Health Inequalities in Scotland

Trends in the socio-economic determinants of health in Scotland

Executive summary

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Socioeconomic factors are a critical determinant of population health

Socioeconomic factors play a critical role in influencing health and health inequalities.

These socioeconomic factors include the pay, security and nature of the jobs that people do. They include households' financial security, which influences the extent to which people are exposed to stress and anxiety, the time and resources people have to adopt healthy behaviours, and their ability to secure a decent standard of living generally. They also include the physical environment in which people live, both in terms of housing – poor quality or overcrowded housing can affect health in various ways – and neighbourhoods more generally (which influence opportunities for work, play and exercise, and exposure to pollution).

The aim of this report is to examine trends in key socioeconomic determinants of health in Scotland since 1999, the year of the establishment of the Scottish parliament. The report is based on six thematic chapters which examine trends in: the labour market; household income and financial security; education and social mobility; housing; public services; and neighbourhoods. A seventh chapter examines trends in socioeconomic determinants of health during the Covid-19 pandemic and the emerging cost-of-living crisis.

The health of Scotland's population since 1999 is characterised by two key trends: persistently high health inequalities, and an unprecedented stalling in health improvement

A companion report to this by the University of Glasgow has examined trends in health and health inequalities in Scotland since 1999 (Miall et al. 2022). In broad terms, the report makes two particularly striking points:

- First, there are large and persistent inequalities in health between the most and least deprived neighbourhoods in Scotland. These inequalities are observed across a wide range of health outcomes, but are particularly striking in relation to mortality rates and healthy life expectancy. Despite a prolonged focus by policymakers on the issue, health inequalities generally show little sign of narrowing over time.
- Second, since around 2012, the long-run trend for population health to improve year-on-year has stalled. Life expectancy was no higher in 2019 – for males or females – than it was in 2014. This represents an unprecedented and abrupt stalling of progress over a five-year period. Healthy life expectancy decreased by two years between 2011 and 2019, following many years of steady improvement.

Similar broad trends are seen in the socioeconomic data

The key findings of this report, which examines trends in the socioeconomic determinants of health in Scotland, have similarities with the findings from Miall et al. In particular, we find that:

- There are large and persistent inequalities in the socioeconomic determinants of health in Scotland. Inequality of household income has remained high throughout the period. Inequalities of wealth, earnings and educational attainment are also high. While for some

indicators there have been periods of falling inequality, these periods have tended to be short-lived and resulted in fairly small reductions in inequality.

- There was an unprecedented stagnation of earnings and household incomes in Scotland (as in the UK) in the decade following 2010. Median weekly earnings were around £80 per week lower in 2021 than they would have been had earnings growth followed its long-run trend after 2010. Median household income in Scotland was no higher in 2015 than it was in 2007.

The two key trends in Scotland's population health thus share similarities with the key trends in socioeconomic determinants of health in Scotland. There are wide inequalities in health and the socioeconomic determinants of health; and the post-2010 period has seen a slowdown in improvement in life expectancy and living standards.

The fact that similar trends are observed in the health and socioeconomic data does not necessarily mean that one causes the other – the slowdown in health improvement may not be entirely caused by the slowdown in socioeconomic improvement. But given what we know about how socioeconomic factors influence health, we should not be surprised that trends are similar.

The focus of this report is to set out those socioeconomic trends in more detail.

Earnings growth has stagnated and earnings inequality is relatively high

The nature of work can affect people's health in a variety of ways: the nature of the work itself, the level and security of earnings it provides, and the extent to which it provides autonomy and flexibility for employees.

The most significant development in the labour market of the past 22 years has been the unprecedented wage stagnation during and following the financial crisis. Inequality of earnings in Scotland has if anything tended to fall slightly since 2010, although earnings inequality remains higher in Scotland than in many European comparators (and substantially higher than in the Nordic countries).

The past decade has seen some increase in less secure contract types and low-paid self-employed work. However there is little evidence of any widespread increase in subjective job-insecurity, or a fall in job satisfaction across the workforce as a whole.

