

Health Equity Research: The Scottish Health Equity Research Unit (SHERU)

Professor Katherine (Kat) Smith
Allison Catalano

December 2024



Scottish Health Equity
Research Unit

Insights, analysis and action on the socio-economic factors
that shape health

What is the Scottish Health Equity Research Unit?

Kat Smith



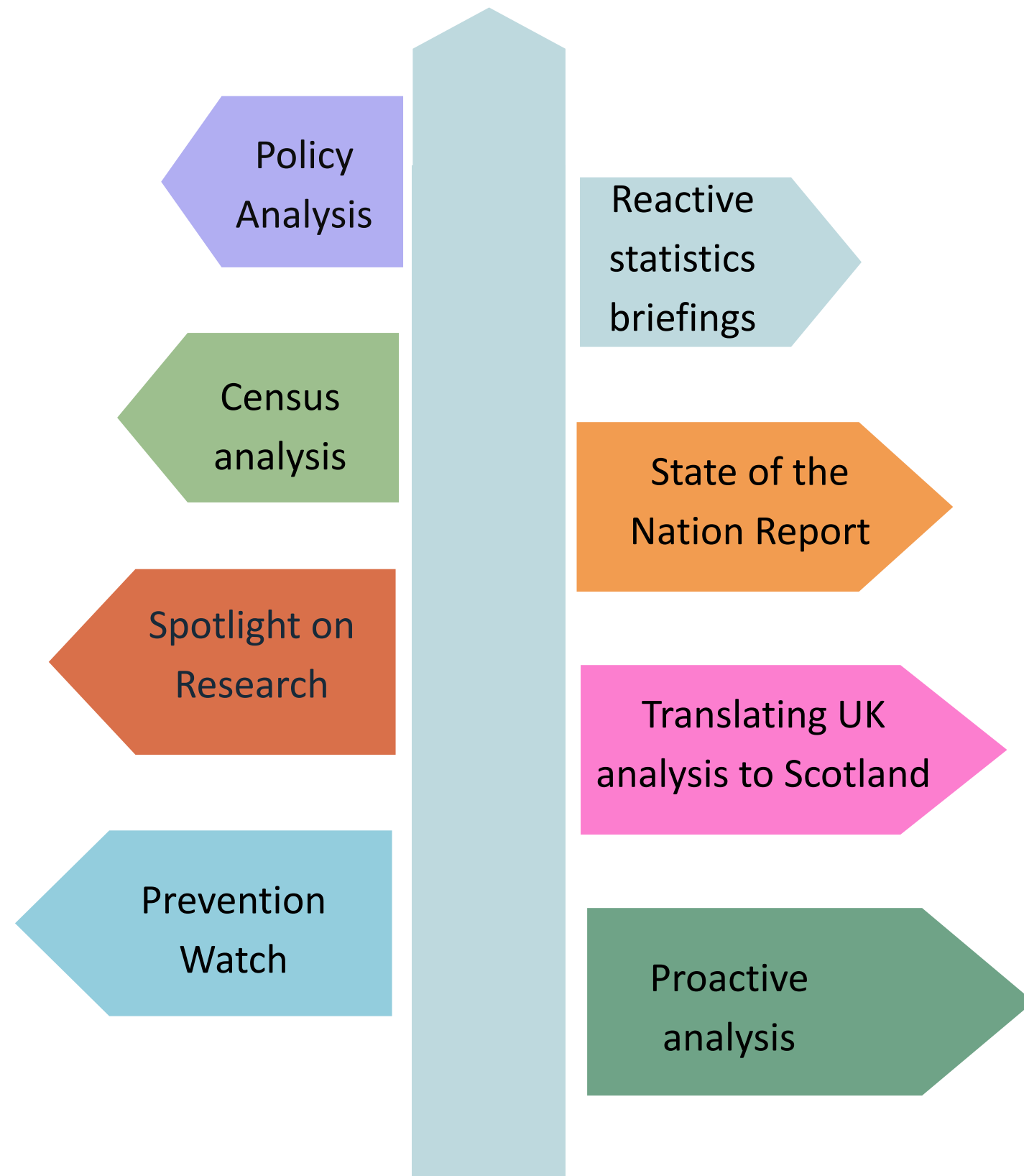
About us

The Scottish Health Equity Research Unit (SHERU) was set up in 2024 to provide insights and analysis on the socio-economic factors that shape health, following a Health Foundation 2022-2023 review.

The unit is a collaboration between the University of Strathclyde's Centre for Health Policy and Fraser of Allander Institute, and is funded by the Health Foundation.



SHERU Outputs



Policy Analysis

June 24: Census Analysis

Dec 24 – Jan 25: Analysis of *Housing to 2040*'s potential to contribute to reducing health inequalities

Reactive stats briefings

Aug 24: Educational attainment

Sept 24: Alcohol specific deaths

Oct 24: Homelessness and Life Expectancy

Census analysis

Nov 24: Analysis of Scotland's census to explore changes in health and socioeconomic inequality since 2011

State of the Nation style annual report

Sept 24: SHERU's annual assessment of progress in tackling health and underpinning socioeconomic inequalities in Scotland

Spotlight on Research

Aug 24: New RCTs of health impacts of cash transfers

Forthcoming: Social Murder? (new book)

Translating UK analysis to Scotland

Sept 24: Housing

Forthcoming: Disability benefits

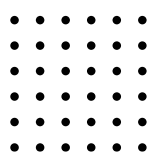
Prevention Watch

Oct 24: Introduction to Prevention Watch

Forthcoming: Prevention in the Scottish budget

Proactive Analysis

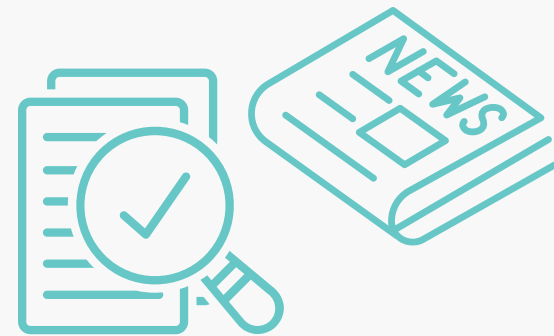
Forthcoming series (currently considering 15 topics...)



4 key areas of work

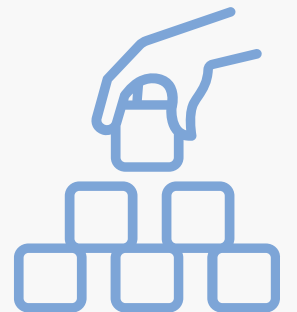
01

COMMENTARY AND
ANALYSIS



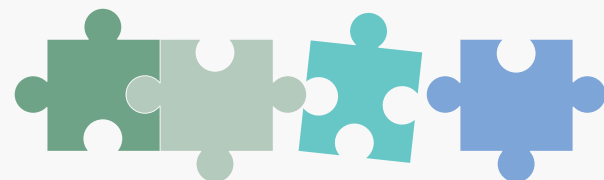
03

ENHANCING THE
EVIDENCE BASE



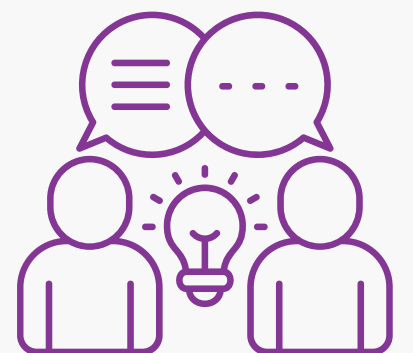
02

STRENGTHENING
POLICY
IMPLEMENTATION



04

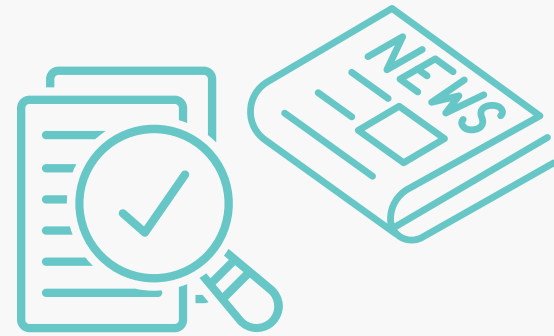
ENGAGEMENT



Key area of work

01

COMMENTARY AND
ANALYSIS



2024 Inequality Landscape

Health and Socioeconomic
Divides in Scotland

Allison Catalano
Emma Congreve
David Jack
Katherine Smith

September 2024

This report looks at six topics:

- Trends in health inequality
- Poverty and household income inequality
- Employment
- Education
- Housing and homelessness
- Populations of concern: Families with children and Young adult men

The report brings together:

- Changes and outcome gaps in data since 2019
- The policy context surrounding each topic
- Spotlights on relevant policy areas or findings
- Thoughts on how to improve our understanding of trends
- Qualitative research behind the trends

Spotlight on Research

Two new studies on the health impacts of cash transfers

Katherine Smith
August 2024

“directly reducing
poverty via cash
transfers was not
effective at improving
health outcomes”

“policies that seek to
alleviate poverty by
providing income support
may have important
benefits for health and
access to care”

Research

JAMA | Original Investigation

Effect of Cash Benefits on Health Care Utilization and Health A Randomized Study

Sumit D. Agarwal, MD, MPH, PhD; Benjamin Lâ Cook, PhD; Jeffrey B. Liebman, PhD

IMPORTANCE Poverty is associated with greater barriers to health care and worse health outcomes, but it remains unclear whether income support can improve health.

OBJECTIVE To examine the effect of cash benefits on health care utilization and health.

