

Persistent Deprivation

Analysis and Policy Interventions

Prof Carol Tannahill

Director

Glasgow Centre for Population Health

A focus on health and social policy

- Scotland's health – how it's changing
- Health inequalities – how our understanding has developed
- The GCPH – working on how to make a difference
- Social policy opportunities and challenges
- **An orchestral prelude**

Health in Scotland

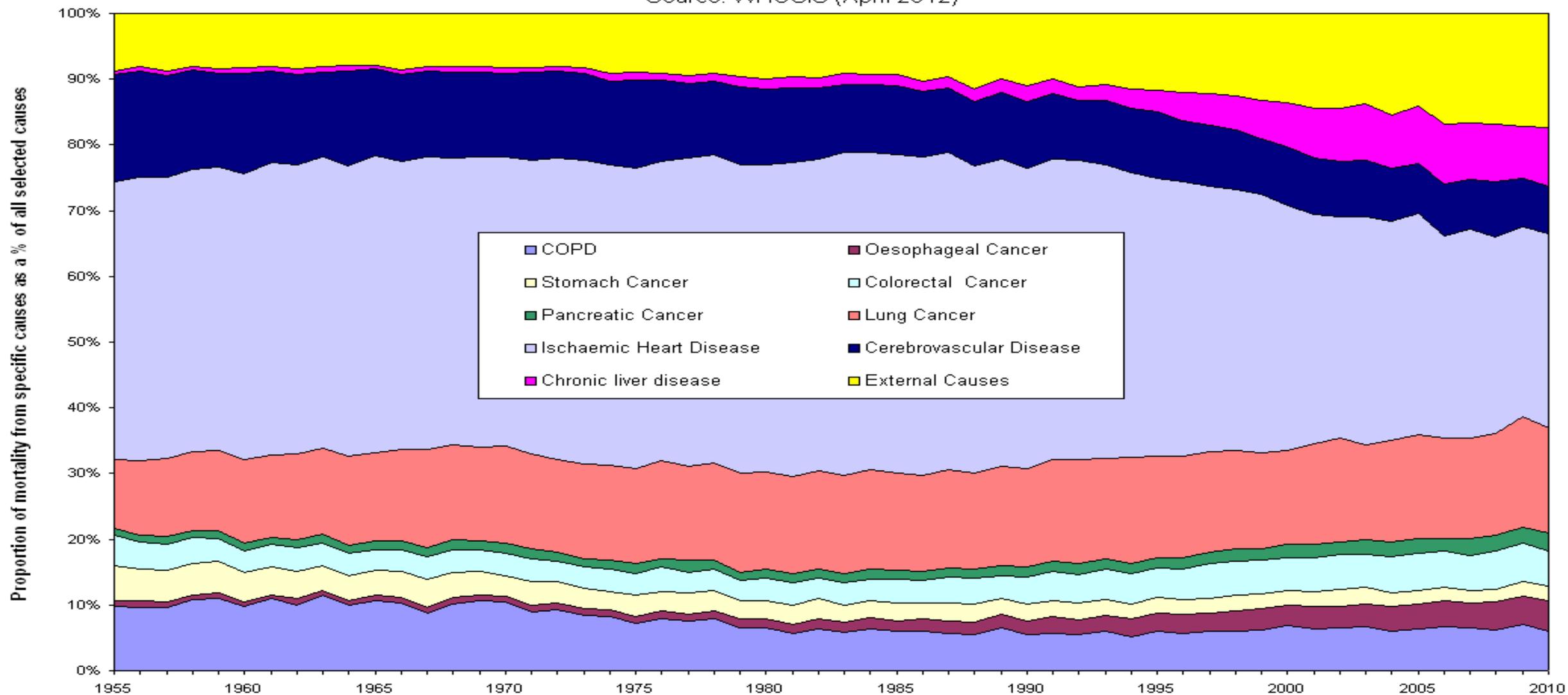
Three key messages

Proportionate Contribution by Cause - Males

Figure S2M

Proportionate contribution of 10 major causes of death as a % of all selected causes among Scottish men aged 15-74 years, 1955-2010

Source: WHOSIS (April 2012)

