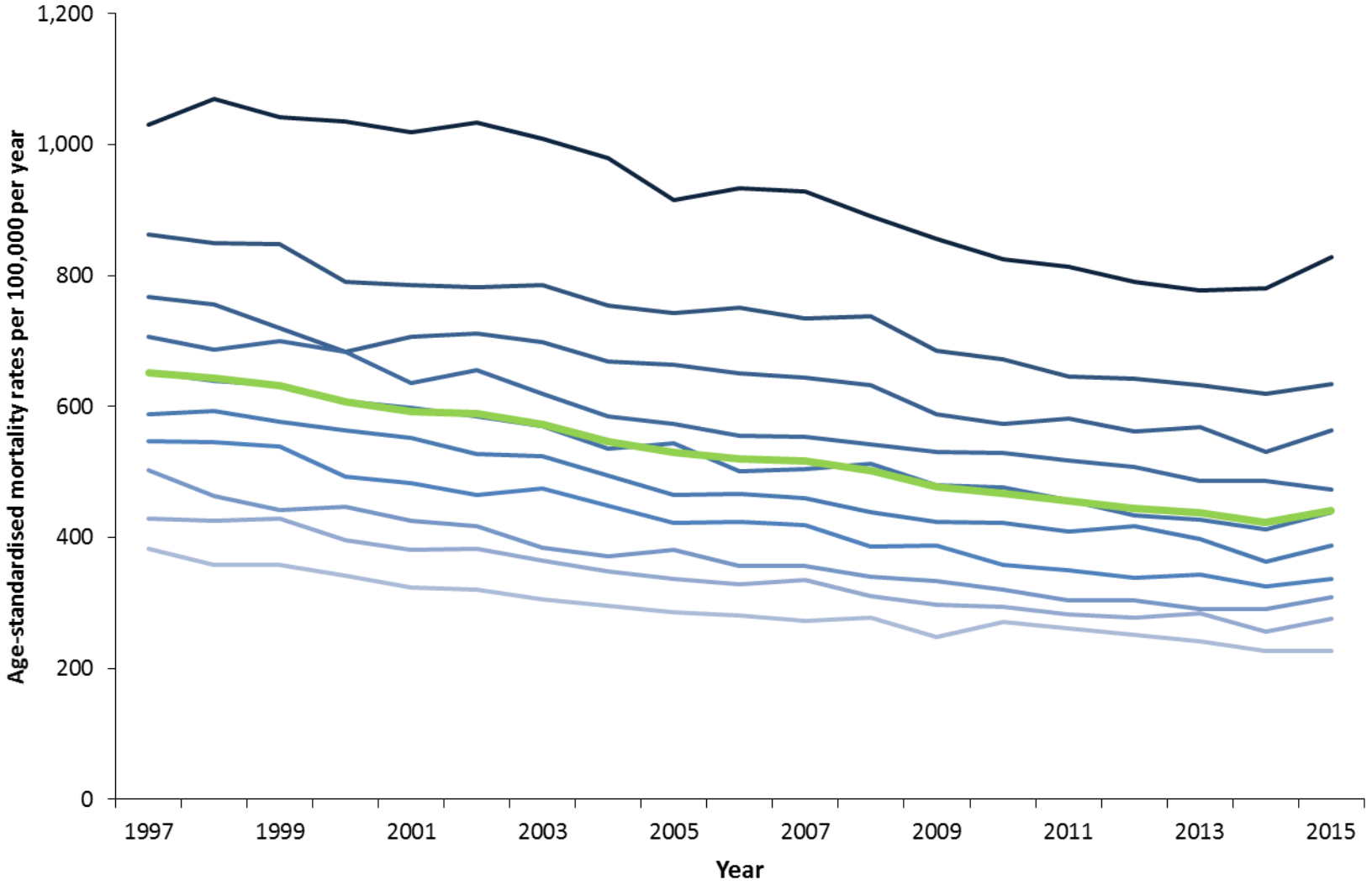
- Limiting long-term conditions – the gap has increased by 39% since the start of the time series in 2008/2009.
- Self-assessed health – the gap has increased by 47% since the start of the time series in 2008/2009

For the other indicators in the report, long term trends in the absolute gap are less clear.