DESIGN, SETTING, AND PARTICIPANTS The City of Chelsea, Massachusetts, a low-income community near Boston, randomly assigned individuals by lottery to receive cash benefits. Participants' medical records were linked across multiple health systems. Outcomes were assessed during the intervention period from November 24, 2020, to August 31, 2021.

INTERVENTION Cash benefits via debit card of up to \$400 per month for 9 months.

MAIN OUTCOMES AND MEASURES The primary outcome was emergency department visits. Secondary outcomes included specific types of emergency department visits, outpatient use overall and by specialty, COVID-19 vaccination, and biomarkers such as cholesterol levels.

RESULTS Among 2880 individuals who applied for the lottery, mean age was 45.1 years and 77% were female. The 1746 participants randomized to receive the cash benefits had significantly fewer emergency department visits compared with the control group (2171 vs 3175 emergency department visits per 1000 persons; adjusted difference, -87.0 per 1000 persons [95% CI, -160.2 to -13.8]). This included reductions in emergency department visits related to behavioral health (-21.6 visits per 1000 persons [95% CI, -40.2 to -3.1]) and substance use (-12.8 visits per 1000 persons [95% CI, -25.0 to -0.6]) as well as those that resulted in a hospitalization (-27.3 visits per 1000 persons [95% CI, -53.6 to -1.1]). The cash benefit had no statistically significant effect on total outpatient visits (424.3 visits per 1000 persons [95% CI, -118.6 to 967.2]), visits to primary care (-90.4 visits per 1000 persons [95% CI, -308.1 to 127.2]), or outpatient behavioral health (83.5 visits per 1000 persons [95% CI, -182.9 to 349.9]). Outpatient visits to other subspecialties were higher in the cash benefit group compared with the control group (303.1 visits per 1000 persons [95% CI, 32.9 to 573.2]), particularly for individuals without a car. The cash benefit had no statistically significant effect on COVID-19 vaccination, blood pressure, body weight, glycated hemoglobin, or cholesterol level.

CONCLUSIONS AND RELEVANCE In this randomized study, individuals who received a cash benefit had significantly fewer emergency department visits, including those related to behavioral health and substance use, fewer admissions to the hospital from the emergency department, and increased use of outpatient subspecialty care. Study results suggest that policies that seek to alleviate poverty by providing income support may have important benefits for health and access to care.

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Corresponding Author: Sumit D. Agarwal, MD, MPH, PhD, Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital, 75 Francis St, Boston, MA 02115 (sagarwal14@bwh.harvard.edu).

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Visual Abstract
Supplemental content

81

NBER WORKING PAPER SERIES

DOES INCOME AFFECT HEALTH? EVIDENCE FROM
A RANDOMIZED CONTROLLED TRIAL OF A GUARANTEED INCOME

Sarah Miller
Elizabeth Rhodes
Alexander W. Bartik
David E. Broockman
Patrick K. Krause
Eva Vivalt

Working Paper 32711
<http://www.nber.org/papers/w32711>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
July 2024

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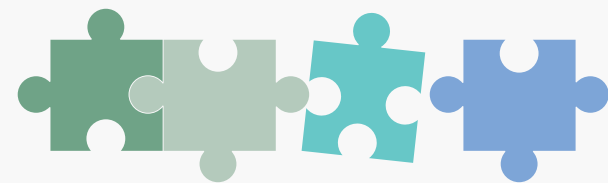
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Key area of work

02

STRENGTHENING
POLICY
IMPLEMENTATION



Strengthening Policy Implementation

SHERU definition of 'implementation gap': the gap between policy intent and lived realities (so policy formulation in remit)

What we said we'd do:



Progress by launch event in Sept:

- Had developed criteria for selecting policy topics
- Had applied these to identify:
 - Housing
 - Employability
- Had begun public procurement process
- Had recruited Research Fellow to support this work

Update:

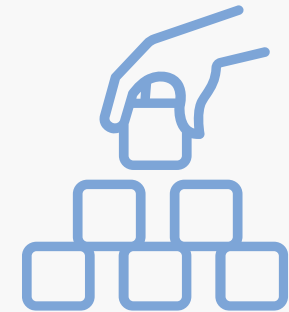
- Public procurement complete and ALS and peer-researcher contracts signed:
 - Community Renewal Trust (ALS)
 - Scottish Community Development Centre and Poverty Alliance (Peer-Researcher)
- Inception meetings complete. Now finalising ethics & design.
- Fiona McHardy commenced in post 1st October
- Scoping research and stakeholder engagement undertaken on both topics, especially housing, leading to a more specific focus on:
 - Housing to 2040
 - No One left Behind
- Have begun national level housing analysis
- Have begun approaching local areas (aiming to choose two) and are **really interested to hear from anyone with thoughts on this.**



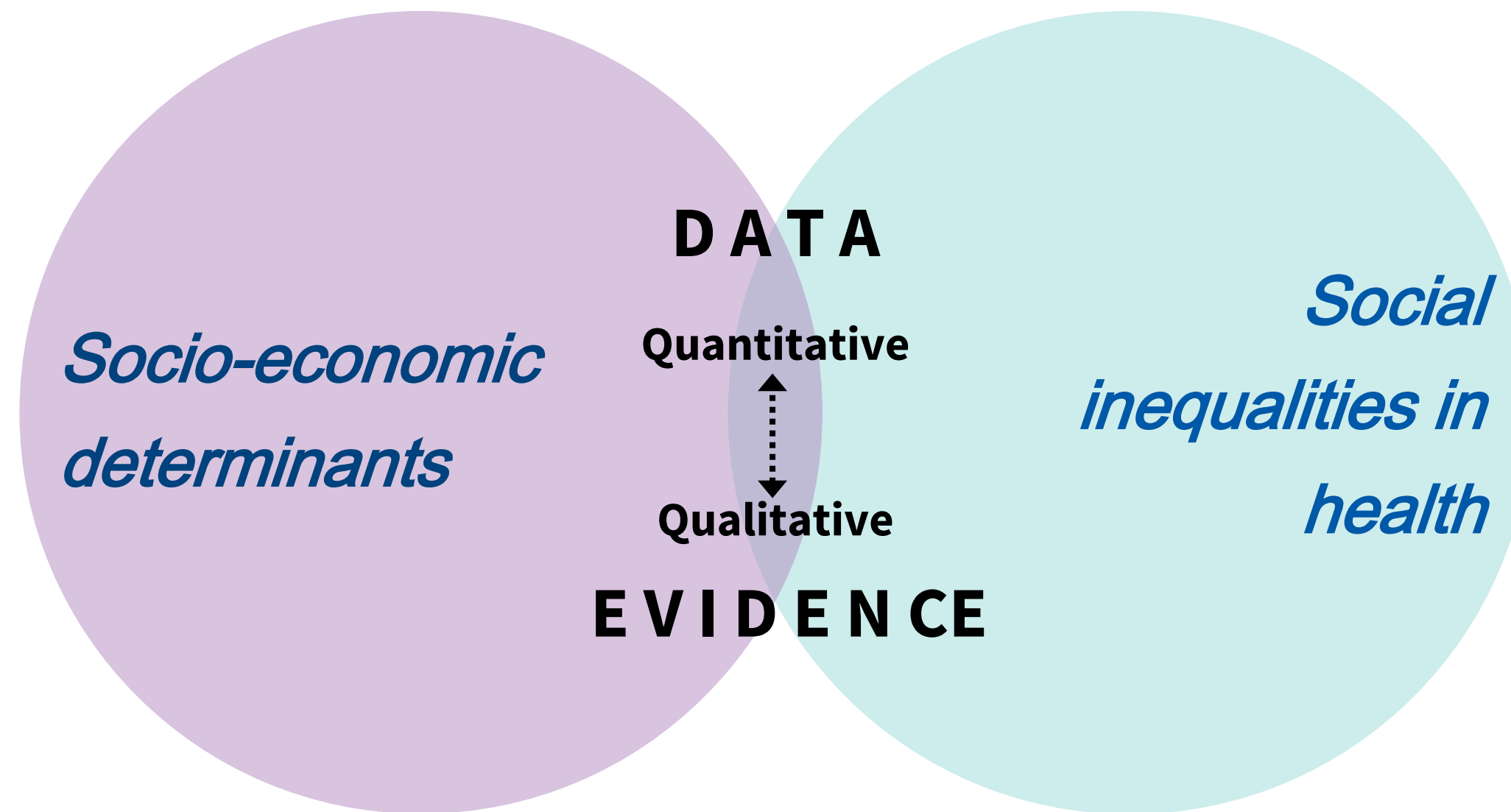
Key area of work

03

ENHANCING THE
EVIDENCE BASE



Enhancing the evidence base



1. **Improving accessibility & visibility** (e.g. census deep dives)
2. **Enriching the data landscape** (e.g. exploring potential of personal data stores to support efforts to address data gaps and linkage)
3. **Reaching the feasibility frontier:** how do we get more out of existing data? (e.g. working with data controllers, broadening analysis beyond SIMD)