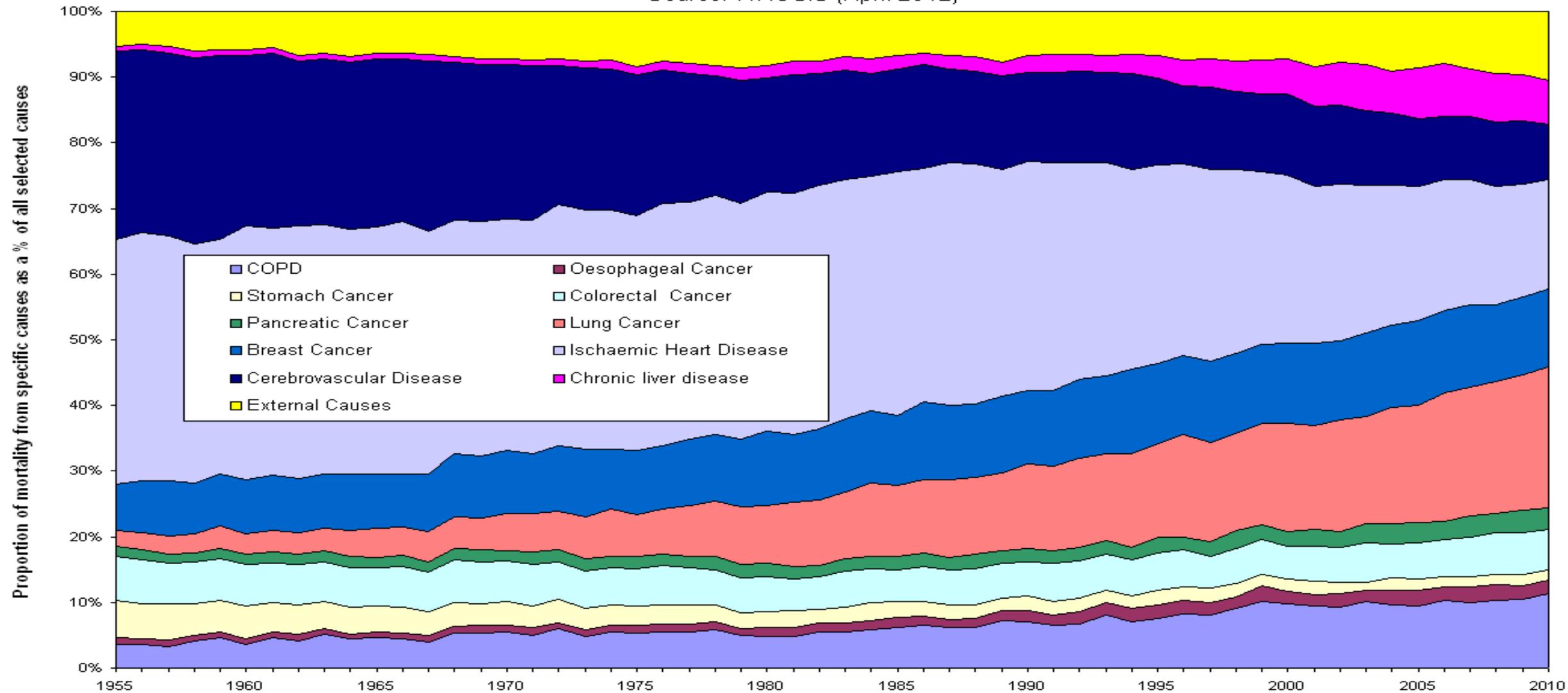


Proportionate Contribution by Cause - Females

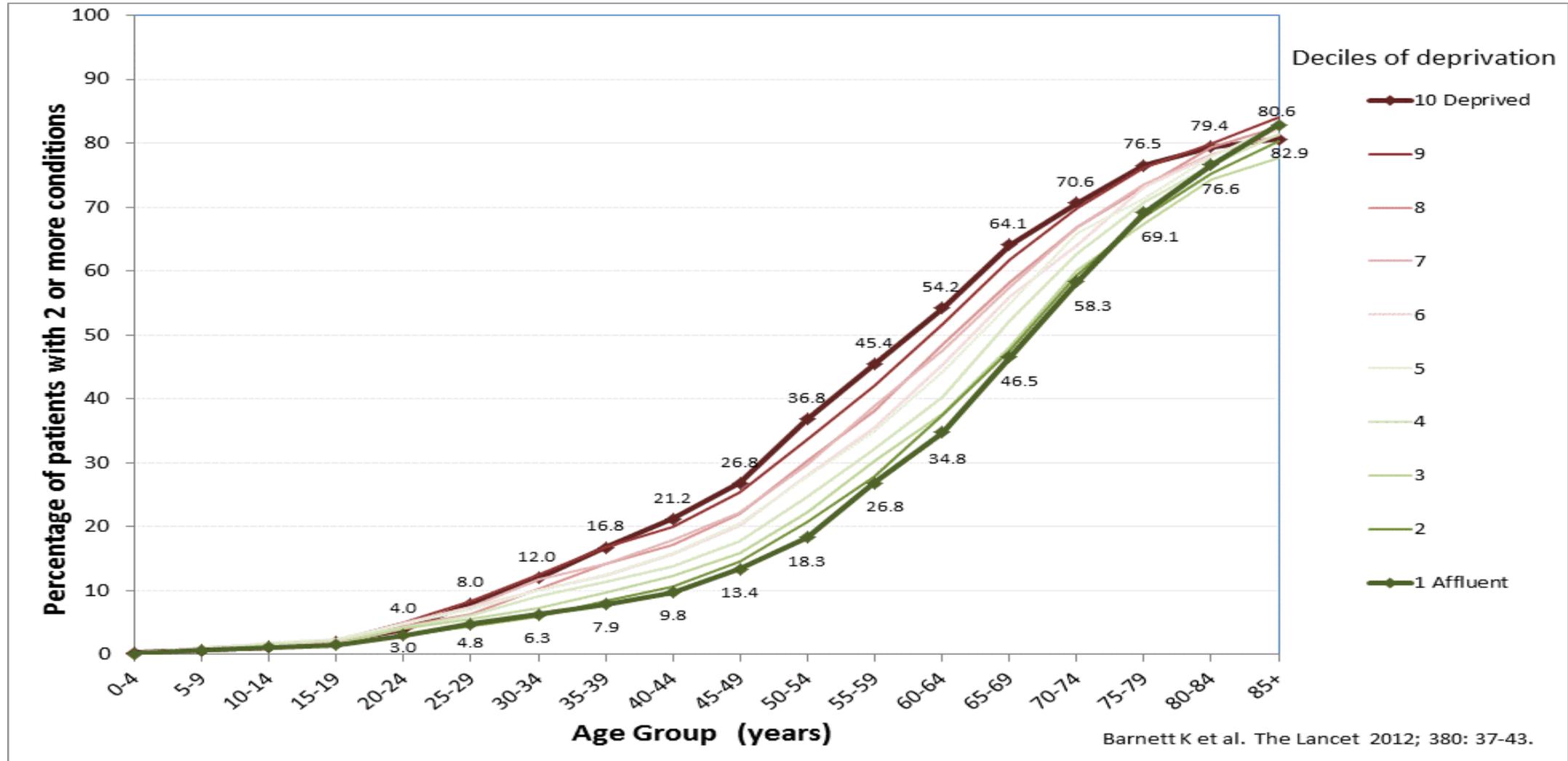
Figure S2F

Proportionate contribution of 11 major causes of death as a % of all selected causes among Scottish women aged 15-74 years, 1955-2010

Source: WHOSIS (April 2012)

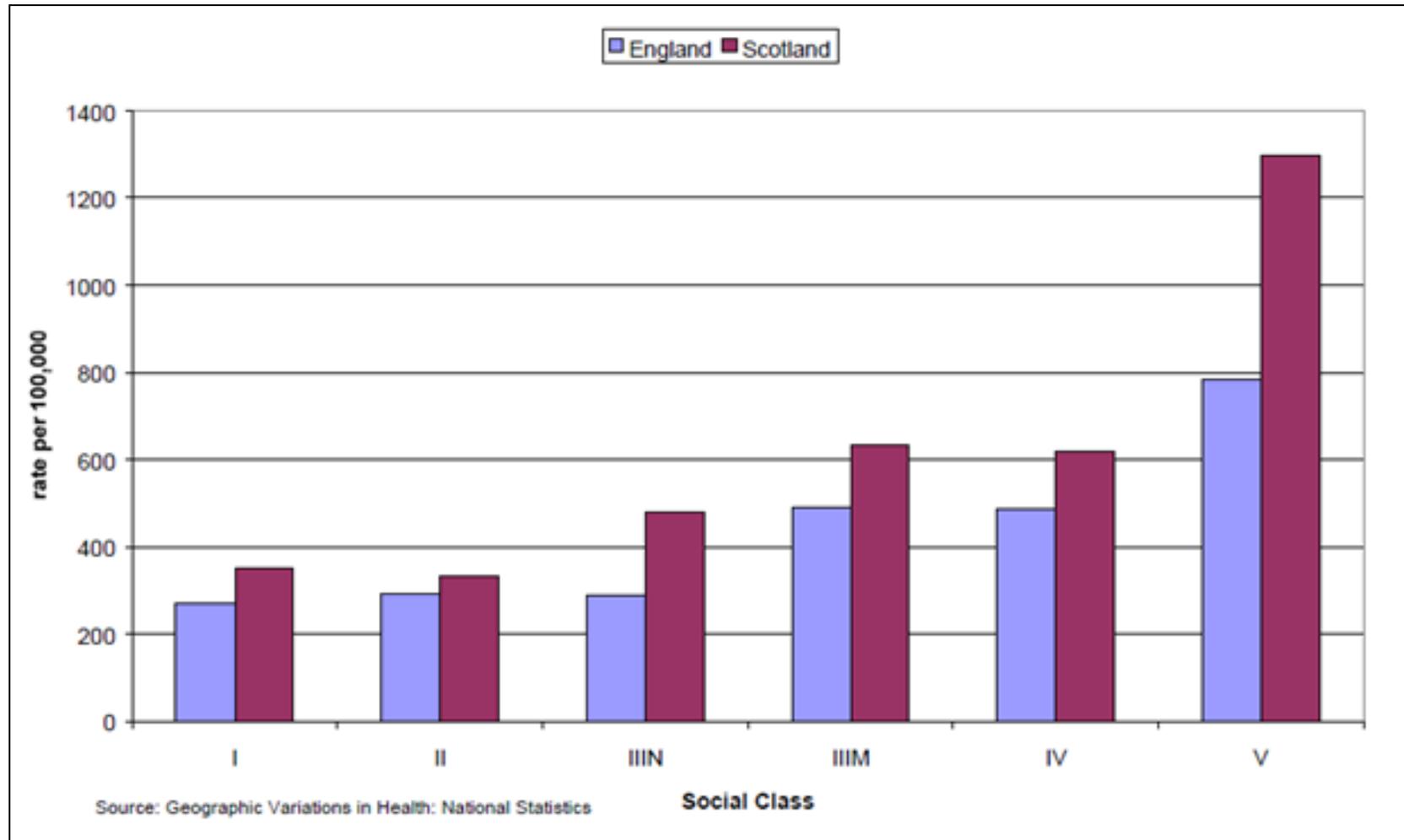


Multi-morbidity and deprivation



Premature mortality by social class

Age-standardised all-cause mortality rates by Social Class, England and Scotland, males aged 20-64, 1991-93