Another measure of dissatisfaction from work is underemployment, i.e. the proportion of workers who want to work longer hours. Underemployment rates in Scotland increased sharply after the financial crisis (from 7% to 11%), but have now returned to around 8%. Insecure work and underemployment are much more likely to be experienced by younger and lower-paid workers.

Additionally, in-work poverty in Scotland has increased. Over 60% of adults living in poverty live in a household where at least one person works, up from 48% in 1999. This trend largely reflects changes to factors that affect household income, rather than a growth in the proportion of people in low-paying jobs.

Health reasons for economic inactivity have changed over time

The proportion of working age people in Scotland who are economically inactive because of long-term health problems declined from around 7.5% in the mid-2000s to around 5% in the mid-2010s. This decline reflects a fall in the prevalence of musculoskeletal and cardio-vascular problems. However, since the mid-2010s the proportion of working-age people in Scotland who are

economically inactive because of health reasons has begun to increase. This is driven by a rise in the prevalence of depression and mental health problems as causes of inactivity.

The trends over time in Scotland mirror those in the UK. But the proportion of working age people who are inactive for health reasons has consistently been around 1-2 percentage points higher in Scotland than in the UK as a whole. However, this does not mean that inactivity rates in Scotland have been higher, but merely that people in Scotland who are inactive are more likely to cite health as the main reason for inactivity, and less likely to cite other factors, such as caring responsibilities, as the main reason for inactivity.

Household income in Scotland since 1999: a tale of two halves

The income and financial security of households is arguably one of the most critical socioeconomic determinants of health. Income affects health directly by influencing the extent to which households can engage in healthy behaviours and through its effect on mental health. Income also affects health indirectly via its role in shaping inequalities in other socioeconomic determinants of health, such as housing and educational attainment.

Trends in household incomes in Scotland in the period since 1999 can be considered in two parts. Over the first decade to 2009, household incomes generally grew reasonably robustly year on year, and there was some modest increase in inequality of household income. The distinguishing feature of the second decade to 2019 was an unprecedented stagnation in incomes.

Household income and wealth inequalities remain persistently high

The period since 1999 has seen only modest, if any, increases in household income inequality in Scotland across most of the population. This observation however needs to be seen in the context of two important factors.

- First is that income inequality in Scotland is relatively high in an international context. This is largely a legacy of big increases in inequality in the 1980s and early 1990s.
- Second, whilst household inequality across most of the population has remained largely unchanged since 1999, inequality has increased at the tails of the distribution. In other words, the very poorest have become poorer than everyone else, and the very richest have become richer than everyone else. This detachment of the very poorest in society from everyone else has interesting parallels with findings from the companion report from the University of Glasgow (Miall et al. 2022) which showed that on some measures, the health of people in the most deprived areas of Scotland has become detached from that of people in less deprived areas.

Furthermore, there are large and persistent inequalities in income and financial security between different groups. Household incomes are lower amongst ethnic minorities, amongst people with a disability, amongst the lower-qualified, than average. These differences are reflected in other measures of income disadvantage. Food insecurity is much more likely to be experienced by lone parents than for other household types.

Most of these inequalities between groups have remained remarkably persistent over the past 20 – 25 years, mirroring the persistence of health inequalities in Scotland.

Our report also finds extremely high levels of wealth inequality in Scotland. 92% of household wealth is owned by half of households, and 45% of wealth is held by just ten per cent of households. There

is little evidence that the distribution of wealth has become more dispersed over the last 10 years, despite a substantial increase in the overall value of wealth held by households.

Having fallen, poverty is on the rise again

If there is some good news, it is in the fact that the proportion of the population living in relative poverty fell significantly during the period from 1999 until around 2012, from around 23% to 18%. The relative poverty rate in Scotland is not too dissimilar from the average observed in European countries.