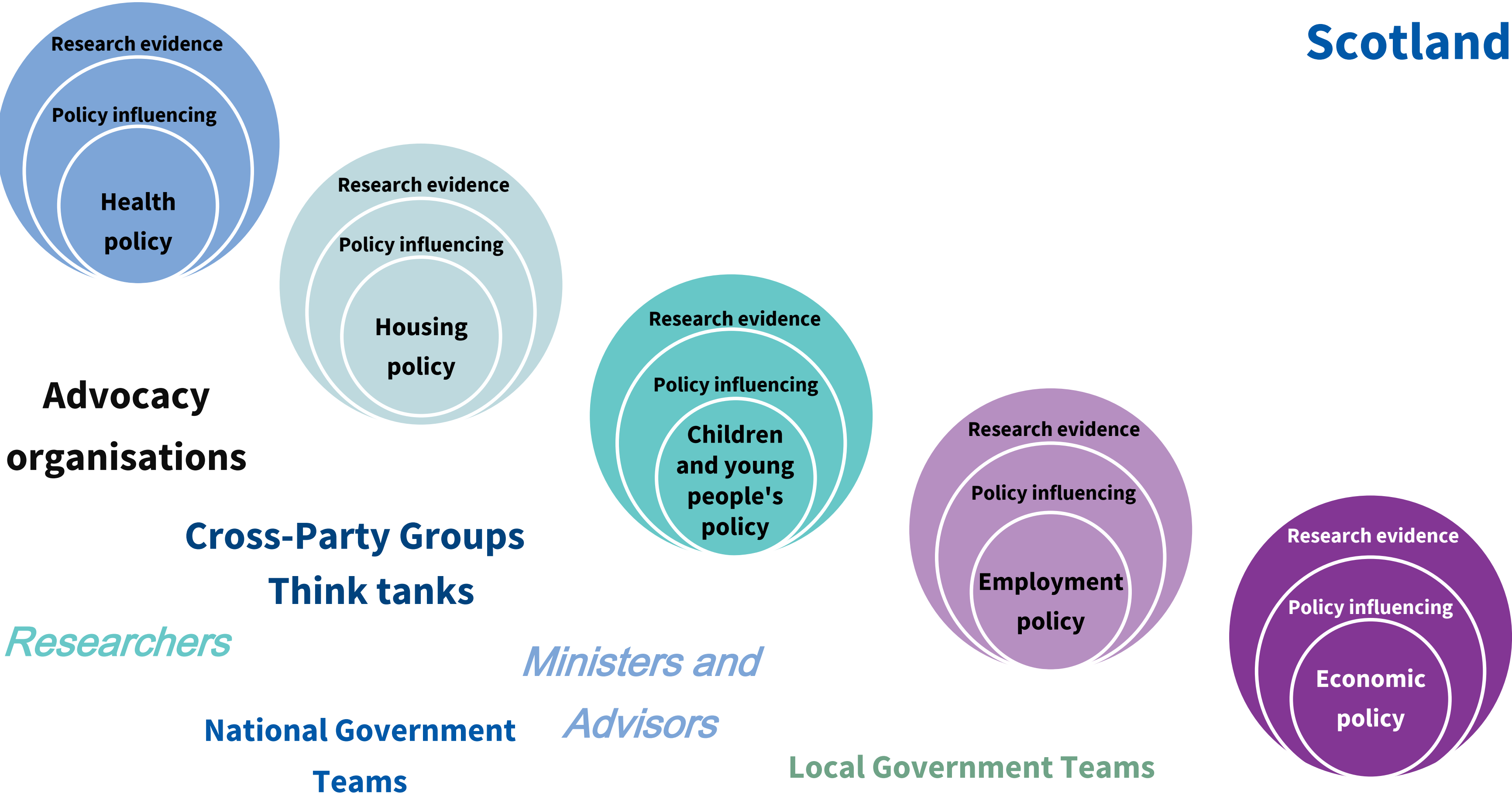
Key area of work

04

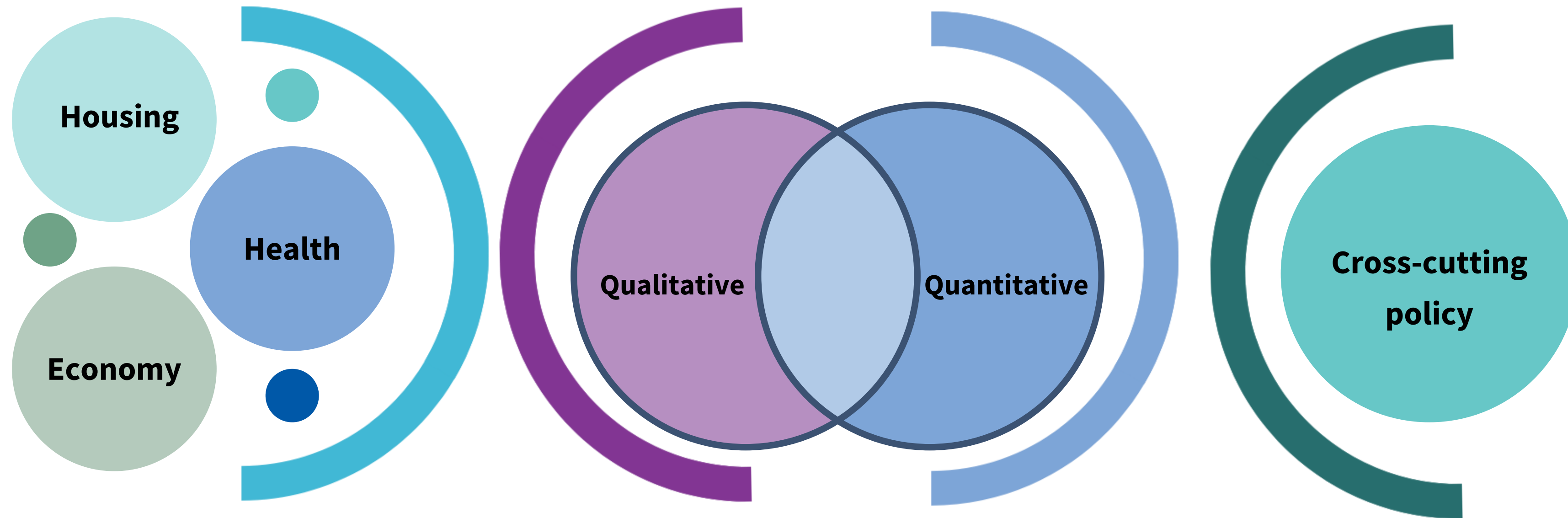
ENGAGEMENT



Current, fragmented landscape of policy silos in Scotland



We will aim to connect and integrate evidence, analysis and alliance building to influence cross-cutting policy development & implementation



Connecting topics

Integrating evidence types

Achieving influence



Commentary and insight

2024 Inequality Landscape

Allison Catalano



2024

Inequality Landscape

Health and Socioeconomic Divides in Scotland

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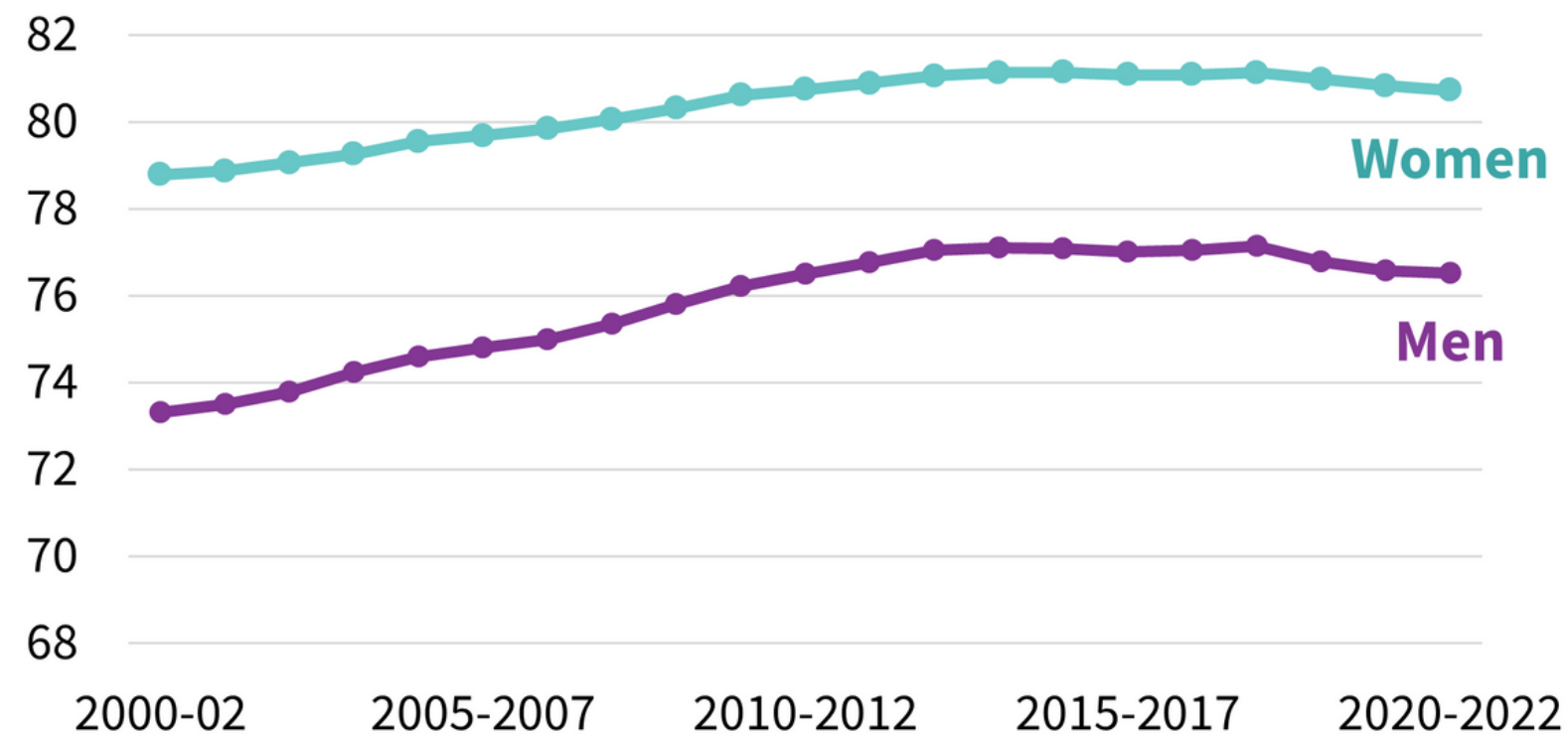
Key findings