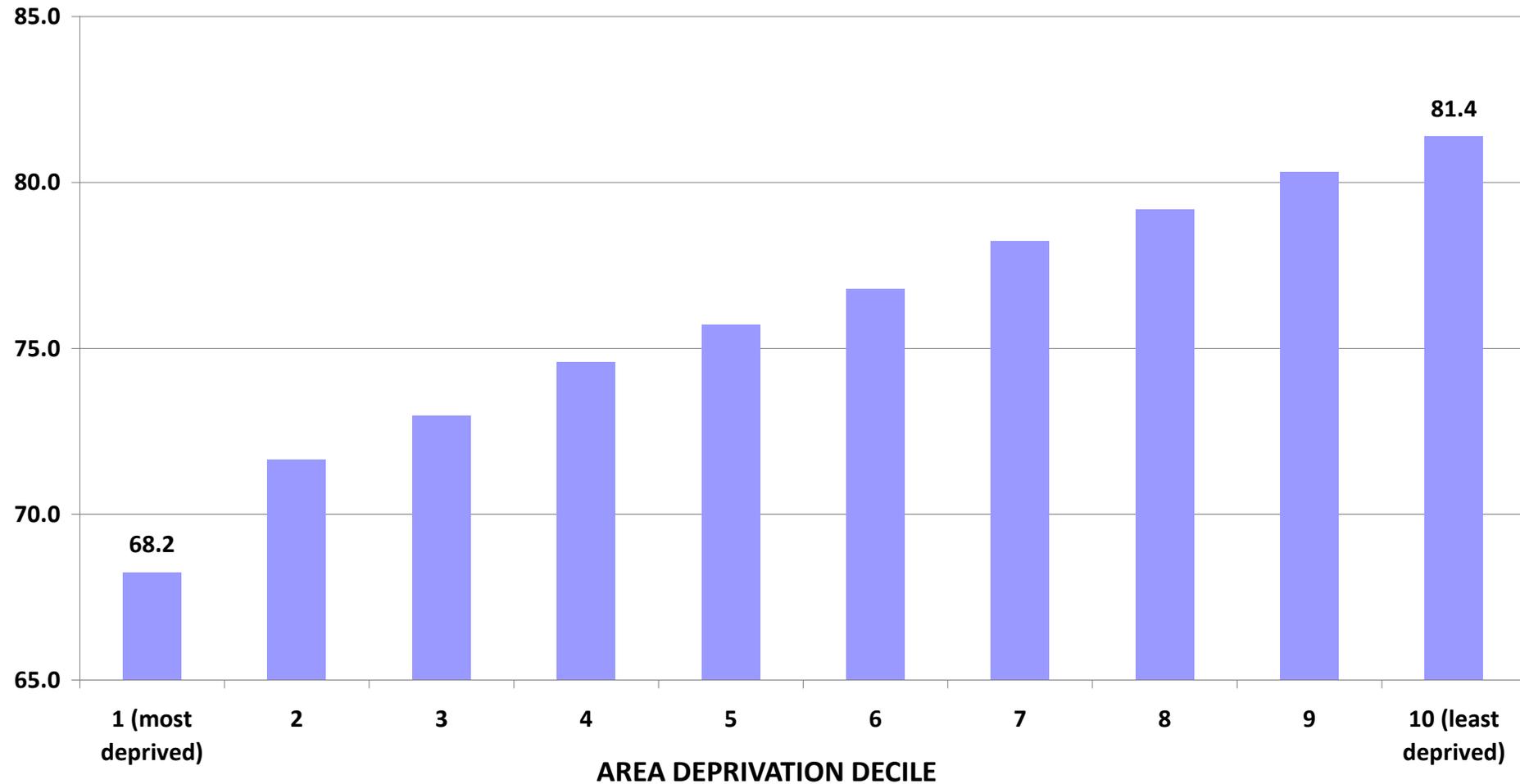


(Source: Scottish Executive, 1993 (from data originally presented by Uren et al, 2001))

Life expectancy in Scotland

Male life expectancy at birth by SIMD deprivation decile, Scotland 2008-2010

Source: National Records of Scotland



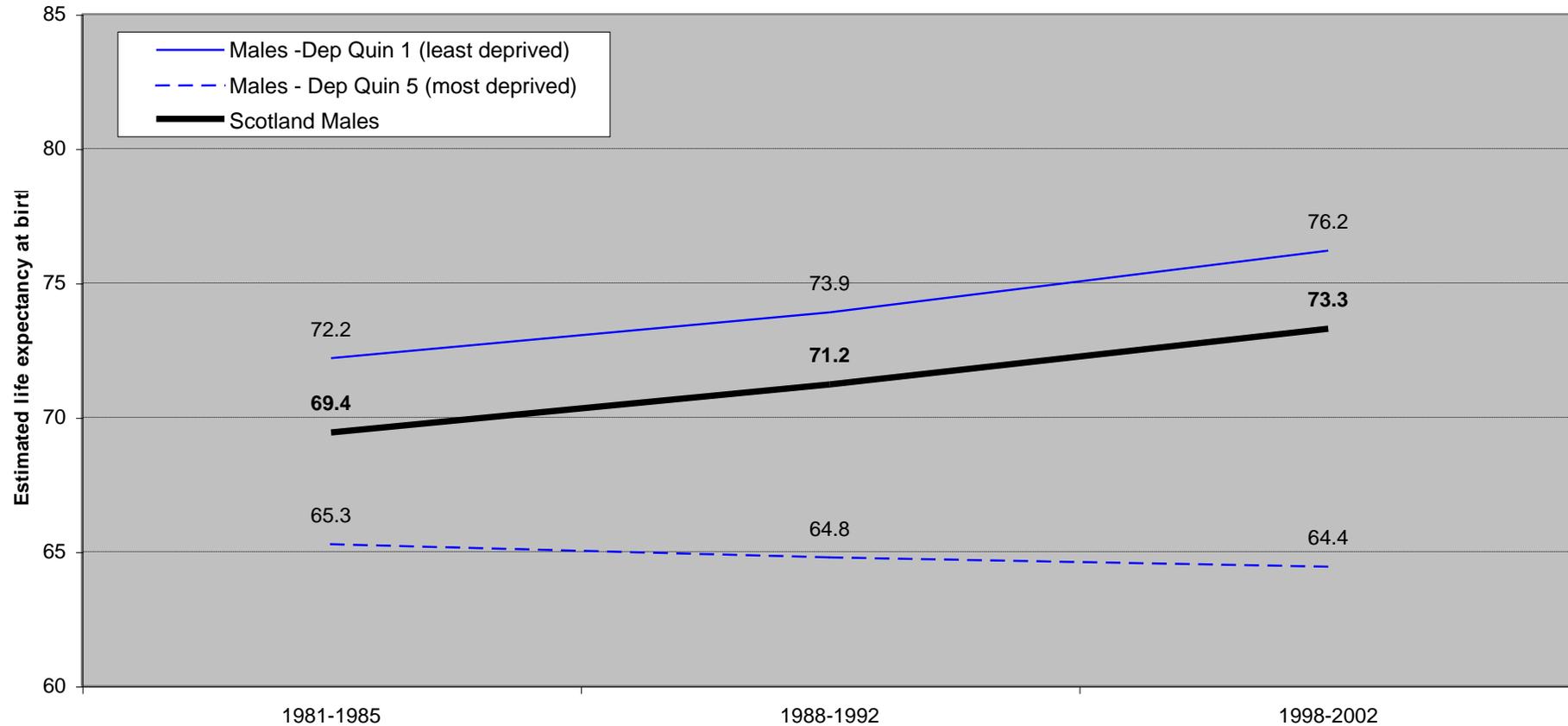
Understanding Health Inequalities

Life expectancy trend by deprivation

Estimates of male life expectancy, least and most deprived Carstairs quintiles, 1981/85 - 1998/2002 (areas fixed to their deprivation quintile in 1981)