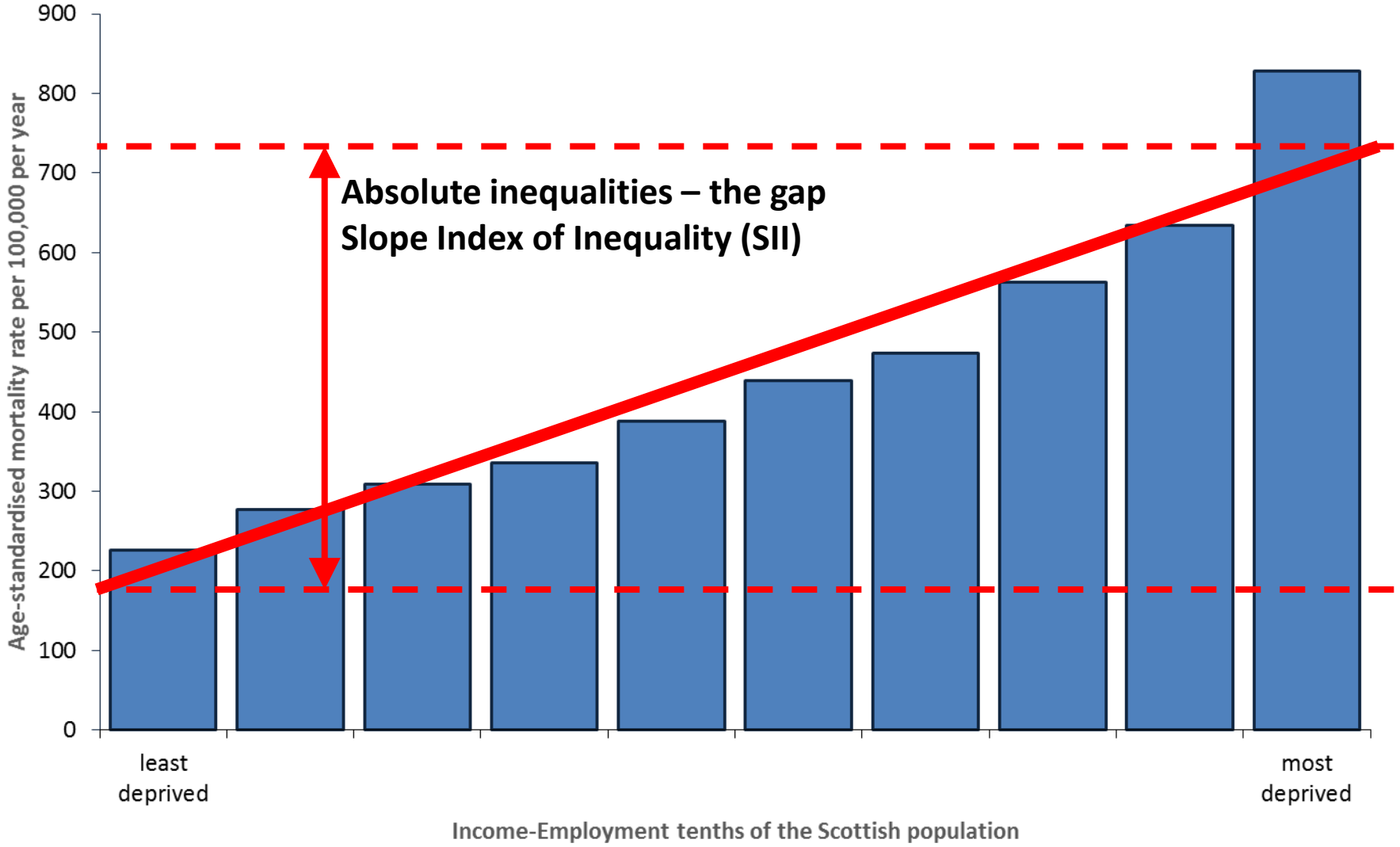
1

- Premature mortality
- Mental wellbeing
- First heart attack <75y
- Heart disease mortality 45-75y
- Cancer incidence <75y
- Alcohol first admissions <75y
- Alcohol deaths 45-75y
- Mortality 15-44y
- Low birthweight
- Healthy birthweight
- Self-assessed health
- Limited long-term conditions

Mortality rate for those aged under 75 years



Mortality rate for those aged under 75 years, 2015



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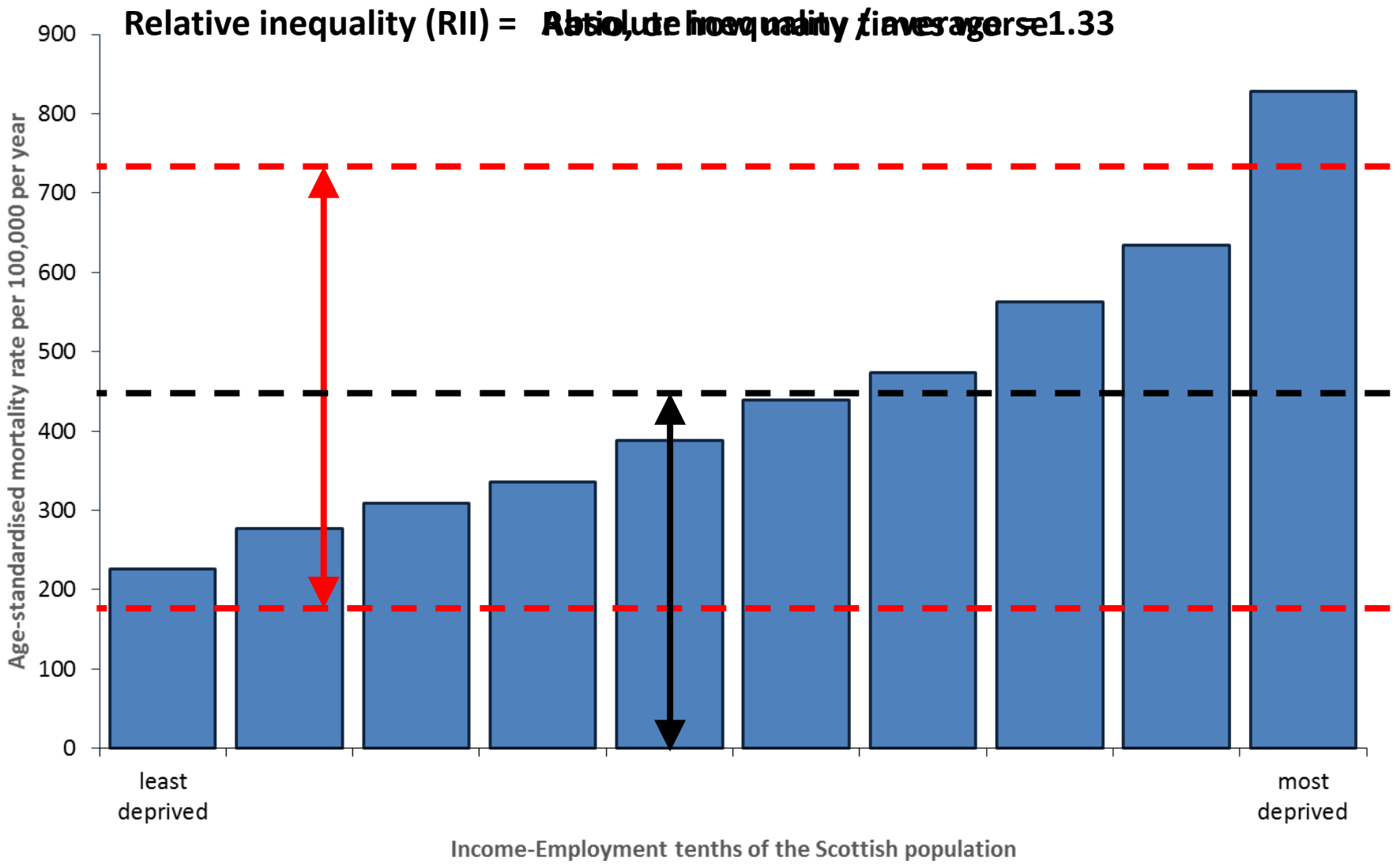
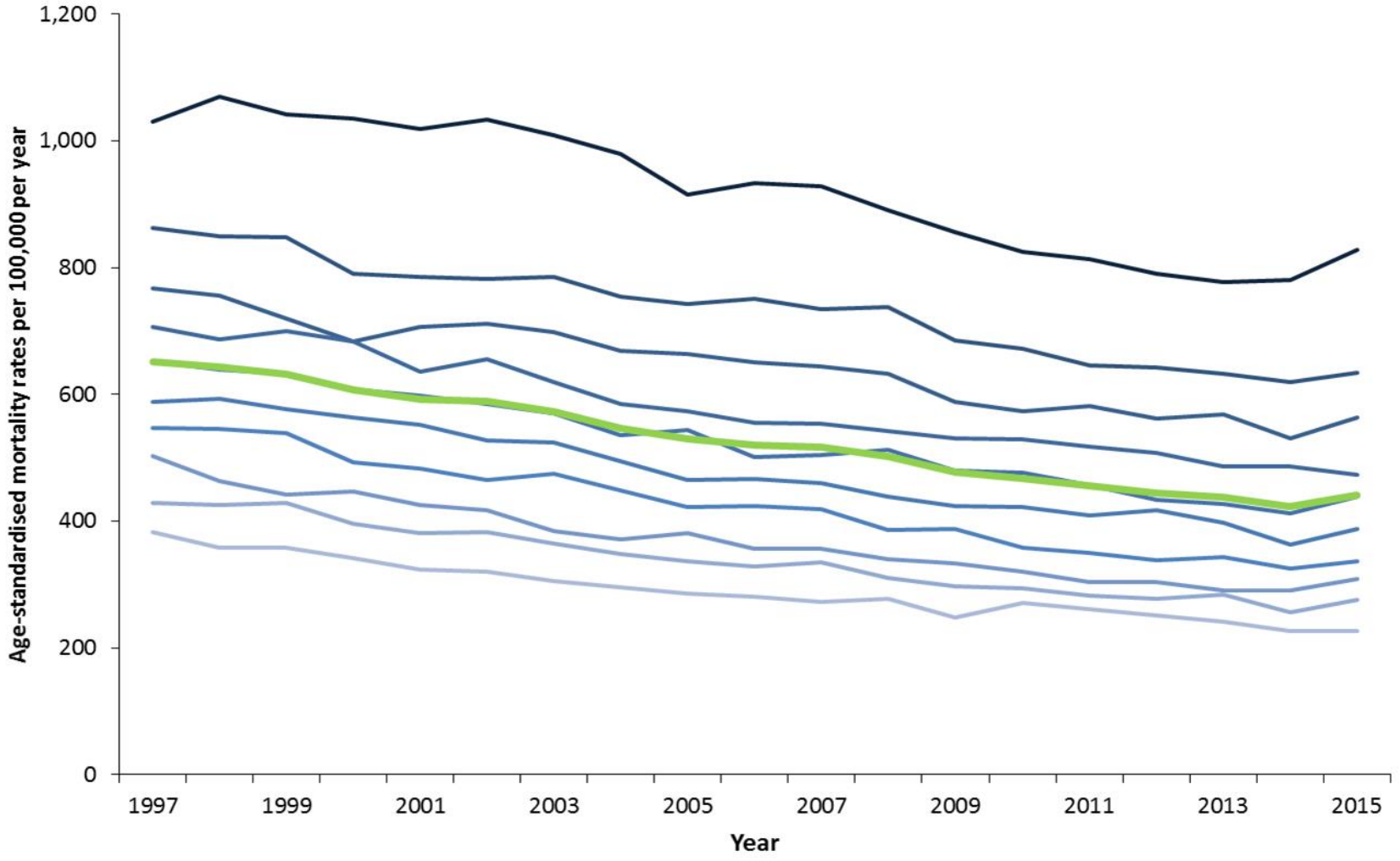
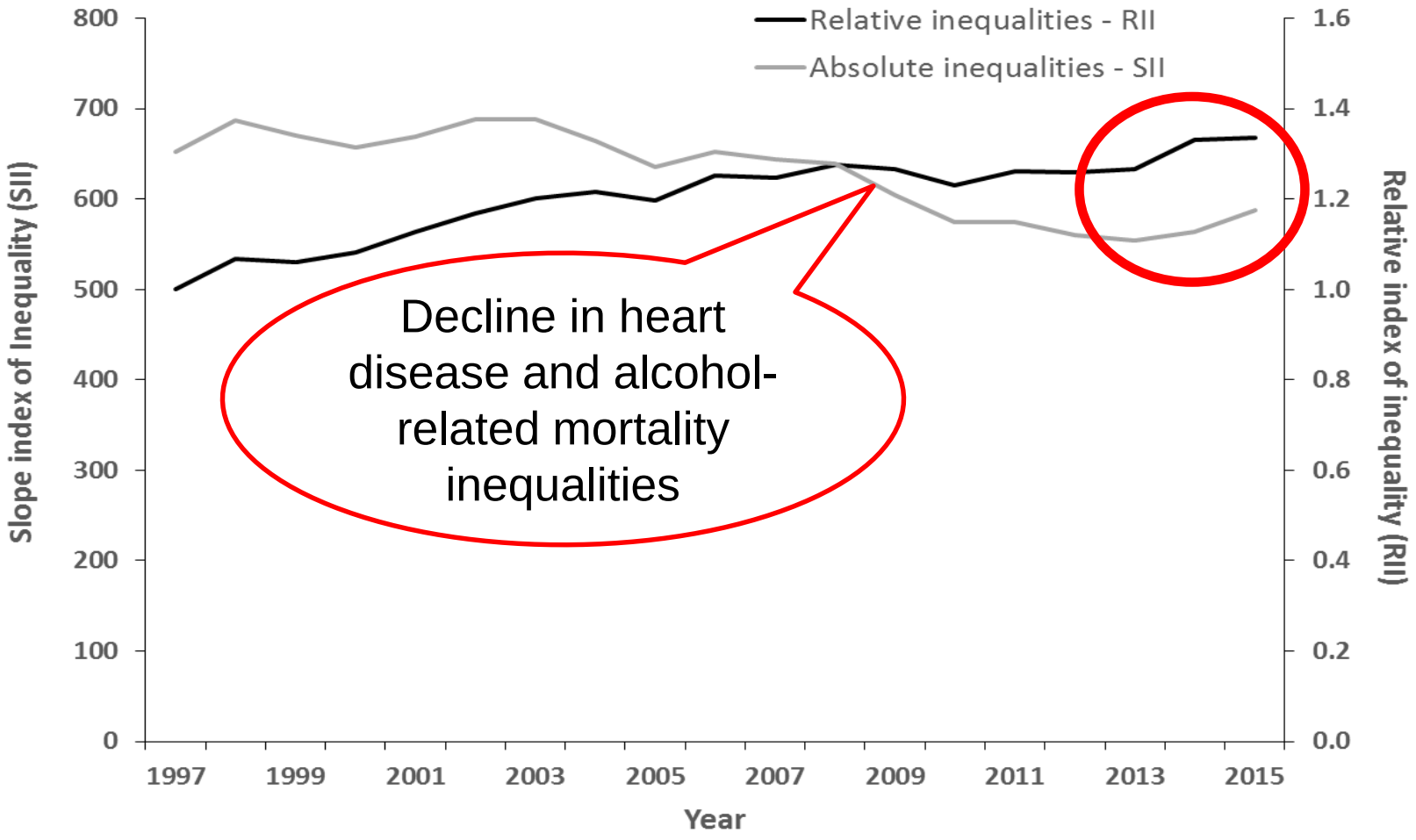