- Key outcomes related to inequalities and health are not improving significantly
- Some are in fact getting worse
- We have not found evidence that policy is driving improvements in socioeconomic or health inequalities
- A lack of publicly available data of sufficient quality makes it very difficult for us to assess whether policies are working or not



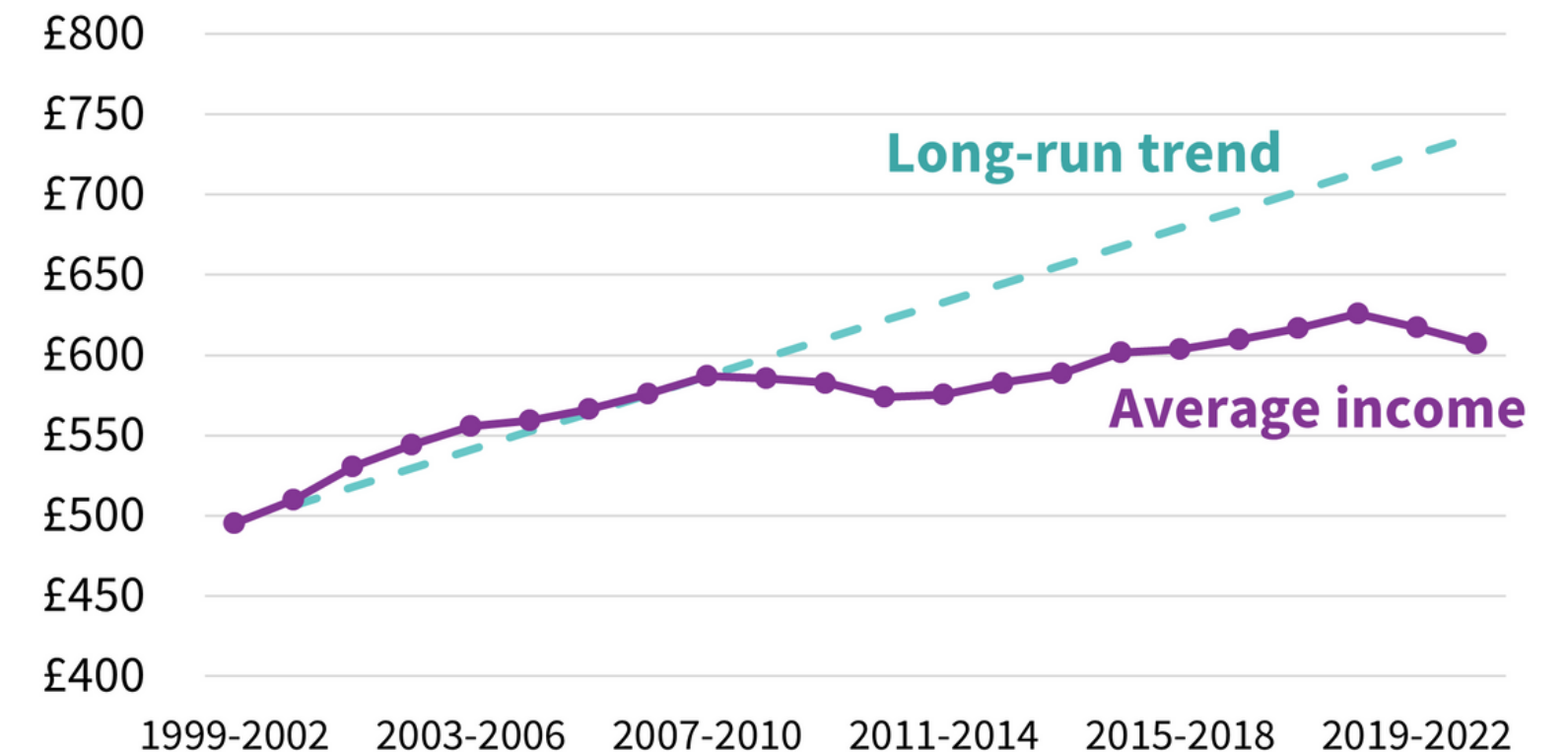
Life expectancy is no longer rising. While deaths relating to COVID-19 play a part in explaining recent falls, the deviation from the long-run trend dates back to the early 2010s.

Life expectancy at birth, in years



Average living standards have never returned to pre-2010 levels of growth and have fallen since 2019.

Median weekly household incomes and the long-run growth trend pre-2010 (in 2023 £)

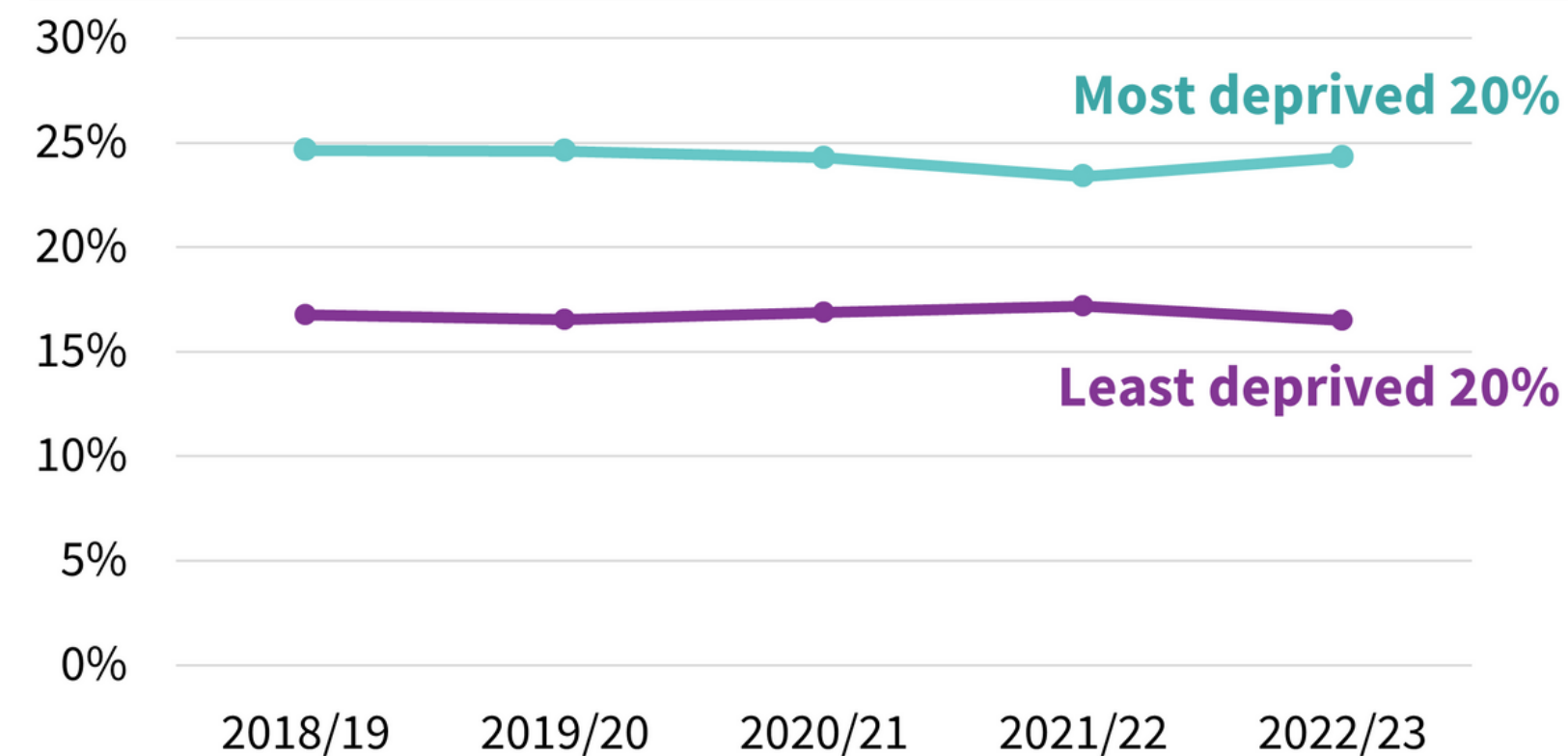


“Nearly every day I’m picking this paper up, I’m reading aboot the life expectancy wae me and [compared to] maybe staying doon in London...They’re absolutely kicking you every way they can, like. And if you’re in a poor area, you’ll always be in a poor area... Naebody’s gonna try and help you oot it, but if you’re in an affluent area, to hell wae the rest...” John, cited in Mackenzie et al., 2017



