Why Do Most Policies to Reduce Health Inequalities Fail?
[Thoughts from the UK…and a little evidence...] 

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Outline

Some key hypotheses on this question:

• **H1**: “Area-based initiatives are doomed to fail” (spatially concentrated areas of multiple deprivation – e.g. public housing estates - are just too difficult to turn around)

• **H2**: “Too soon to tell – it would take at least a human generation..” [cf. RGE/CH/JF’s 1994 CIAR-PHP book chapter on “time and latency”]

• **H3**: “Too little, too late.. have to massively move to socialist redistributive policies across the board” (i.e. need a revolution...)

• **H4**: “Too inconsistent...the actual public sector policies pursued to date have been profoundly misaligned” (i.e. widely variant ideologies often operate across various ministries)
BACKGROUND: Scottish Health Inequalities by SES

Steepest in Western Europe – and largely not declining (even in absolute terms) since UK devolution began 15 years ago.

Last 30 years: rise in mortality inequalities in in teens/young adults, due to “external causes”:
• drugs/alcohol/
• violence/self-harm
(i.e. conditions related to mental health & strongly influenced by local “culture”/social env’t) – seen initially in males, then in females 10 years later – “Two Scottish paupers’ graveyards (for the young: filling up fast; for the old: stable demand)”
Average life expectancy at birth, 1999-2000 to 2009-10
Average life expectancy has increased but people in the least deprived areas still live longer than people living in the most deprived areas, and the gap has increased for women.

(by post-codes’ Scottish Index of Deprivation)

Life expectancy in Scotland
Source: Audit Scotland

**H1:** Comparison of all-cause death rates in selected European countries*, Scotland and local council areas of Scotland. Men aged 0-64 during 2001

Nearly all the unhealthiest local councils are in greater Glasgow, with large public housing estates

[*Austria, Finland, Germany, Ireland, Italy, Luxembourg, Norway, Portugal, Spain, Sweden, Switzerland, UK: England & Wales, UK: N.I.]

H1: Comparing SES gradients in health using 1) individually-assigned SES variable (education) values using the Scottish Longitudinal Study; 2) geographically fine-grained, ecologically-assigned SES (Scottish Index of Multiple Deprivation, based on 6505 datazones for 5m population)

Exploratory analysis presented at IDLN Conf., Perth, 2012:

- Dependent Variable: death risk, from any cause, for a 50-year-old male over 7 years follow-up post-2001 census
- Model based on SLS members, aged 35-74 at 2001, followed from census day 2001 to end of 2007
- 2297 members left Scotland during the follow-up and were dropped from the analysis
- Logistic Regression against categories of basic level of education attained, as recorded in the 2001 census = the socio-economic variable value (for educational attainment) assigned to each individual

Compare these mortality risks to those from regression of same outcome, against mean value of “education level attained” (expressed as the local proportion of adults with “no qualifications”) for Scottish datazone of each subject’s residence (“postcode”), to look for extent to which “SES mis-classification bias,” due to ecological assignment of SES, outweighs the combined influence of area-associated multiple aspects of poverty:

- If the former, ecologically assigned SES analysis will show smaller health gradients than individually assigned SES
- If the latter, ecologically assigned SES analysis will show larger health gradients than individually assigned SES
H1: 7-YEAR ALL-CAUSE MORTALITY OF 50-YR-OLD SLS MALES, 2001-2007, BY EDUCATION LEVEL (2 WAYS)

* AREA MODEL ESTIMATES RATES FOR SMALL AREAS WITH ALL vs. NO QUALIFIED PERSONS (NOT THAT UNLIKELY), THE LATTER WITH MANY OTHER ASPECTS OF POVERTY CONCENTRATED LOCALLY
H1: SUPPORT FOR THIS HYPOTHESIS COMES FROM MACKENBACH’S ANALYSIS OF ENGLISH “HEALTH ACTION ZONES” INITIATIVES TO REDUCE INEQUALITIES BY TARGETING THE WORST-OFF LOCAL AREAS (1998-2010)

“Health Action Zones could be loosely evaluated but the authors concluded that these made little impact in terms of measurable improvements in health outcomes during their short lifespans.”

H2: “Too soon to tell: needs at least a whole human generation..”

• OK – the long reach of early life is well established: Clyde’s BMJ article: “Get’ em while they’re young”

• But.. shouldn’t we at least see some reductions in the SES gap in adult health outcomes, after a period of steady declines in the rich-poor gap in infant mortality? (as has been seen in all of the UK for at least 50 years)
H2 (BACKGROUND): HOW BADLY AFFECTED BY OBESITY ARE SCOTLAND AND ENGLAND?

Overweight & Obesity in Post-adolescent (14-17yrs) European Girls

Scotland
England
Germany
Portugal
France
Ireland (Republic of)
Lebanon
Bulgaria
Russian Fed
Netherlands
Slovenia
Denmark
Slovakia
Spain
Czech Republic
Poland
Finland (self report)
Turkey
Estonia (self report)
Latvia (self report)

Overweight and obesity defined by IOTF International cut off points. Last update 27th Feb 2012 © London

H2: Exclusive BF: 6-8 weeks of age in Scotland

Some of the worst rates in Europe, and steepest SES inequalities, COMPLETELY UNCHANGING

Source: Information Services Division, NSS, Scottish NHS, 2015
Footnote: Obesity Prevalence by Country, 1970s to 2012

Quick EPI-Quiz Q: Notice any archetypal patterns here?