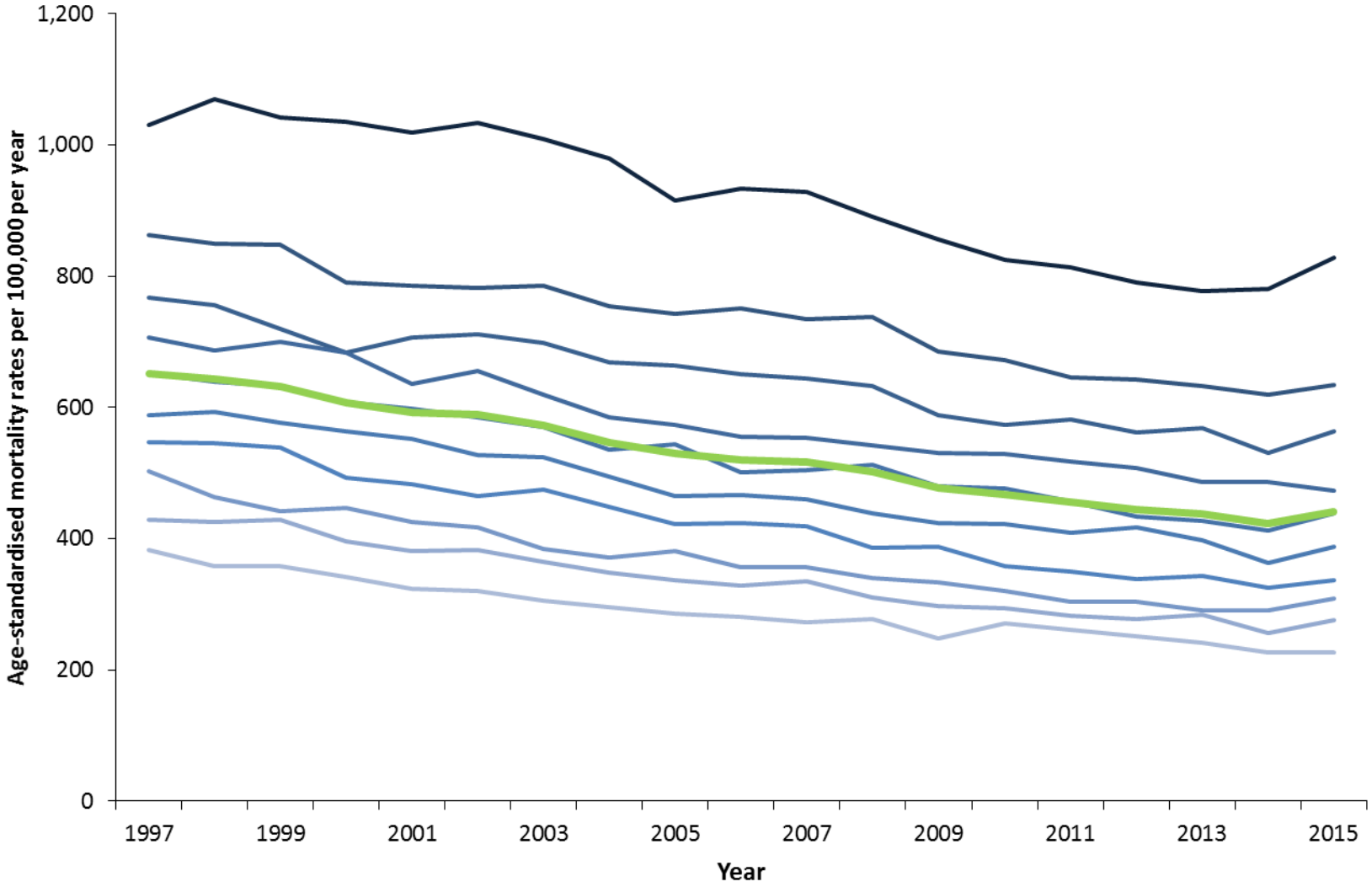
Mortality rate for those aged under 75 years