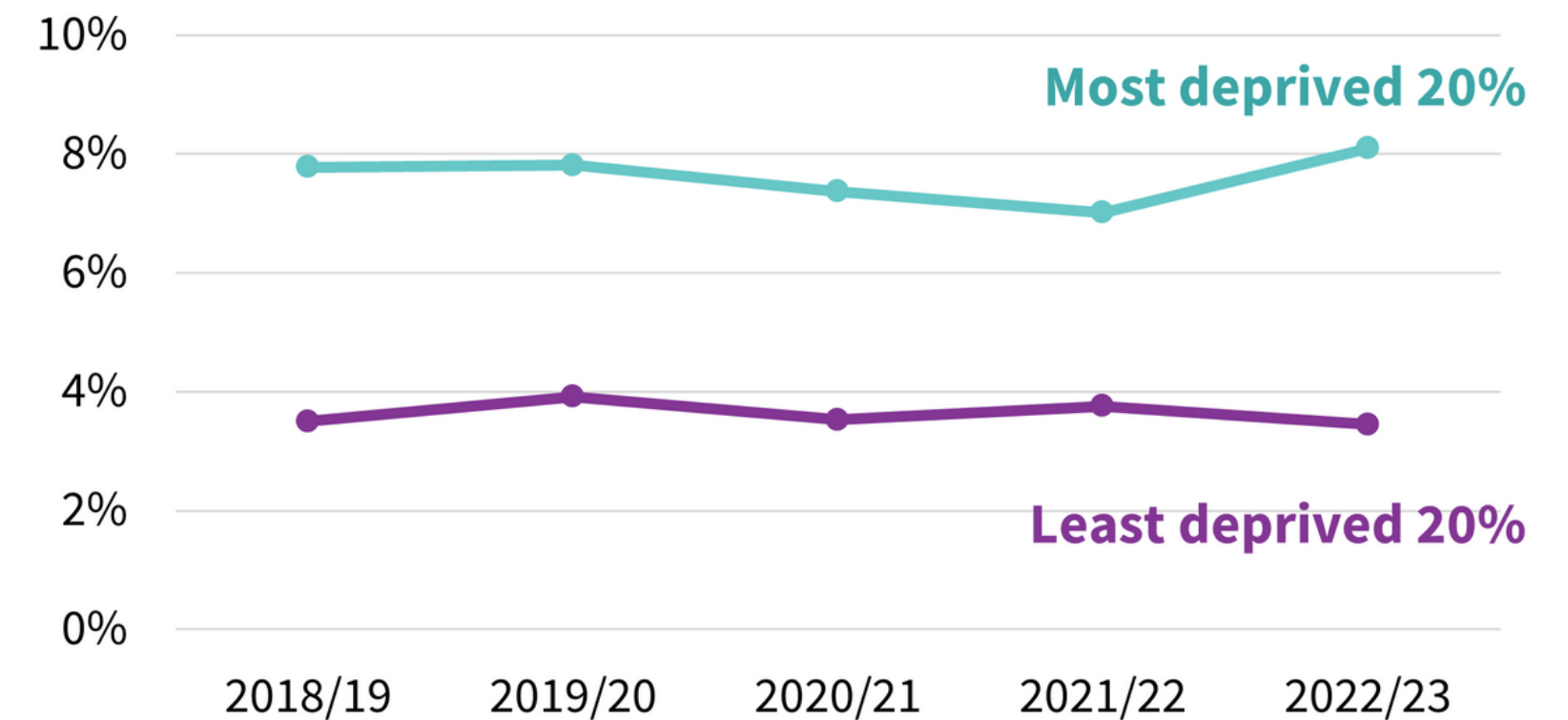
A higher number of children are born in deprived areas compared to non-deprived ones.

Proportion of total live singleton births by area deprivation



Gaps in early health outcomes, such as low birthweight and developmental concerns, **are wider than they were pre-pandemic**.

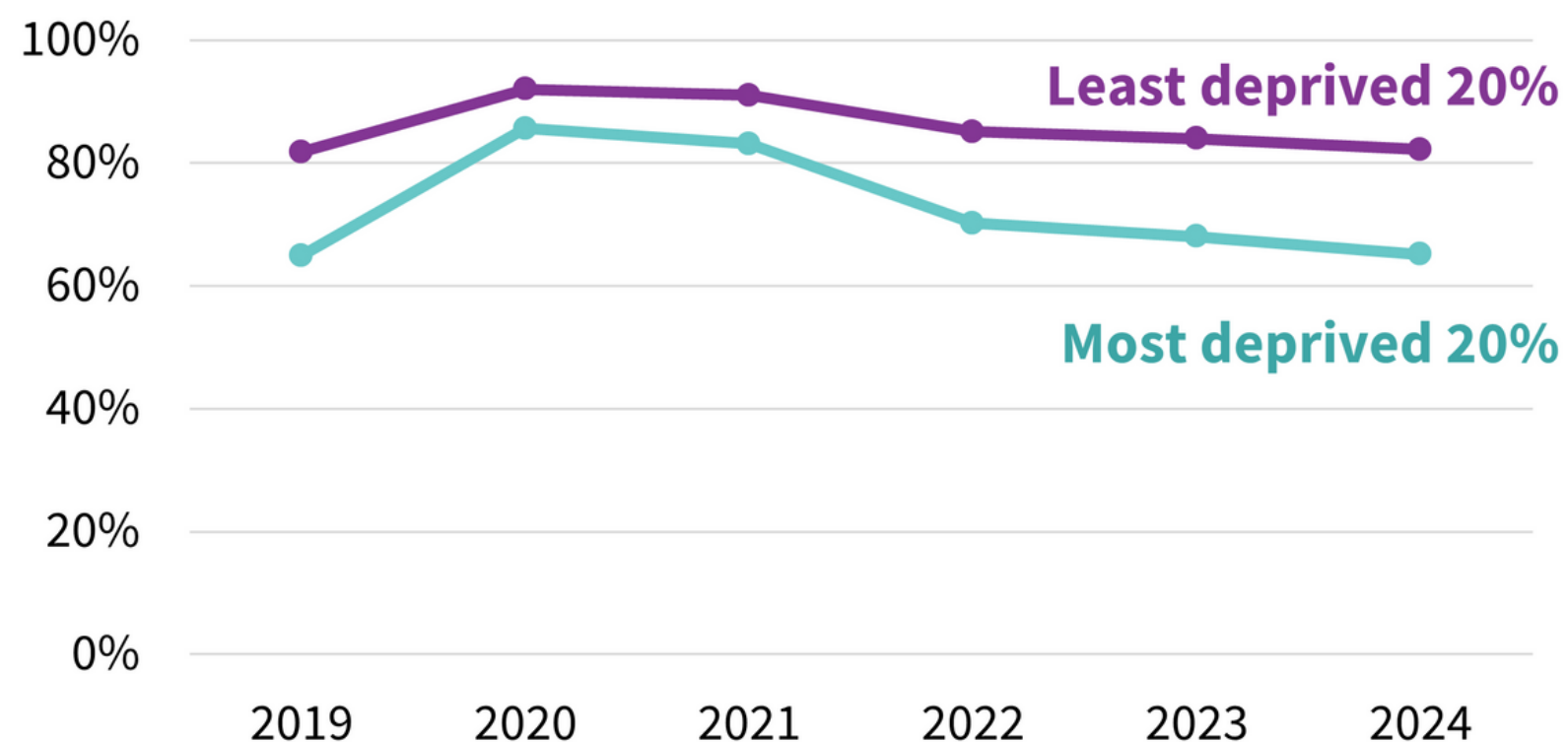
Proportion of live singleton births at a low birthweight (under 2,500g) by area deprivation



Gaps in attainment narrowed during the pandemic but are now wider than they were in 2019.

Proportion of candidates attaining grade A-C at SCQF Level 6

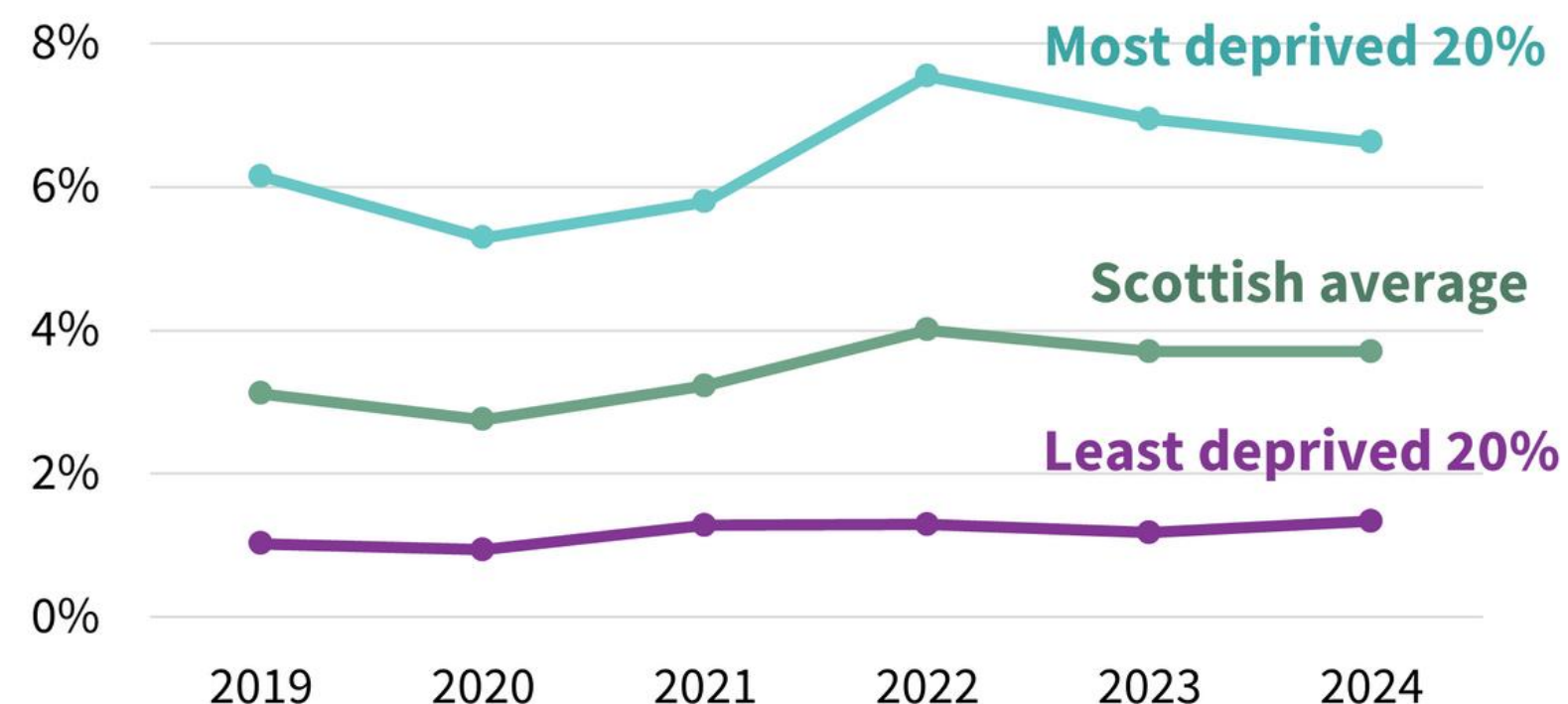
(Higher)



Young adults in Scotland are more likely to not participate in education, employment, or training than they were pre-pandemic.