Greater Glasgow

Source: calculated from GROS death registrations and Census data (1981, 1991, 2001)



FUNDAMENTAL CAUSES

Global forces
Political priorities
Societal values

Distribution of power and resources (material & non-material)

Personal and household characteristics

INDIVIDUAL

WIDER ENV. INFLS

Differences in provision of opportunities, environments, services etc

CIRCS

Differences in capacity to benefit from opportunities

Inequalities in outcomes

FUNDAMENTAL CAUSES

Global forces

Political priorities

Societal values

Distribution of power and resources (material & non-material)

Personal and household characteristics

INDIVIDUAL

WIDER ENV. INFLS

Differences in provision of opportunities, environments, services etc

CIRCS

Differences in capacity to benefit from opportunities

Inequalities in **outcomes**

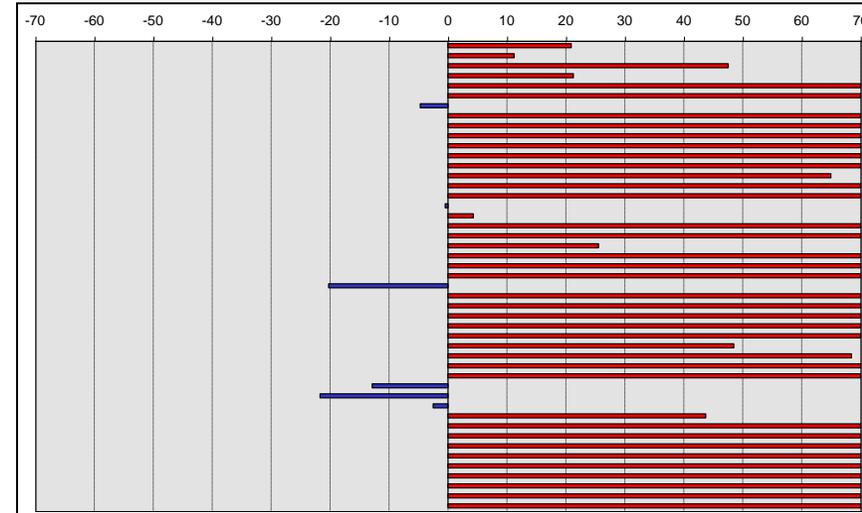
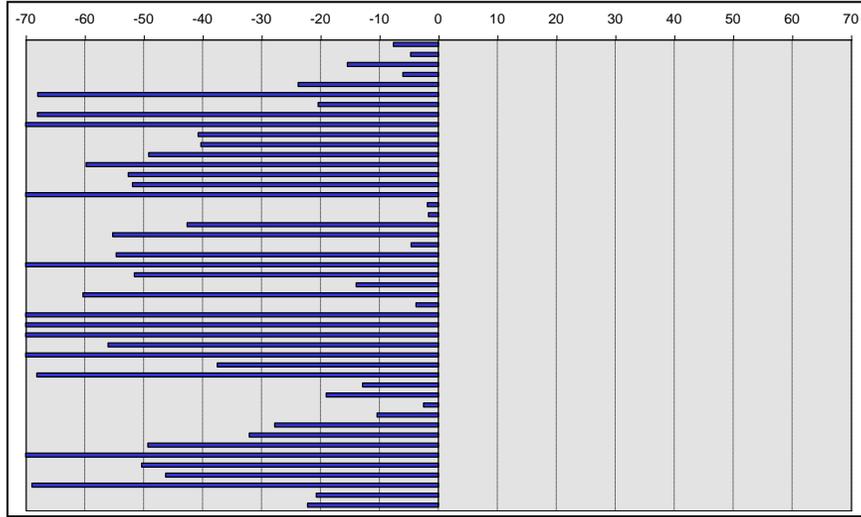
Core principles

- 1. Level Up***
- 2. Focus on causes not consequences***
- 3. Start young***
- 4. Target, tailor and positively discriminate***
- 5. Build resilience***

The GCPH

The Centre's mission is to generate insights and evidence, support new approaches, and inform and influence action to improve health and tackle inequality.

The contrasting experience of Scotland's communities



How should we respond?

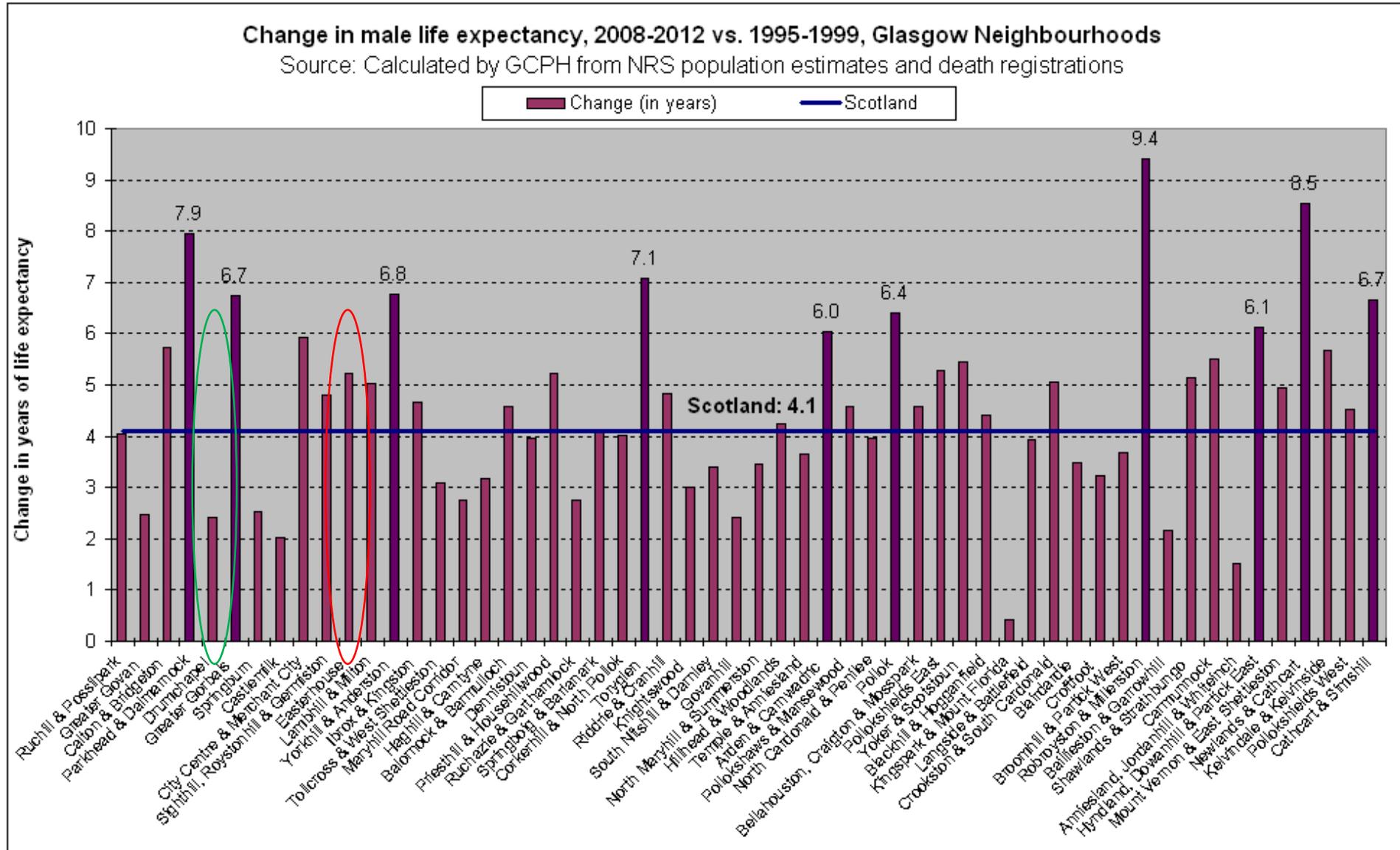
How should we respond?