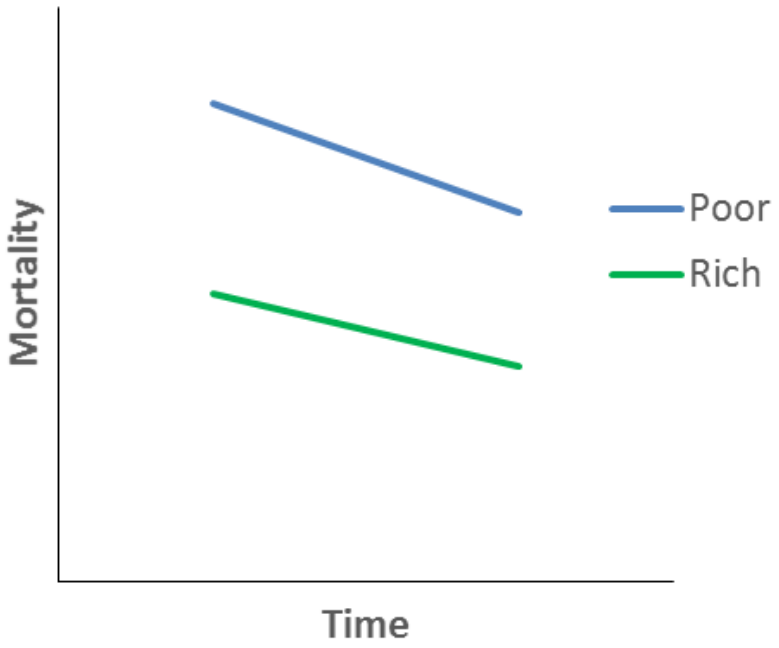
Trends in absolute and relative inequalities



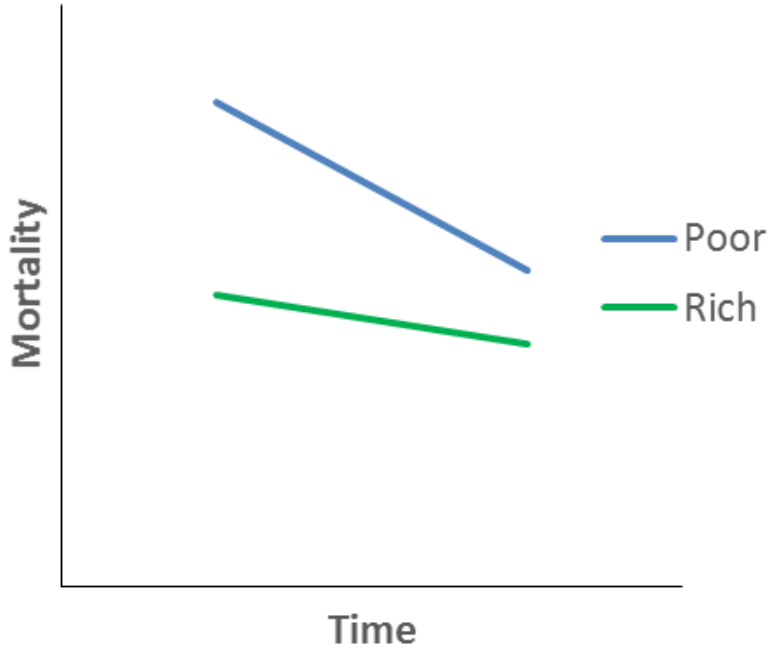
Mortality rate for those aged under 75 years



Current situation:
Absolute inequalities ↓
Relative inequalities ↑



Ideal future situation:
Absolute inequalities ↓
Relative inequalities ↓



Blakely T, Disney G, Atkinson J Teng A, Mackenbach JP. Typology for Charting Socioeconomic Mortality Gradients: "Go Southwest". Epidemiology 2017; 28(4): 594-603.

What causes health inequalities?

4 theories have been proposed:

1. **Artefact** (i.e. we aren't measuring it well enough)
2. **Selection theories** (i.e. poor health causes social slide)
3. **Behaviours and culture** (i.e. poor people behave badly)
4. **Structural & political economy** (i.e. politics and policy are the cause)

Artefact

- Undermined by inequalities demonstrated using different statistical measures of social status
- …and in different places and different times
- Very difficult to sustain a theory that such outcomes are unrelated to social status
- However, improved measures of social status, or, perhaps better, of the social realities of people's 'lived experience', would still be helpful

Selection

- The zombie hypothesis
- Selection – reverse causation argument (i.e. poor health causes social slide)
- Longitudinal studies which measure social status early in life amongst healthy people and track people over time for health problems show little social slide[1] [2]