Gaps in participation are wider than they were pre-pandemic.

Proportions of those aged between 16 and 19 that are not participating in education, employment or training

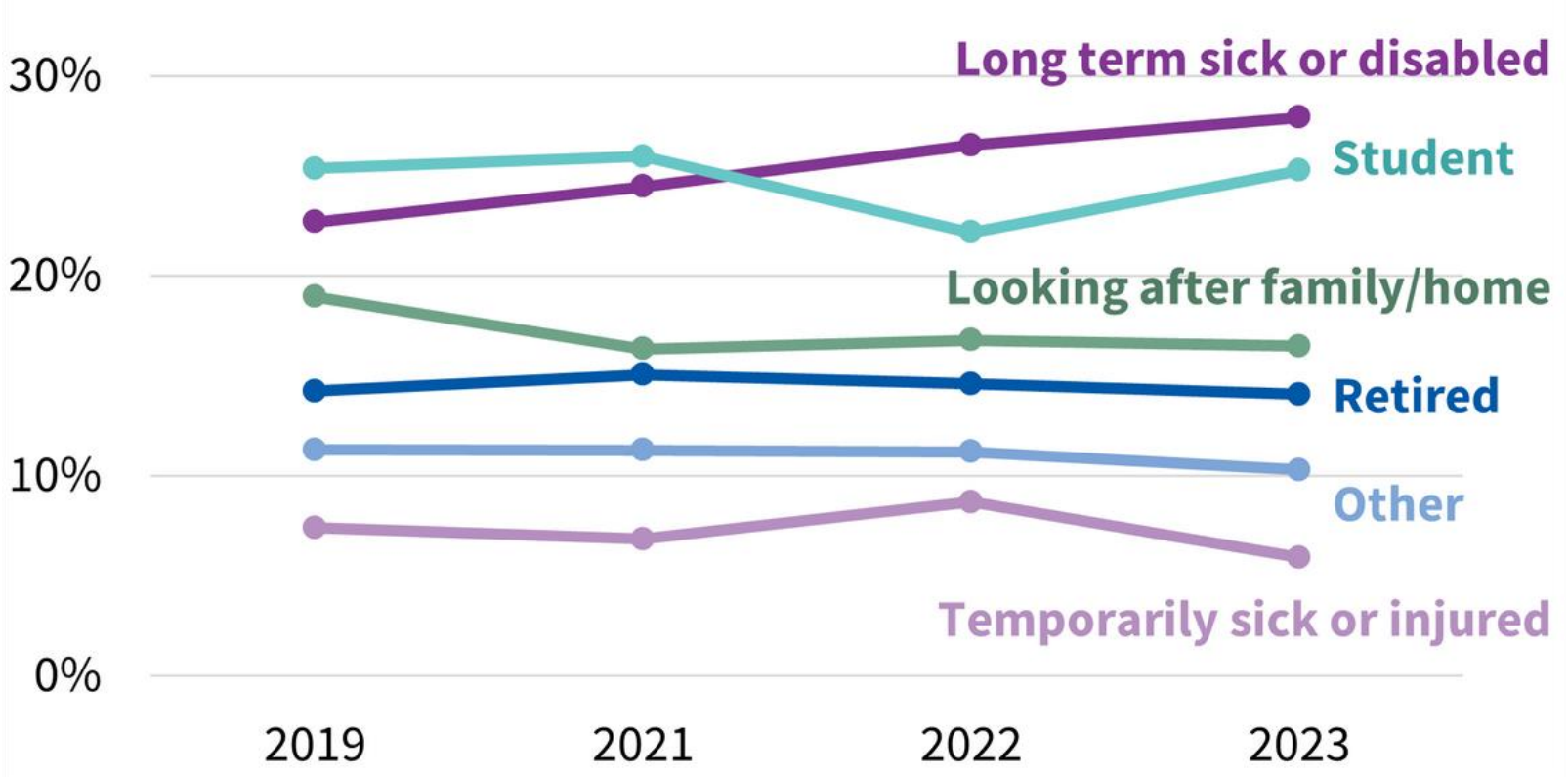


“It was just quite frustrating that... all of these people that were going to fail... when all of the grades came out but they got predicted higher because, like, maybe the area they were in. Like, I remember seeing people online that was like, they went to a good school but they were performing badly, but because they went to a good school, their grades got picked up massively. [...] I felt, like, helpless, like, 'cause there was nothing I could do about it, and it just kind of got, like, taken away from me.” 18 year old male group participant, discussing the Scottish approach to grading during the COVID-19 pandemic, cited in Fergie et al, in press.



People in Scotland are more likely to be inactive due to long-term illness or disability.

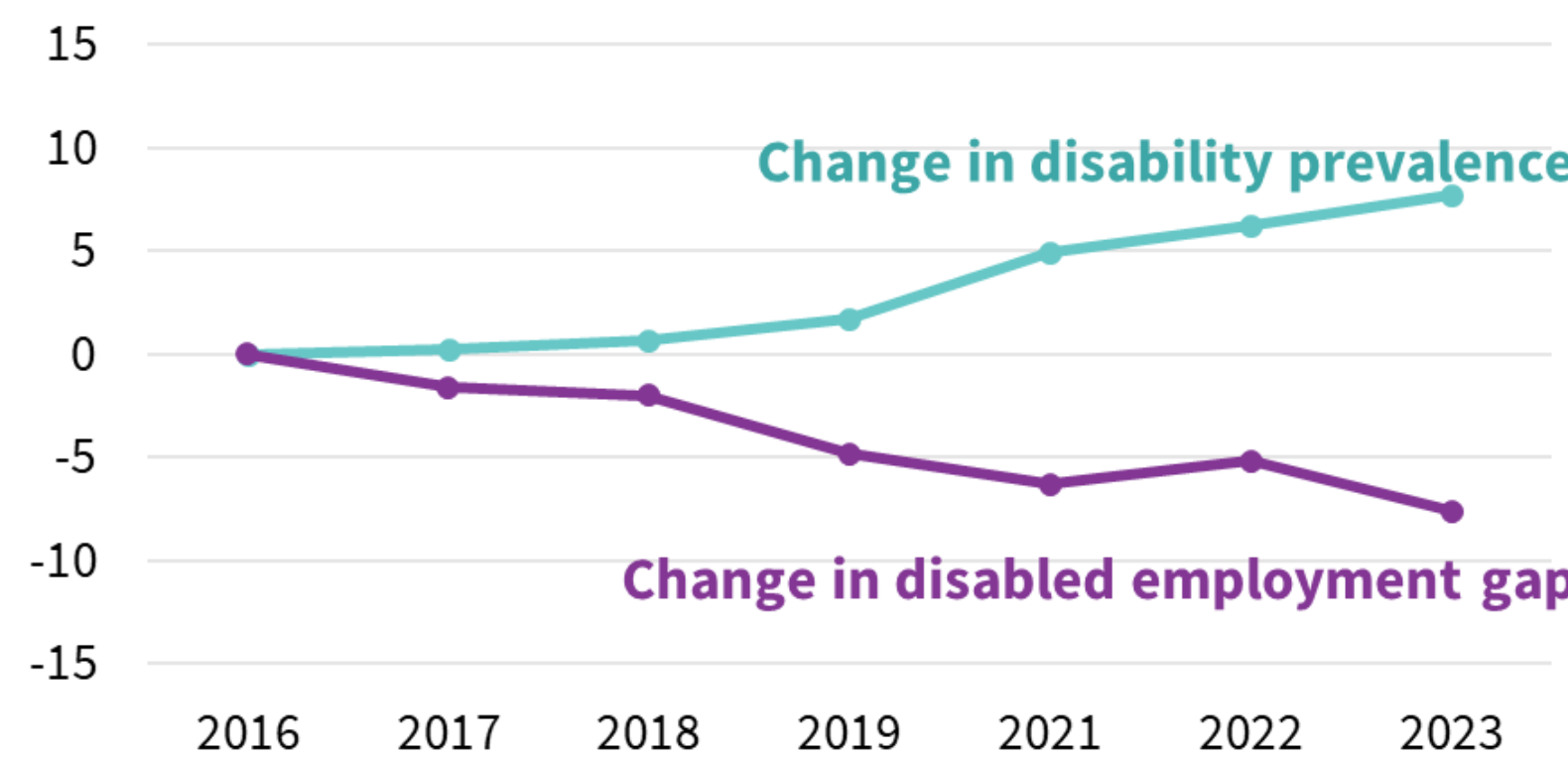
Proportion of inactive people by reason for inactivity in Scotland