- **Direct and specific causes:** action on individual features
- **Fundamental determinants:** perpetuate systematic differences, operate consistently over time regardless of changes in causes
- **Complex systems of causation:** need to understand relationships between components

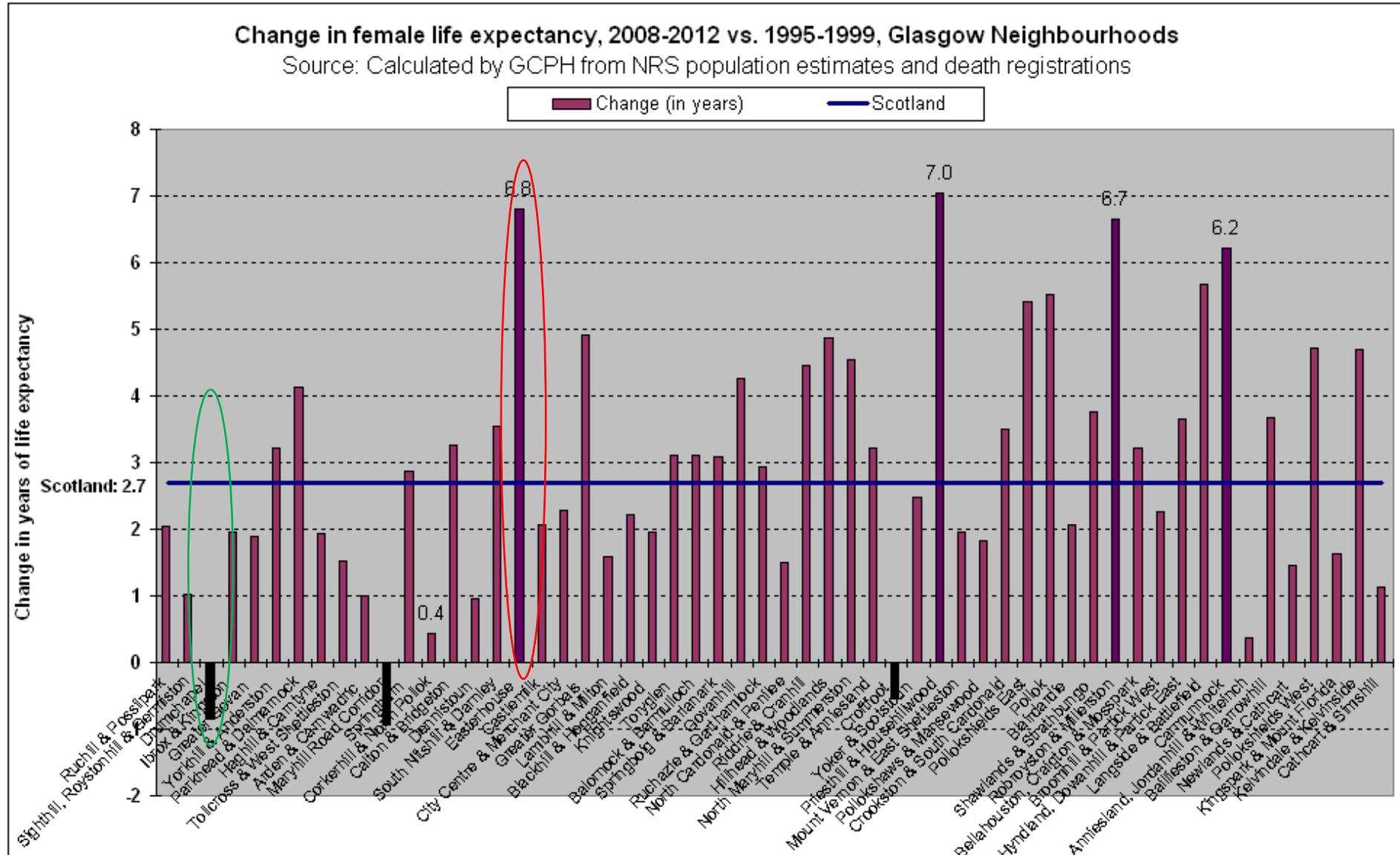
How are Scotland's places changing?

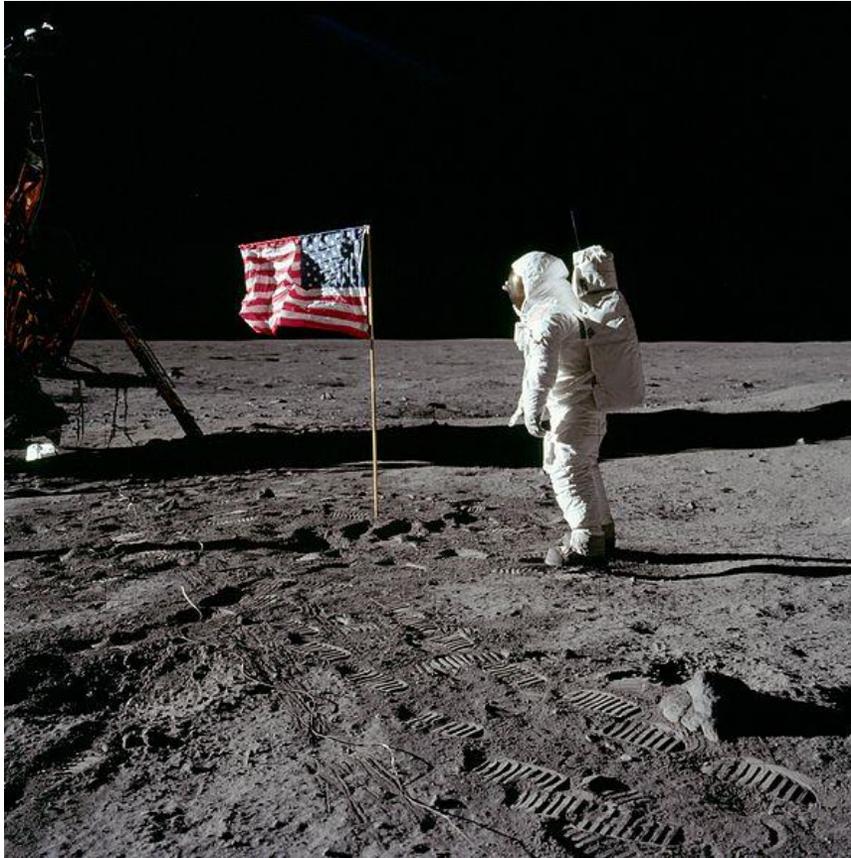
- Key messages from SIMD (Note: relative positions, not absolute levels of deprivation)
- Multiple deprivation in Scotland has become less concentrated over time:
 - Decrease in Glasgow City
 - Increases notable in Renfrewshire, Fife, E Ayrshire, N Lanarkshire
- But of the 976 datazones in 15% most deprived in SIMD 2012:
 - 77% were also in the 15% most deprived on all previous occasions
 - 5% had never been in this category before
- Similar picture for the datazones in 5% most deprived – about $\frac{3}{4}$ stay there throughout period.