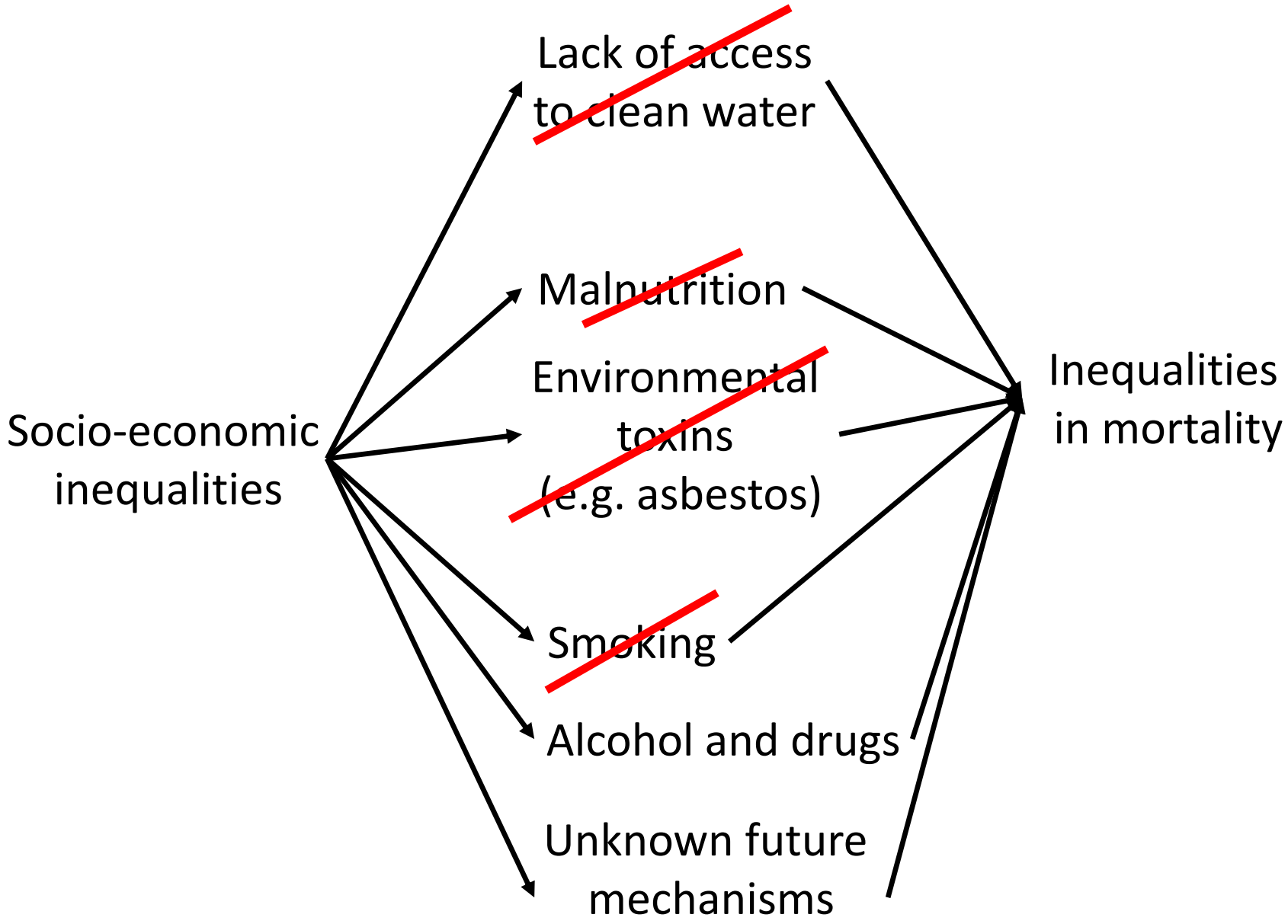
[1] Smith G. D., C. Hart, D. G. Watt, D. Hole, V. Hawthorne. 1998. Individual social class, area-based deprivation, cardiovascular disease risk factors, and mortality: the Renfrew and Paisley study. *J Epidemiol Community Health* 52: 399-402.
[2] Power C., S. Matthews. 1997. Origins of health inequalities in a national population sample. *Lancet* 350(9091): 1584-9.

Behavioural and cultural

- Important, but partial, theory
- Advocates suggest that the prevalence of behaviours (e.g. smoking, alcohol & diet) cultures or skills (e.g. parenting) are the root causes of health inequalities

- Unhealthy behaviours are more prevalent in lower socio-economic groups, however:
- The same behaviours generate higher mortality amongst working class
- It ignores why particular social groups adopt unhealthy behaviours[1] [2]
- The patterning of health behaviours is explained by socio-economic circumstances
- Where unhealthy behaviours have equalised, mortality inequalities have not[3]
- Changes over time in the causes of death responsible for inequalities suggest that removing one particular exposure (e.g. unclean drinking water) only changes one high cause-specific mortality rate for another[4] [5]

[1] Nettle D. Social class through the evolutionary lens. *The Psychologist* 2009; 22(11): 934-7.
[2] Lynch JW, Kaplan GA, Salonen JT. Why do poor people behave poorly? Variation in adult health behaviours and psychosocial characteristics by stages of the socioeconomic lifecourse. Social Science and Medicine 1997; 44(6): 809-819
[3] Stringhini S, Dugravot A, Shipley M, Goldberg M, Zins M, Kivima M, Marmot M, Sabia S, Singh-Manoux A. Health Behaviours, Socioeconomic Status, and Mortality: Further Analyses of the British Whitehall II and the French GAZEL Prospective Cohorts. *PLoS Med* 2011; 8(2): e1000419. doi:10.1371/journal.pmed.1000419.
[4] Link BG, Phelan J. McKeown and the idea that social conditions are fundamental causes of disease. American Journal of Public Health 2002; 92(5): 730-2.
[5] Mackenbach JP. What would happen to health inequalities if smoking were eliminated? *BMJ* 2011; 342: d3460.


Lack of access to clean water
Malnutrition
Environmental toxins (e.g. asbestos)
Smoking
Alcohol and drugs
Unknown future mechanisms
Socio-economic inequalities
Inequalities in mortality

Structural and political economy

- Differences in income, resources and power between groups cause health inequalities:
- Health inequalities rise and fall with income inequalities
- The health of communities has improved when they have been given more resources by chance[1]
- Those with most resources are always the healthiest, regardless of their behaviours[2]
- Even when genetic factors are involved (such as cystic fibrosis) inequalities in mortality by social class are wide and vary depending on changing contextual factors[3]

[1] Costello EJ, Compton SN, Keeler G, Angoid A. Relationships between poverty and psychopathology. JAMA 2003; 290: 2023-9.
[2] Commission on Social Determinants of Health. 2008. Closing the gap in a generation: Health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.
[3] Barr HL, Britton J, Smyth AR, Fogarty AW. Association between socioeconomic status, sex, and age at death from cystic fibrosis in England and Wales (1959 to 2008): cross sectional study. BMJ 2011; 343: d4662.