* 2020 data is omitted due to sample size issues

Disabled people in Scotland are more likely to be in work, but **working-aged adults are also much more likely to report a disability**

Percentage point change in disability prevalence and the disability employment gap since 2016

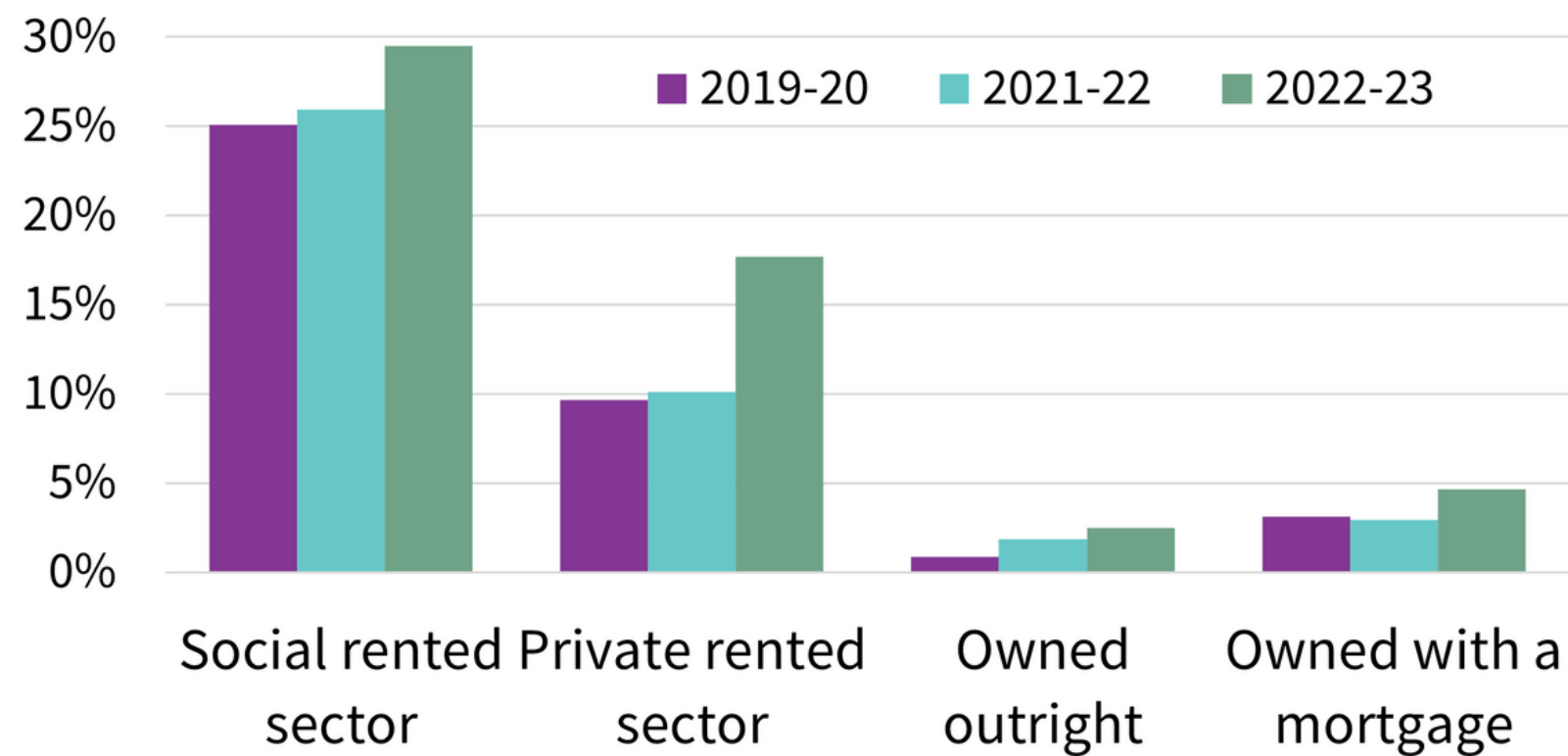


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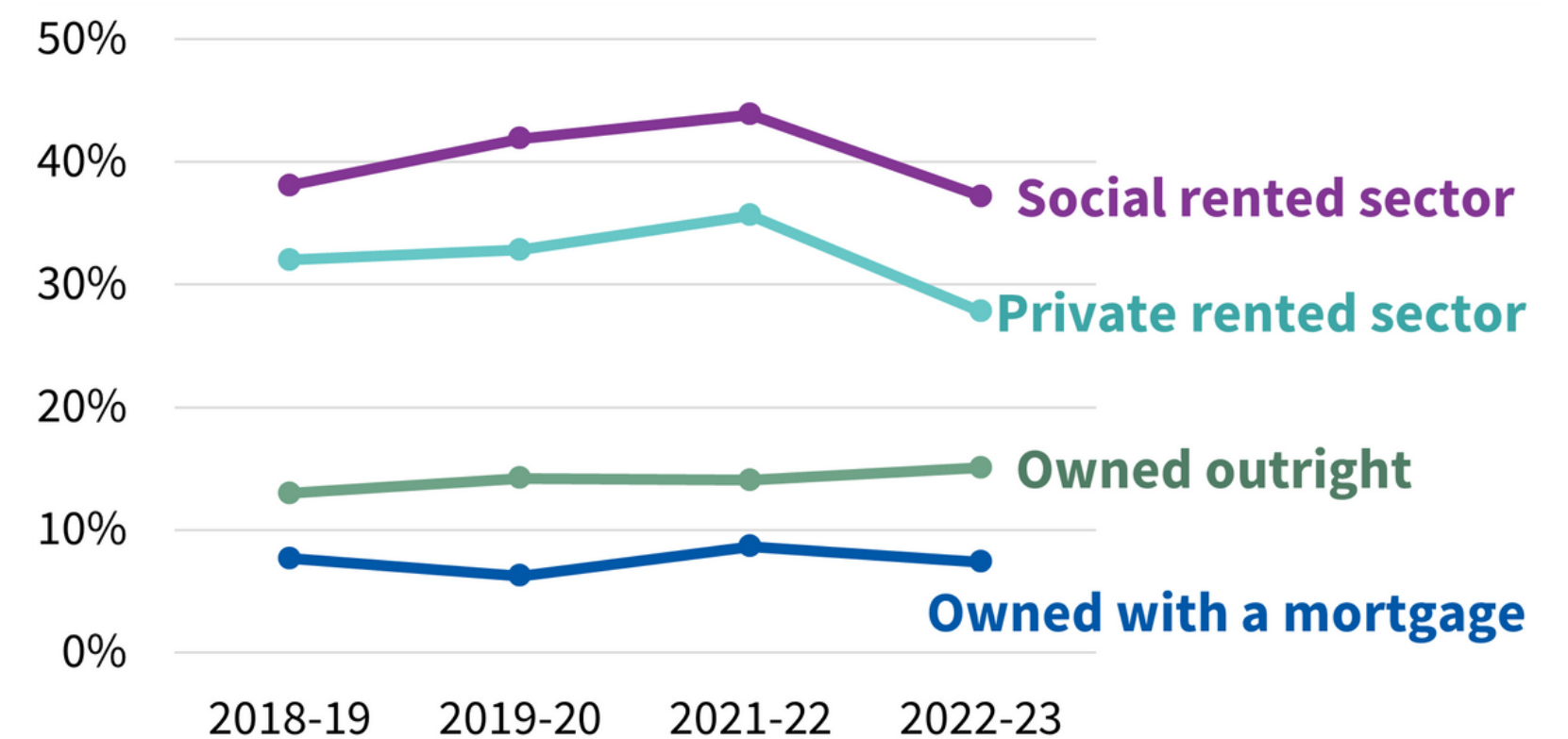
Food insecurity and fuel poverty are higher than they were pre-pandemic.