Changing Male Life Expectancy: Neighbourhood level



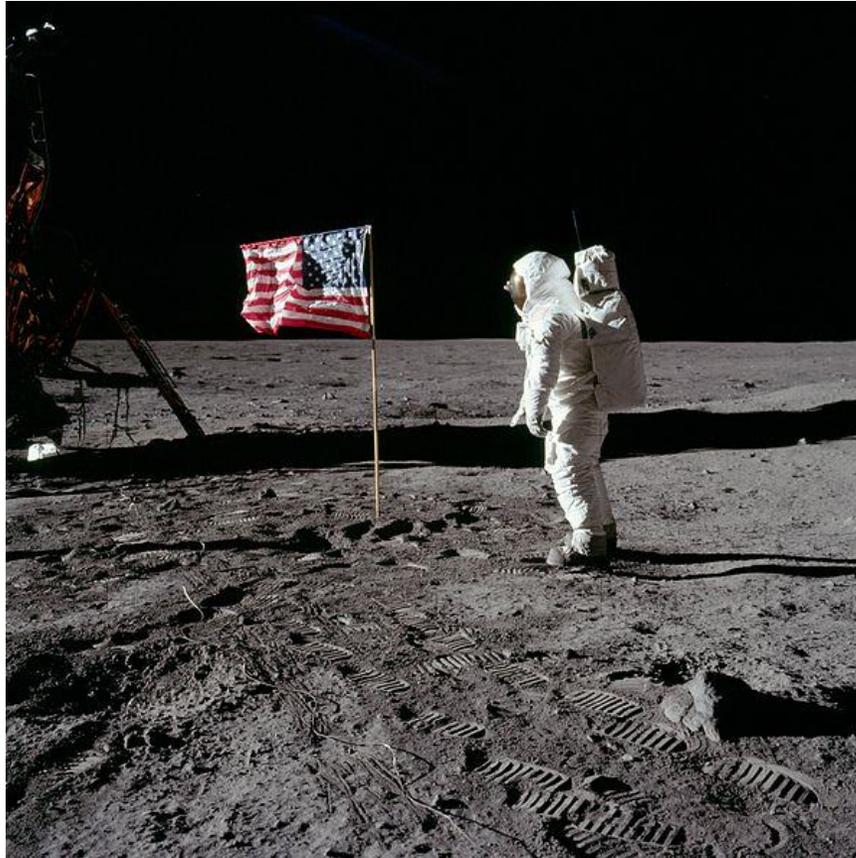
Changing Female Life Expectancy: Neighbourhood level





- Our ability to achieve desired ends is much stronger in relation to some kinds of needs than others
- Why?

Buzz Aldrin, the first moonwalk, 1969



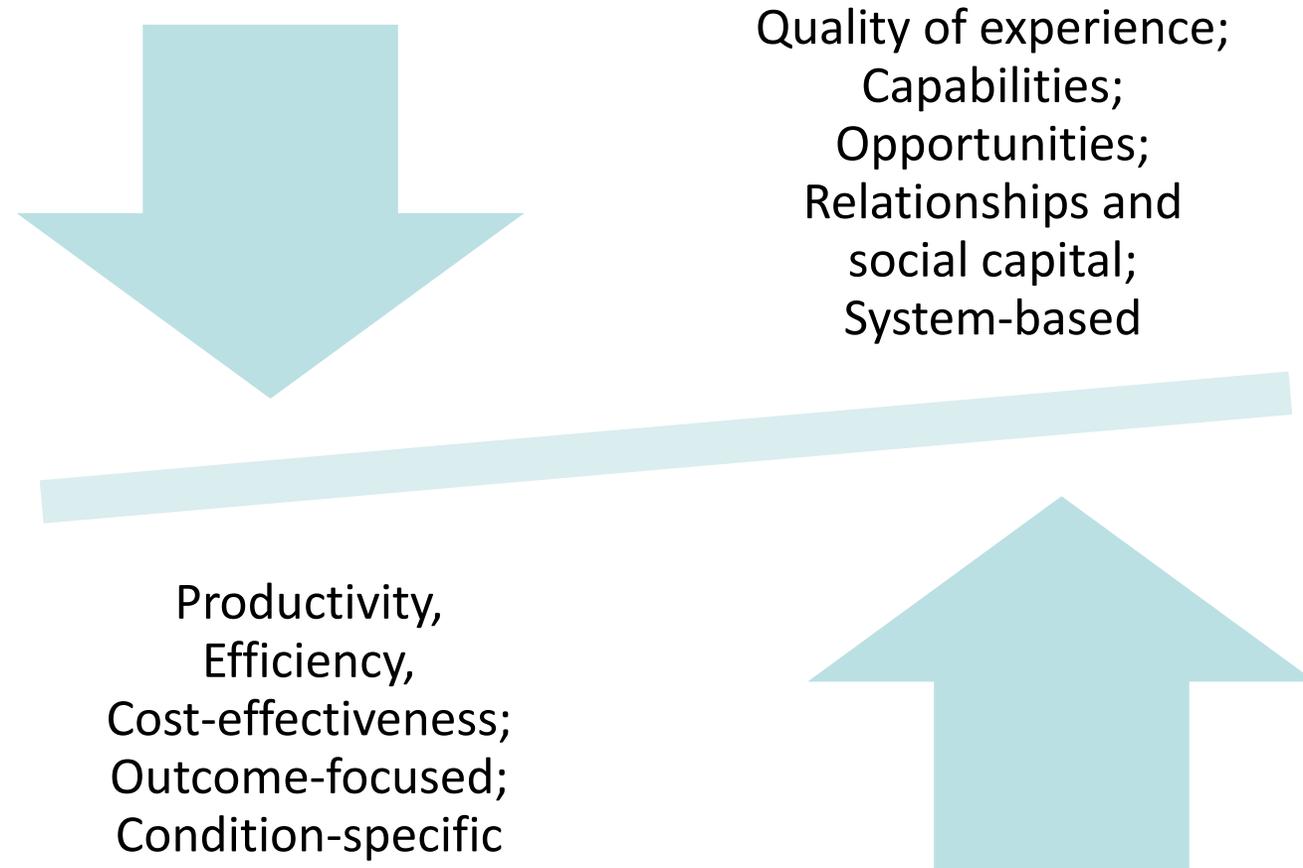
With social interventions:

there is no single method or formula
what is done and achieved will vary from
case to case

routinisation often hinders performance
flexibility, responsiveness, and context-
specific approaches are essential

Know-how “moulds and supports the practice used in a
field as performed by those skilled in the art”
(Nelson, 2010)

What might this mean for measures and approaches?