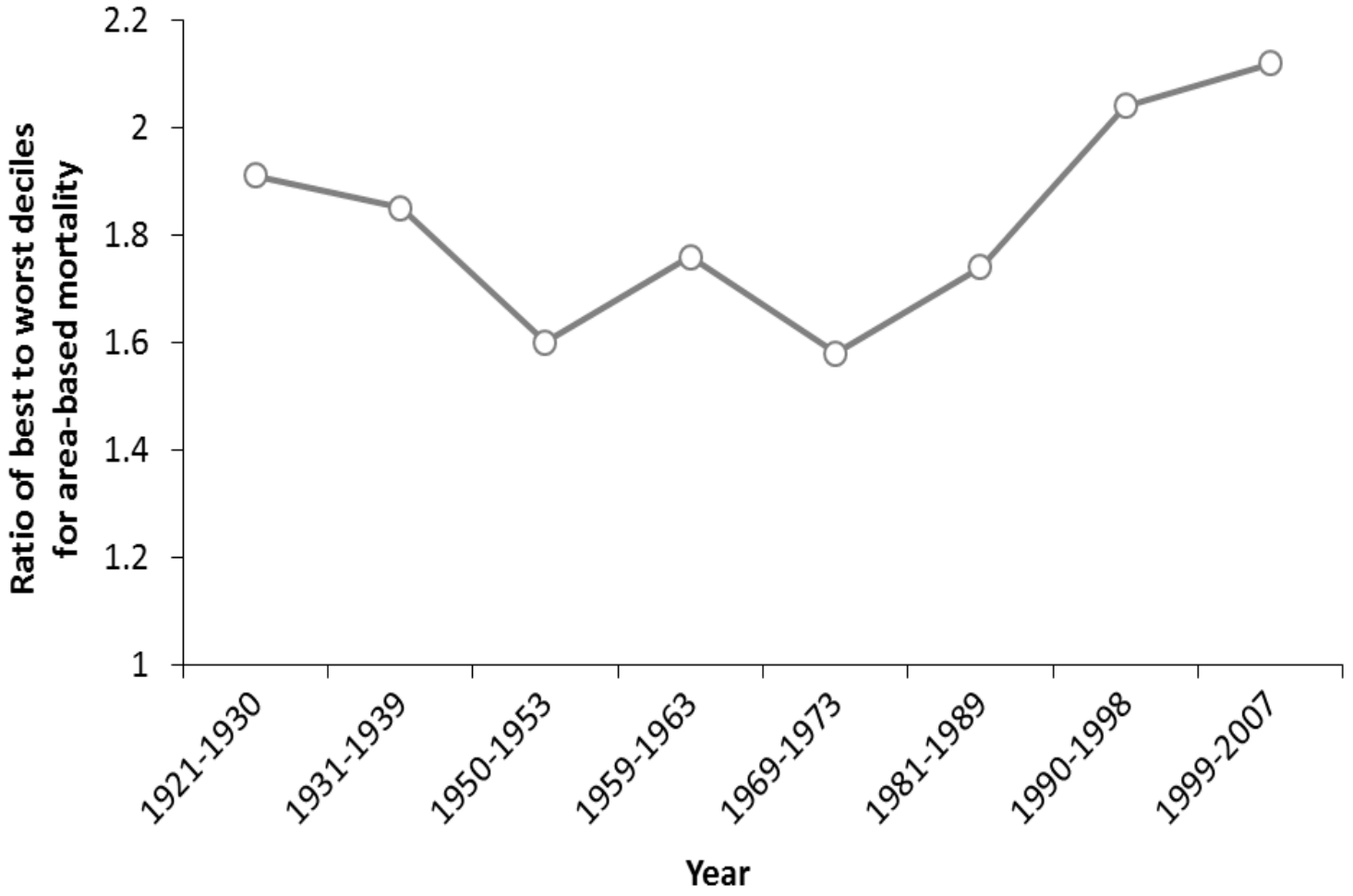
"That's the cause o' it [his ill-health], aye – the lack o' work. See if I'd been working? I'd never have any bother because you were that used tae working and it kept you fit. So if you're no' working, what are you daein? Your system's shutting doon. And that's what's wrong wi' all these men round aboot here. Their systems are shutting down."

health: 'I don't smoke; I don't drink. The only thing

"Everybody kinda looked oot for each other. If somebody was short [of money], like the neighbours next door, there was a, still a long running joke, the floating fiver [£5 note] because this fiver, you dinnae ken who it belonged to it, it just went between the two hooses…There was mair a kinda sense o' community…There's no' the same kinda feeling noo, doors are shut."

"Brian, was only what? two year [unemployed] [when] his wife left him. All those [unemployed miners] did was drink and gamble. They'd nae work, nothing else to dae in the morning, got up, go to the pub, come back hame, go to the pub. It ruined ma brother's life. His wife left…James's wife left him and a lot of guys in this area, a' their wives…all the women were seeing was a drunk man coming in…An awfy lot of men seemed to just go aff the rails."

Inequality in mortality between best and worst 10% of local authorities in Great Britain (sources: Thomas 2010 and Luxembourg Income Study)