Footnote: Obesity Prevalence by Country, 1970s to 2012

Figure 2. Obesity rates

?Two archetypes of obesity’s “pandemic curve”: a clue to its origins?*

*See my Commentary in Nature, April 14, 2016
H2: STD’D LITERACY TEST SCORES

HOW EARLY IN LIFE CAN WE SEE BIG NON-HEALTH SES-GAPS IN SOME COUNTRIES?

1. WHERE YOU’RE BORN ONLY MATTERS IF YOUR PARENTS ARE LOW-SES

TYPICAL "FAN" PATTERN

“Fifth of Scots have poor literacy”

- The BBC:
  - http://news.bbc.co.uk/1/hi/scotland/8393805.stm

“Literacy report shows Russell there really is a crisis in education”

- The Scotsman:
  - http://news.scotsman.com/opinion/Literacy-report--shows-Russell.5883656.jp

“Zero-tolerance approach to poor literacy needed, experts say”

- The Herald:
H2: Determinants of School Outcomes in Scotland – Why Schools Are Not to Blame

• “While individuals may defy this trend, no school in a deprived area is able to record a similar level of success to that achieved by almost all schools in the most affluent areas.”¹

• “...but the gaps between them (schools) are far less important than differences between students. In Scotland, who you are* is far more important than what school you attend.”²

*meaning “who your parents are (and their social class)”

Children should start school at two – Ofsted

Target underachievers in bold move, says Morgan

Early start to help children from poorer backgrounds

Richard Adams
Education editor

said, later adding: “I said three to 18, it could be two to 18 as far as I’m concerned.”

The comments by Morgan, who became chair of Ofsted in 2011, will fuel controversy about the expansion of schools into supportive roles that were previously the domain of parents. Sir Michael Wilshaw, Ofsted’s chief inspector of schools, has previously said that where parents are unable or unwilling to help with their children’s education, schools should step in.
**H3**: “Most policy initiatives to reduce inequalities are *trivially impotent* in the face of the deeper, *structural* origins of SES that affect health over the life-course: need massively redistributive, socialist policies”

- OK – but if that were true, would we not expect those EU nations with the most intensive policy efforts of this kind to have experienced the largest reductions in health inequalities?
H3: The latest word on recent (1990-2010) HI trends across the EU...

“Remarkable mortality declines have occurred in lower socioeconomic groups in most European countries covered by this study. Relative inequalities in mortality widened almost universally, because percentage declines were usually smaller in lower socioeconomic groups. However, as absolute declines were often smaller in higher socioeconomic groups, absolute inequalities narrowed by up to 35%, particularly among men. Narrowing was partly driven by ischemic heart disease, smoking-related causes, and causes amenable to medical intervention. Progress in reducing absolute inequalities was greatest in Spain, Scotland, England & Wales and Italy, and absent in Finland and Norway.*

Conclusions: Trends in inequalities in mortality have been more favourable than is commonly assumed. Absolute inequalities have been reduced in several countries, probably more as a side-effect of population-wide behavioural changes and improvements in prevention and treatment, than as an effect of policies explicitly aimed at reducing health inequalities.”


*Who would like to assign these countries a relative score as to the degree of their “socialist redistributive policies” during this 20-year period?
H4: Are government policies, across ministries, often misaligned, so that the “right hand giveth, but the left hand taketh away (from the poor)?”

A striking example, from the UK in recent years, is the lip-service given by gov’t to reducing child poverty (surely a key SDoH), compared to the net distributive effects of all social and economic policy-changes over this period
The table below ranks 29 developed countries according to the overall well-being of their children. Each country's overall rank is based on its average ranking for the five dimensions of child well-being considered in this review.

A light blue background indicates a place in the top third of the table, mid blue denotes the middle third, and dark blue the bottom third.

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Lack of data on a number of indicators means that the following countries, although OECD and/or EU members, could not be included in the league table of child well-being: Australia, Bulgaria, Chile, Cyprus, Israel, Japan, Malta, Mexico, New Zealand, the Republic of Korea, and Turkey.
H4: Figure 1: Impact of direct tax and benefit reforms introduced or planned between April 2012 and April 2015 by the UK government

[Source: Cribb et al 2013 [2]]

“IT DOESN’T HAVE TO BE THIS WAY.”

“Elderly Poverty Rate, Late 2000s (per cent)
Remit

• Developing novel public health interventions
• Fostering collaboration between government, researchers and the public health community
• Building capacity within the public health community

4 working groups, each a life course stage
Useful websites & references

- Scottish Collaboration for Public Health Research and Policy:
  www.scphrp.ac.uk
- Offord Centre for Child Studies
  http://www.offordcentre.com/index.html
- Australian Early Development Index - click on AEDI
- British Columbia ECD mapping portal
  http://www.ecdportal.help.ubc.ca/archive/faq.htm