However, more recently – since about 2015 – the proportion of the population in both relative poverty and extreme poverty has been on a slow but persistent upward trend, mainly reflecting changes to working age social security benefits. The recent upward trend is particular marked for child poverty. The relative poverty rate is slightly lower in Scotland than in the UK as a whole, largely because housing costs tend to be somewhat lower.

Large socioeconomic gaps in educational attainment exist from the first year of school through to higher education

Educational attainment is associated with better health outcomes, partly since education is associated with income security, and more secure employment.

Inequalities in educational attainment in Scotland are high, and exist at all levels of education, from Primary 1 through to higher education. At primary level for example, the proportion of pupils from the most deprived neighbourhoods reaching the expected level on the Curriculum for Excellence is around 15-20 percentage points lower than amongst pupils from the least deprived neighbourhoods. Attainment gaps are even higher at senior levels, and in terms of access to higher education.

To the extent that international comparisons are possible, pupils' socioeconomic background is slightly less important in influencing pupils' attainment in Scotland than is the case in England and in many other countries. But socioeconomic background is more important in determining outcomes in Scotland than in several comparator countries.

Inequalities in educational attainment in Scotland have generally remained fairly persistent over time. This persistence is arguably not surprising, given the persistence of broader socioeconomic inequalities of income, wealth and financial security. Inequalities in households resources and financial circumstances are a major determinant of the socioeconomic gap in educational attainment. It seems unlikely that we will make significant progress in closing the socioeconomic gap in attainment until these broader socioeconomic inequalities are addressed.

Intergenerational social mobility in Scotland is low

The existence of these poverty-related attainment gaps reflects the way that parents from relatively more advantaged backgrounds are able to transfer these advantages to their children in a variety of ways. These may include financial mechanisms (better-off parents are better able to provide their children with resources that support learning and development), and non-financial (whether that is through connections to schools or employers, or simply through being able to spend more time with children to support their development).

Another way of looking at the transfer of opportunity across generations is through the concept of social mobility, which measures the extent to which people's education, income or jobs are

associated with those of their parents. In Scotland, the occupations that people have as adults are strongly associated with those that their parents had. We find for example that people whose parents worked in higher paid managerial or professional occupations are over two times more likely to work in similar occupations as adults, compared to people whose parents did not work in those occupations. There is no evidence that intergenerational occupational mobility is improving for younger cohorts compared to older cohorts.

People in Scotland who grow up in a household where nobody was in work are more likely not to work as adults than those who grow up in a household where at least one person is employed. One of the mechanisms that accounts for this result is ill-health, with adults who grow up in a household where nobody is in work much more likely to suffer activity-limiting health problems as adults.

Housing inequalities are shaped by changing tenure patterns

The quality and affordability of housing can affect health in a variety a ways, from the stress that high-cost or poor-quality housing imposes on occupants, to the physiological impacts of living in over-crowded, damp or cold homes.

A key theme over the past twenty years has been the growth in the share of households in the private rental sector. This continues a trend that started pre-devolution. In general, the private rented sector is associated with higher costs and lower quality compared to owner occupation and social housing.

Housing-related benefits played a key role in limiting the impact of higher housing costs on lower-income households, but since 2010, reforms have reduced the protection offered, meaning that housing costs as a proportion of income have risen for the lowest-income households.

There is a clear income gradient with regard to the quality of housing. Lower-income households are more likely to live in houses with damp and mould, are less likely to be able to keep their home warm in the winter, and are more likely to have to deal with external noise, which can contribute to stress and anxiety, and disrupt sleep. People's perceptions of their immediate neighbourhood have also worsened over the past ten years, with experiences of antisocial behaviour increasing.

Air quality has improved…

The characteristics of the places where people live can influence health. One way in which places affect health is through environmental quality.

A more positive development during the past 25 years has been a reasonably consistent improvement in air quality in Scotland, with concentrations of health-harming pollutants including particulate matter and nitrous oxide tending to fall.