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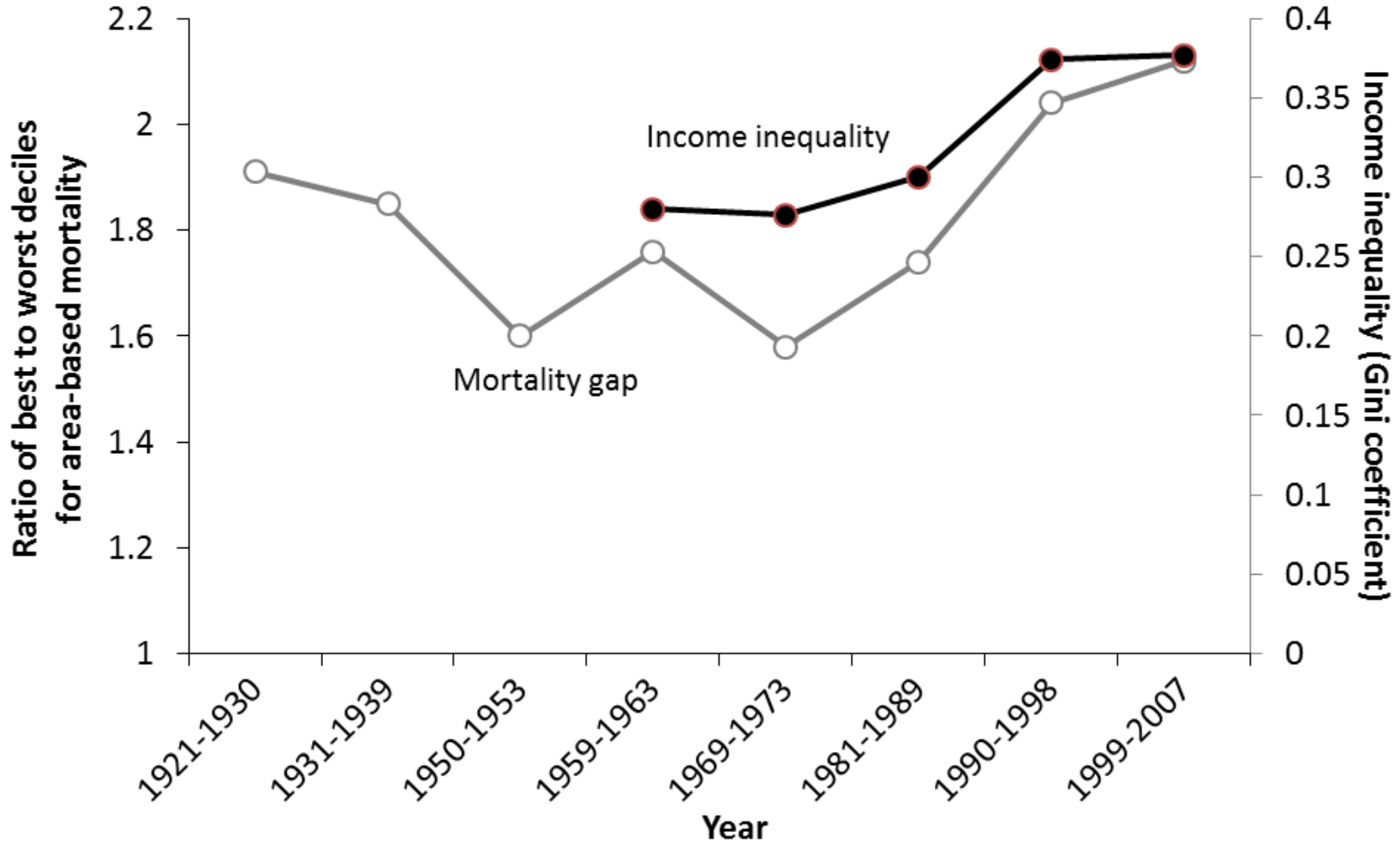
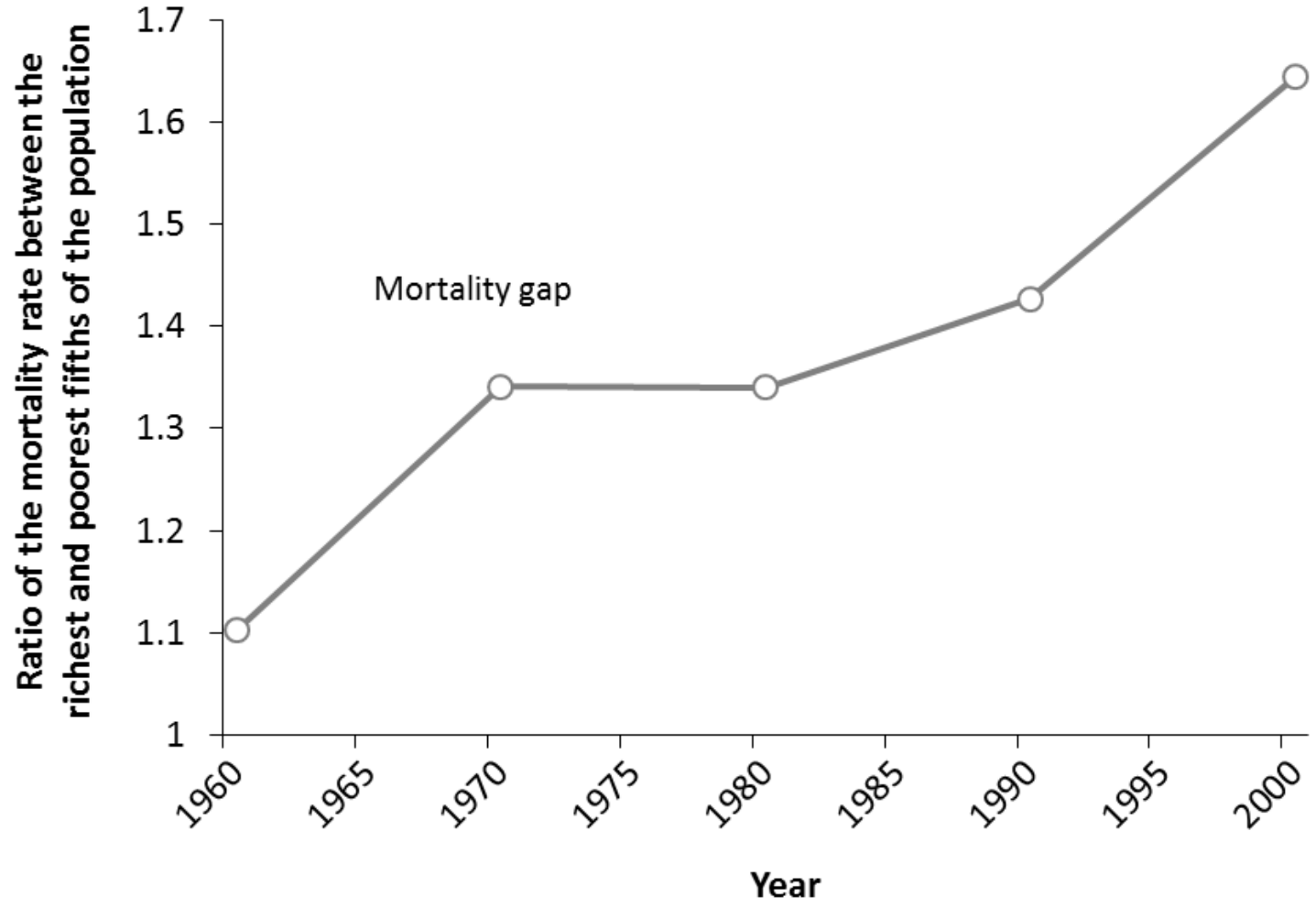


Inequality in mortality between richest and poorest 5ths of the US population 1960-2000 **(sources: Krieger 2008 and Luxembourg Income Study)**