The importance of social interventions

- History shows the limitations of investing in place without also investing in people
- Better approaches and outcomes are achieved when people have choice and voice
- Scotland's challenges are increasingly 'social'
- Networks, supports and opportunities are intensely local for people in poverty
- Social capital helps people get by and get on; associated with better outcomes and lower inequality



Evaluating Sistema Scotland

#bignoiseresearch

@theGCPH

@sistemascotland



Education
Scotland
Foghlam Alba



Reviewing the literature

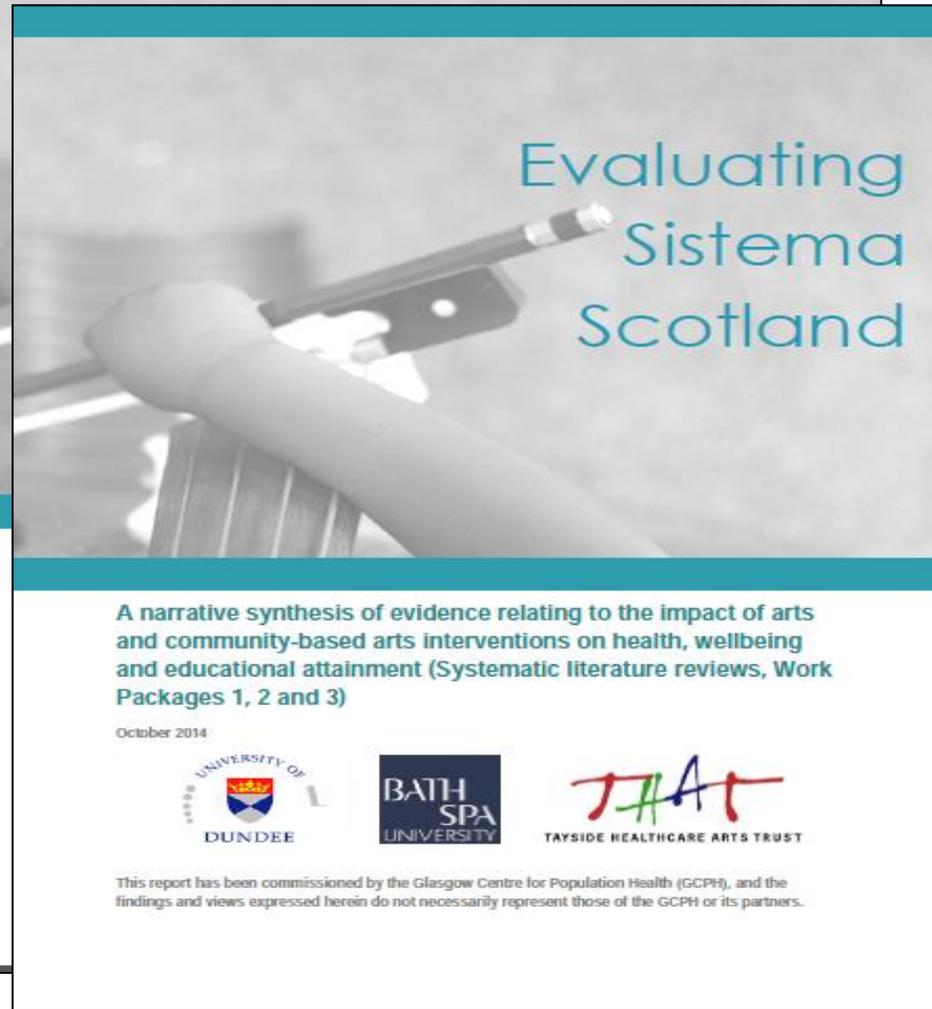
To inform this evaluation, GCPH commissioned 3 systematic literature reviews:

- 1. The impact of art attendance and participation on health and wellbeing**
- 2. 'Arts and smarts' – assessing the impact of arts participation on academic performance during the school years**
- 3. Community-based music programmes, and health and inequalities – the impact on children/adolescents and their families**

Plus

Brief synthesis of all three reviews

www.gcph.co.uk



Participation in arts can have a positive impact on health and wellbeing – most often demonstrated through impacts on mental health and wellbeing.

Some evidence that participation in arts and culture is associated with long-term survival, especially through avoidance of accidents, violence and suicide.

Regular engagement with arts and culture independently predicts a healthier, longer life in a patient population

Learning an instrument independently predicts better educational attainment and attainment

Less clear: community-based, early years, arts-based intervention and impacts on inequalities

**Pathways?
How to deliver?**



ORIGINAL ARTICLE

Visiting the cinema, concerts, museums or art exhibitions as determinant of survival: a Swedish fourteen-year cohort follow-up

Benson Boinkum Konlaan^a, Lars O Bygren¹ and Sven-Erik Johansson²

^aDepartment of Social Medicine, University of Umeå, Umeå, Sweden and ²Statistics Sweden, Department of Welfare- and Social Stockholm, Sweden

Public Health 2009; 28: 174-178

This study was to ascertain the possible influence of attending various kinds of cultural events on visiting cultural

Leisure participation predicts survival: a population-based study in Finland

MARKKU T. HYYPPÄ, JUHANI MÄKI, OLLI IMPIVAARA, ARPO AROMAA
Department of Health and Functional Capacity, National Public Health Institute

SUMMARY
The authors study whether leisure participation is an independent predictor of survival over 20 years. Of the nationally representative sample of 5000 adult Finns (Mini-Finland Health Survey), aged >30 years, the cohort of 30-59 years (n=5087) was chosen for the Cox proportional survival analysis. The sum score of leisure participation was divided in quartiles (the lowest quartile = scarce = 0-6), two intermediate quartiles = 7-11, and the highest quartile = abundant = 12-21), adjusted for statistically significant covariates (age, tobacco smoking, alcohol consumption, obesity, self-rated health and diagnosed chronic diseases), and we estimate the hazard ratio (HR) for the risk of death (ate) and 0.66, 0.52-0.84. Leisure participation was insignificant in multivariate analysis. Results show that leisure participation predicts survival in men. The significance of leisure participation for men's health.

Key words: leisure participation; survival; longitudinal survey

INTRODUCTION

Previous studies have shown that social participation, in terms of attendance at meetings and the possibility to influence decisions in organized groups and associations (Dalgard and Håheim, 1998), in terms of attendance at (some) cultural events (Bygren *et al.*, 1996; Konlaan *et al.*, 2002), in terms of engagement in social and productive activities (Glass *et al.*, 1999; Sundquist *et al.*, 2004), or in terms of religious participation (Lutgendorf *et al.*, 2004), predicts survival. Also, social ties in American men (Eng *et al.*, 2003) have been shown to predict survival. Berkman and her co-workers have developed a social participation and engagement model for the impact of social participation and engagement (Berkman *et al.*, 2000). Recently, we showed that active social participation predicted good health in 2001a; Hyyppä and colleagues (Hyyppä *et al.*, 2004) showed that social participation was associated with individual health in culturally diverse ways in culturally diverse ways in the Swedish-speaking population.

The online version of this article has been published under an open access model. Users are entitled to display the open access version of this article for non-commercial purposes provided that the original author(s) and the Journal and Oxford University Press are attributed as the original source of publication. If an article is subsequently reproduced or disseminated not in its entirety but only in part without acknowledgement of the source, it is an infringement of copyright. For commercial re-use, please contact journals.permissions@oxfordjournals.org

3. Attending cultural events and cancer mortality: A Swedish cohort study

Authors: Lars Olov Bygren ^a; Sven-Erik Johansson ^b; Benson Boinkum Konlaan ^a; Andrej M. Grjibovski ^c; Anna V. Wilkinson ^d; Michael Sjöström ^a

^a Department of Biosciences and Nutrition, Karolinska Institute, Sweden
^b Centre for Family and Community Medicine, Karolinska Institute, Sweden
^c Norwegian Institute of Public Health, Oslo, Norway
^d Department of Epidemiology, The University of Texas M.D. Anderson Cancer Center, Houston, Texas, USA

Arts & Health, Volume 1, Issue 1 March 2009, pages 64 - 73

Abstract
Attendance at cultural events is associated with better survival and self-rated health. This study aimed to determine whether attendance at cinemas, theater, art galleries, live music shows, and museums was associated with cancer-related mortality. A randomly selected, cancer-free cohort of Swedish adults aged 25-74 years (n = 9011), formed in 1990-91, was followed up to 31 December 2003. The outcome measure was cancer-related mortality. The main independent variable was a cultural attendance index. A proportional hazards analysis adjusted for age, sex, chronic conditions, disposable income, educational attainment, smoking status, leisure time physical activity, and urban/non-urban residency was conducted. Rare and moderate attendees were 3.23 (95% CI: 1.60-6.52) and 2.92 (95% CI: 1.52-5.62) times, respectively, more likely to die of cancer during the follow-up period than frequent attendees. The effect was observed only among residents of urban areas. The results, if replicated, imply that promoting attendance at cultural events could lead to improved urban population health.