…but there remain large spatial disparities in health and the socioeconomic determinants of health

However, the story on some other place-based aspects of the socioeconomy is less positive. People's perceptions of their immediate neighbourhood have worsened over the past ten years, with experience of antisocial behaviour increasing. Worsening perceptions of local neighbourhoods are concerning, as it may lead to people being less likely to socialise or exercise in their neighbourhood, with negative impacts on health.

More broadly there is significant variation in the socioeconomic determinants of health across Scotland's local authority areas. For example, recent data shows that typical weekly earnings range

from £390 in Inverclyde to closer to £600 in East Dunbartonshire. The majority of such variation is attributable to differences in the characteristics and attributes of the people living in those areas, rather than the effect of 'place' itself. But even if spatial variation is attributable largely to 'people' rather than 'places', the resulting spatial variation in socioeconomic factors is important. This is in part because it can further accentuate other forms of inequality, such as education or employment, due to the way it concentrates advantage or disadvantage in particular places.

There is huge variation in rates of child poverty across Scottish local authority areas, from 10% in Shetland and East Dunbartonshire to 30% in Glasgow in the most recent data. In this context it is not surprising that health also varies so markedly across local authority areas.

Austerity policies have contributed to the stalling of longterm health improvement

The financial crisis of 2007/8 preceded, as we noted above, an unprecedented period of stagnation in earnings and living standards. This coincided with the era of 'austerity' – a fiscal consolidation, achived largely through public spending reductions, at a time of economic weakness.

The fact that the post-2010 period has seen the coinciding of an unprecedented period of real-terms public spending retrenchment (austerity), an unprecedented stagnation of household incomes, and an unprecedented stalling in improvements in mortality and life expectancy, naturally leads to questions about the degree of causality between these things.

Public spending constraint in the period since 2010 is undoubtedly an important contributory factor to the slowdown in health improvement since then.

Arguably the most obvious immediate channel through which this occurred was in terms of the slowdown in public spending on health and social care. Whilst spending on health and social care was 'protected' from cuts during the austerity period, spending increased much more slowly than it had done in previous years, and did not increase in line with the needs associated with a growing and ageing population and increases in treatment costs. In Scotland, spending on health increased by less than one percent a year in the decade after 2009, compared to 3-4% per annum in the previous decade. By 2019/20, health spending was over £3bn less than it would have been had the trend prior to 2010 continued. This slowdown in funding of health and social care services is likely to have increased mortality rates, in turn impacting on life expectancy.

The impact of austerity policies on health is likely to be lagged, so it is possible that some of the impact of austerity may be yet to reveal itself in data. This could be the case of any number of policies that support population health, wellbeing or social inclusion more generally.

Austerity policies may also affect health in the short-term on dimensions other than mortality and life expectancy. For example, there is evidence that changes to working-age social security since 2010, including a greater emphasis on conditionality in the years immediately after 2010, and real terms cuts in the period 2015-19, have been linked to increased prevalence of anxiety and mental health issues. This in turn may make those affected more vulnerable to other health problems in future. (It is too early to assess the effect of more recent benefit changes, including the devolution of some social security payments to the Scottish parliament). Cuts to local government services may have similar effects.

More generally, it is difficult to separate the effects on health of changes in household income associated with cuts to social security benefits, from changes in income associated with the unprecedented earnings stagnation. Austerity arguably did contribute to weak earnings growth post-

2010 via its impact on aggregate demand. But factors other than just austerity have been at play in shaping the slowdown in earnings.

The unequal health impacts of Covid-19 were shaped by socioeconomic inequalities

The health impact of the Covid-19 pandemic was extremely unevenly felt. Age-standardised Covid-19 mortality rates were over twice as high amongst people living in the most deprived fifth of neighbourhoods compared to those living in the least deprived fifth of neighbourhoods. They were also notably higher amongst the most deprived neighbourhoods compared to the second-most deprived quintile of neighbourhoods.