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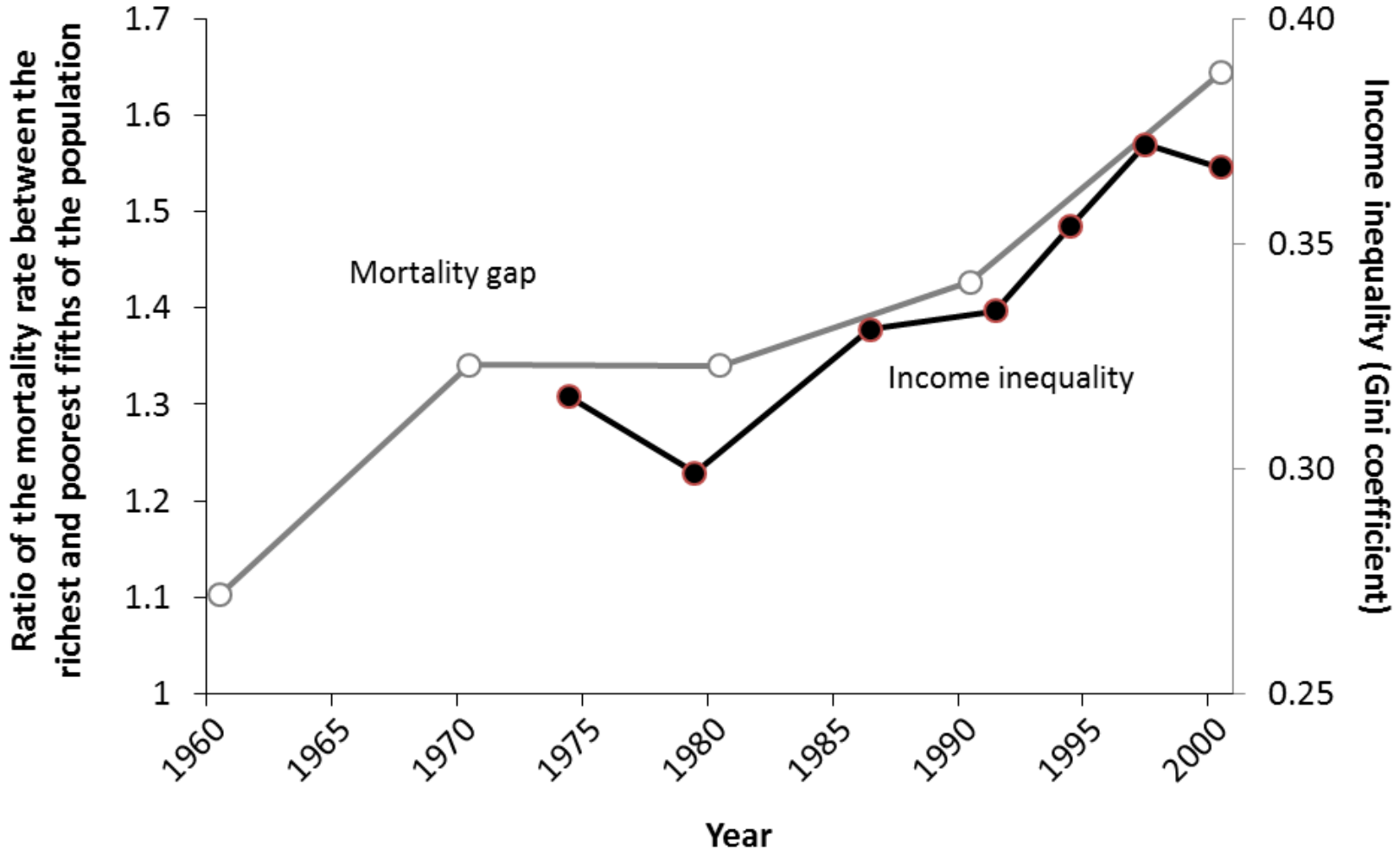
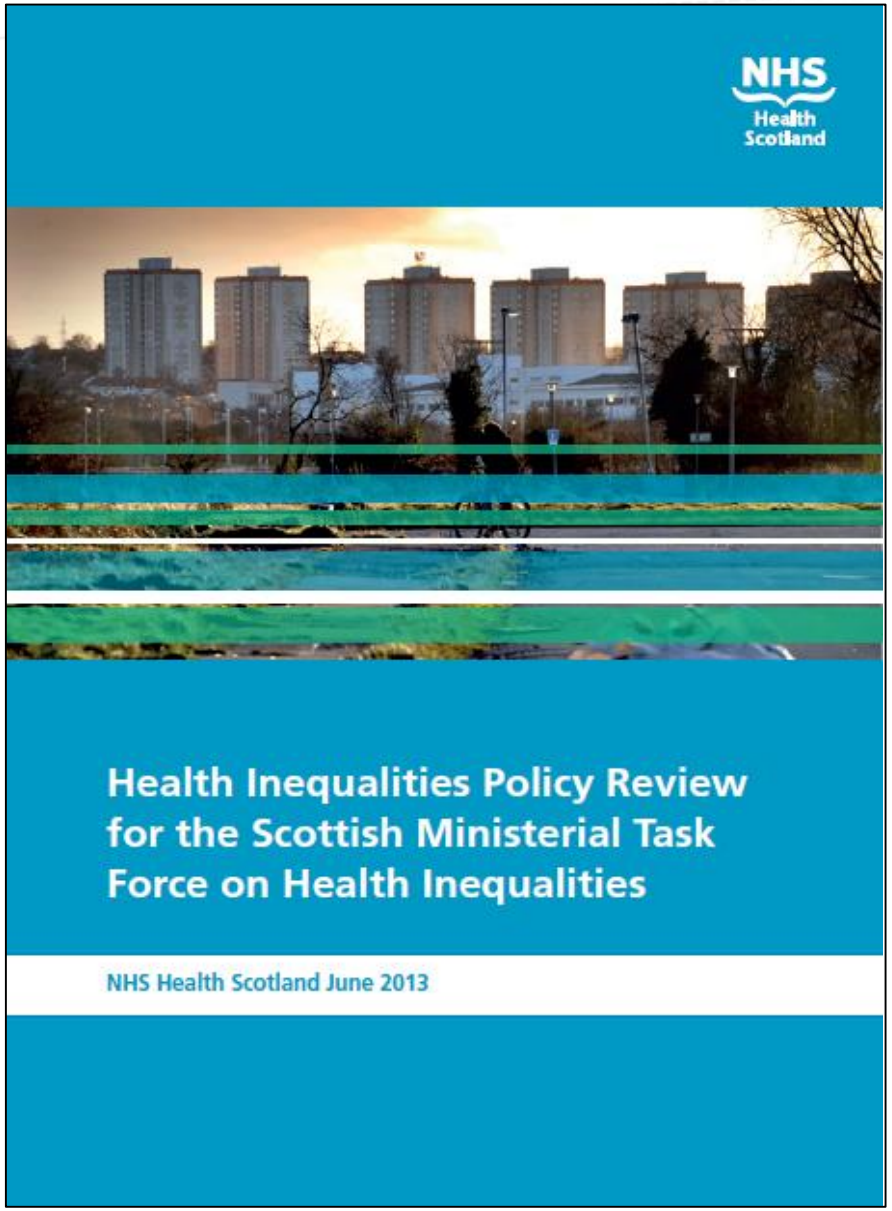


On the causes of health inequalities

- Structural explanations fit best
- Behavioural and cultural theories are relevant, but insufficient. Blaming poor people for their behaviours, skills and cultures is damaging
- Selection theory doesn't explain much
- Therefore health inequalities are determined by political decisions and political priorities
- Health inequalities are not inevitable and have been lower in the past and are lower in other populations



Least likely actions to reduce health inequalities

- Information based campaigns (mass media information campaigns)
- Written materials (pamphlets, food labelling)
- Campaigns reliant on people taking the initiative to opt in
- Campaigns/messages designed for the whole population
- Whole school health education approaches (e.g. school based anti-smoking and alcohol programmes)
- Approaches which involve significant price or other barriers
- Housing or regeneration programmes that raise housing costs

Most likely actions to reduce health inequalities

- Structural changes in the environment: (e.g. area wide traffic calming schemes, separation of pedestrians and vehicles, child resistant containers, installation of smoke alarms, installing affordable heating in damp cold houses)
- Legislative and regulatory controls (e.g. drink driving legislation, lower speed limits, seat belt legislation, smoking bans in workplaces, child restraint loan schemes and legislation, house building standards, vitamin and folate supplementation of foods)
- Fiscal policies (e.g. increase price of tobacco and alcohol products)
- Income support (e.g. tax and benefit systems, professional welfare rights advice in health care settings)

- Reducing price barriers (e.g. free prescriptions, school meals, fruit and milk, smoking cessation therapies, eye tests)
- Improving accessibility of services (e.g. location and accessibility of primary health care and other core services, improving transport links, affordable healthy food)
- Prioritising disadvantaged groups (e.g. multiply deprived families and communities, the unemployed, rough sleepers and the homeless)
- Offering intensive support (e.g. systematic, tailored and intensive approaches involving face to face or group work, home visiting, good quality pre-school day care)
- Starting young (e.g. pre and post natal support and interventions, home visiting in infancy, pre-school day care)

Summary

- Health inequalities are due to politics and policies
- Behaviours are only part of the story
- Addressing poverty, inequality and the social determinants of health is essential
- The evidence suggests that the most effective actions on health behaviours involve legislation, regulation and taxation