Keywords: cancer; cultural participation; health promotion

The study settings

Big Noise Raploch	Big Noise Govanhill
Programme established 2008	Programme established 2013
Settled, white Scottish community (3,000)	Transient, diverse community (15,000)
Approximately 500 participants: 50% of all eligible pupils	Approximately 800 participants: 30% of all eligible pupils
Approximately 175 participants engaged in 'after-school' provision (approx. 50%)	Approximately 125 children engaged in 'after-school' provision (approx. 30%)
Participants aged six months to 16 years	Participants aged six months to nine years

First phase evaluation: Sept 2013 - May 2015

Evaluation aims

1. To assess, over the long-term, the outcomes of the Big Noise programmes in Raploch and Govanhill, in terms of social and behavioural development, educational performance and attainment and future impacts on the lives, health and wellbeing of the children and young people participating in the programmes. Additionally the social impacts at the family and community levels will be assessed. The programme impacts at a societal level will be assessed through an economic analysis which will consider the costs of the programme and the broader returns on investment.
What are the impacts at various levels?
2. To gain insight into Sistema Scotland's ethos and vision, their approaches to selecting programme sites, adapting programme delivery to local structures and requirements, local partnership working and the characteristics of the staff and implementation which are critical to enhancing inclusion, engagement and retention and achieving positive outcomes for the individual, family and community.
**How are they achieved?
(delivery)**

Components

1. Process learning, assessment of short-term impacts, and explication of impact pathways.
2. Assessment of the quality of education and learning within Big Noise Raploch.
3. Cost-benefit analysis (projected net present value) of Big Noise Govanhill.

Components

1. Process learning, assessment of short-term impacts, and explication of impact pathways.

- 1,500 hours observation, 265 individuals' views, interviews, case studies, focus groups
- Thematic analyses, multiple analysts
- Profile of engagement



- Impacts identified in short-term (<5yrs); medium-term (5-10 yrs)
- Impacts theorised in long-term : 7 impact pathways
- Process learning themes identified

Findings: impacts

1. **Short-term impacts (<5years)** Improvements observed and reported in :

- confidence, pride, aspiration, happiness, self-esteem, discipline, concentration and attitude.
- language acquisition, handwriting (Govanhill)

2. **Medium-term impacts (5-10 years)** (Raploch only)

Improvements observed and reported in:

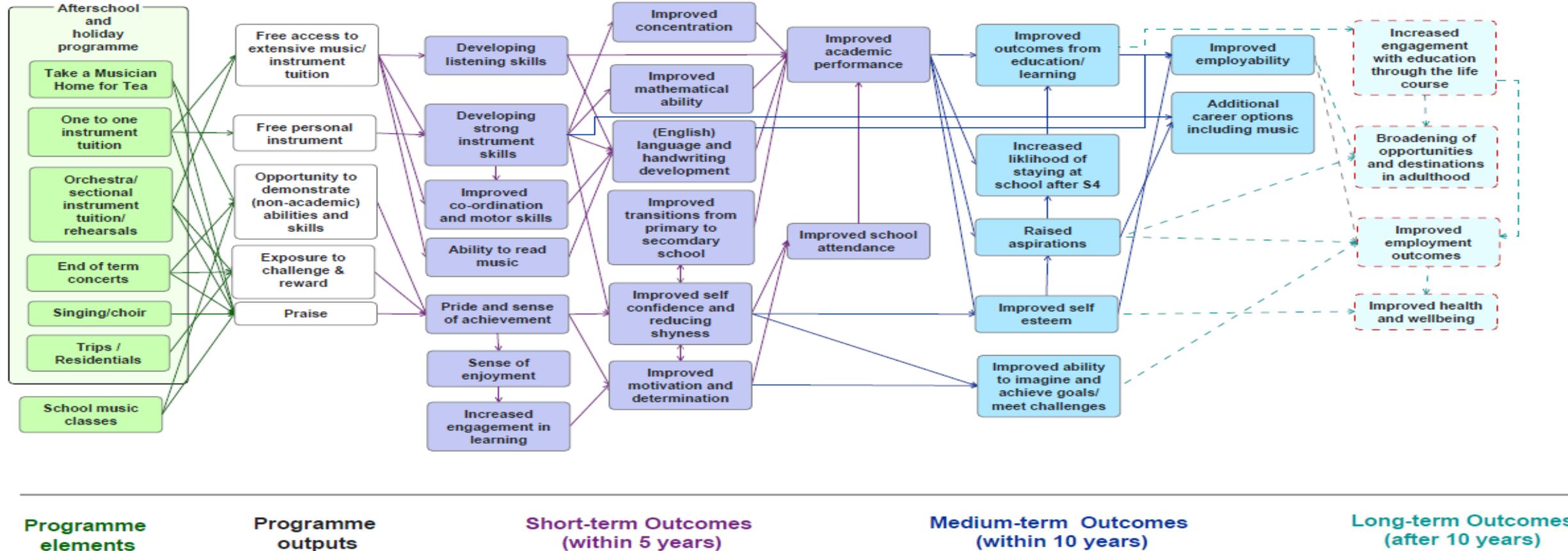
- collaboration and co-operation skills, motivation and determination, resilience, emotional intelligence, positive peer groups, engagement with arts and culture, aspiration for higher education.

3. The short-term benefits of the programme have the potential to translate favourably in economic terms as early as year six of programme delivery.

In the longer-term ...

- We will study outcomes through accessing routine data on key indicators.
- Meantime, 7 pathways to outcomes developed based on evidenced impacts and published evidence.
 - i. Boosting engagement with learning
 - ii. Developing life skills
 - iii. Securing emotional wellbeing
 - iv. Building social skills
 - v. Respite and protection
 - vi. Developing as a musician
 - vii. Encouraging healthy behaviours

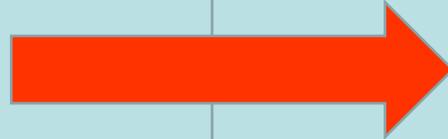
Boosting engagement with learning and education



How are the impacts achieved?

Interdependent and interwoven

Principles for delivery



Impact Pathways

How Sistema Scotland and Big Noise work...

- Longevity and commitment
- Inclusive and accessible
- Innovation and flexibility
- Intensive and immersive
- Collective learning and teaching
- Pursuit of excellence
- Focus on relationship

...underpins the impacts observed & development of pathways

- Boosting learning and education
- Developing and building life skills
- Securing emotional wellbeing
- Building social skills and networks
- Respite and protection
- Developing as a musician
- Encouraging healthy behaviours

In conclusion

- How things are done really matters.
- There were 7 features of Big Noise that, taken collectively, really define the approach.
- The children and young people participating in Big Noise are benefitting from the programme in a range of ways.
- Putting this evidence together with wider evidence, we have identified a number of pathways through which the programmes could have long-term impacts on these young people's health, wellbeing and life prospects.
- For many, those prospects are already transformed.