These inequalities in health impact were strongly determined by socioeconomic factors. Lower income households were more exposed to the virus given that workers in those households were less likely to be able to work from home. Lower-income households were also more vulnerable to the virus as a result of their housing circumstances, and because people living in those households were more likely to have pre-existing health conditions.

The pandemic is also likely to leave a legacy of higher socioeconomic inequality, but the future persistence of the pandemic's effect is uncertain

The Covid-19 pandemic, and its associated restrictions, also resulted in significant increases in inequalities in educational attainment. It seems likely that it has also resulted in an increase in wealth inequality.

What we do not know at the moment is the extent to which the impact of the pandemic on educational inequalities will persist for the cohort of pupils affected, and the extent to which the impacts might prove transitory.

So far, the impact of the pandemic on labour markets appears to have been less significant than many people thought it would. By mid-2022, the structure of the labour market does not look too different from how it looked pre-pandemic. However, the employment rates of some groups – particularly those with few qualifications and older men - has not yet returned to pre-pandemic rates.

Economic inactivity remains slightly elevated compared its pre-pandemic rates, but only marginally so. There is an ongoing debate about the extent to which heightened inactivity reflects early retirement for voluntary reasons or withdrawal from the labour market for health reasons.

The cost-of-living crisis poses a significant threat to population health

The cost-of-living crisis, which emerged fairly abruptly at the beginning of 2022, will result in large falls in household disposable incomes during 2022 and 2023. The crisis is clearly affecting low-income households proportionately more than high-income households. This reflects the greater share of poorer households' spending on energy and food, the items which are seeing the largest price rises, combined with poorer households' more limited access to savings, and more limited ability to absorb the effects of price rises by substituting onto cheaper product lines.

The UK government interventions to mitigate the cost-of-living crisis announced in September 2022 are substantial and despite some changes in policy since then, they will go a long way towards mitigating what would otherwise have been a catastrophic fall in livings standards for those with the lowest income.

But even with this intervention the forthcoming winter will be extremely challenging for many households. Households facing rising food and energy costs within the context of a limited budget will have to make difficult decisions about where to cutback, with negative consequences for health.

Conclusions: addressing socioeconomic inequality and stagnation in living standards is essential to reverse stalling health improvements and reduce health inequalities

The health of the population, and health inequalities within the population, are shaped by social and economic circumstances.

The health of Scotland's population during the past 25 years has been characterised by two key issues: persistently high health inequalities, and an unprecedented stalling of improvements in health since around 2012.

These two health trends have similarities in the socioeconomic data: persistently high socioeconomic inequalities, and an unprecedented stagnation of earnings and incomes since around 2010. It cannot be said that these socioeconomic trends are the sole cause of the contemporaneous health slowdown. But these trends in Scotland's socioeconomy, combined with a prolonged funding squeeze on public services, have undoubtedly contributed to the recent stalling in improvement in health. Socioeconomic factors are likely to effect health with a lag, so it is possible that some of the impacts of the last decade's slowdown in economic improvement will continue to affect mortality trends in future years.

Only by addressing these socioeconomic challenges can we expect to make meaningful progress in reducing Scotland's wide health inequalities, and in reversing the recent stalling in mortality improvement.

Addressing these issues will be challenging but is feasible given sufficient political will. Indeed the period from 1999 to around 2010 did witness a number of improvements in the socioeconomic determinants of health in Scotland. Poverty fell, incomes grew, employment increased. In recent years however, more indicators have had a tendency to move in the wrong direction.

The aim of this report has been to describe the nature of inequalities in the socioeconomic determinants of health in Scotland, but not to make specific recommendations about how those inequalities should be addressed. A subsequent report, produced by The Health Foundation, advised by a group of leading experts on public health and the economy, will consider how Scotland can build on strong policy intent to reverse stubbornly high inequalities in the socio economic determinants of health, and create a sustainable approach to closing the gap in health outcomes.

As reiterated in the Marmot Review, health and health inequalities are good measures of how well society is doing: how well it is creating the conditions for people to lead lives they have reason to value. Scotland can, and should, do better.

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