Proportion of people who are food insecure by tenure



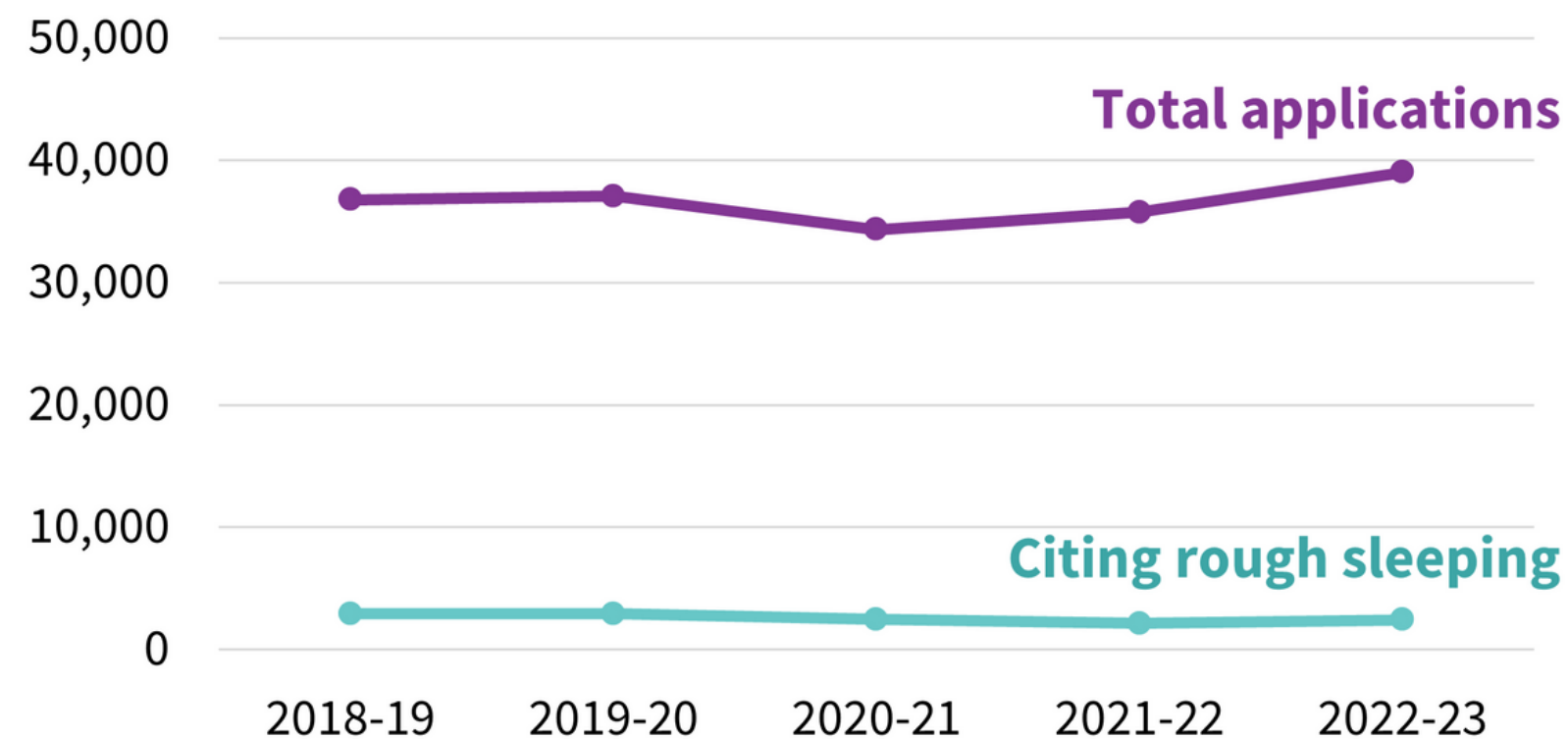
This is in spite of overall lower poverty rates for most housing tenures

Proportion of population in relative poverty by tenure



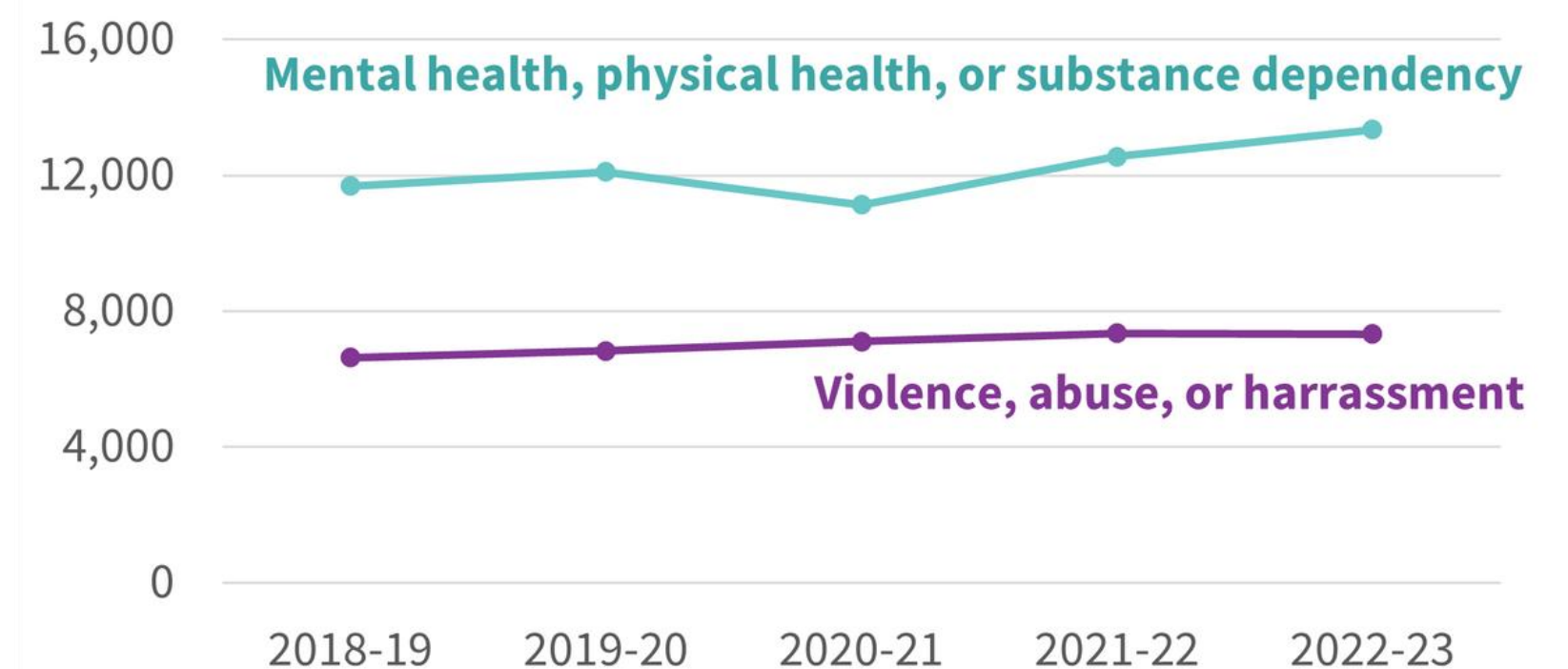
Homelessness applications are higher than they were pre-pandemic

Number of homelessness applications and applications citing rough sleeping



People experiencing homelessness are more likely to cite unsafe situations and mental health conditions in their applications.

Number of homelessness applications citing mental health, physical health, a drug or alcohol dependency, violence, abuse, or harassment



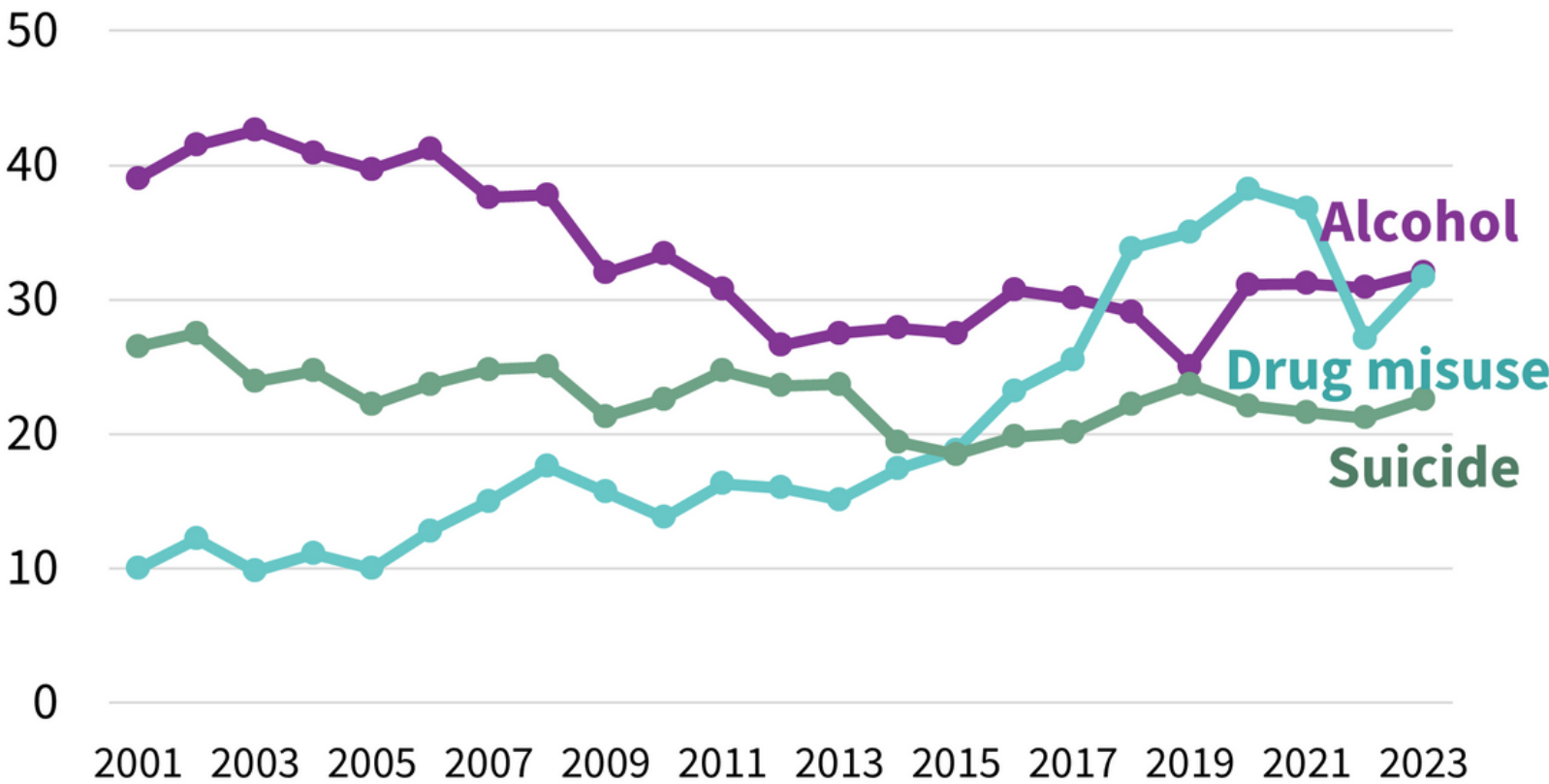
"I tried to kill myself about five times. It [homelessness] kicked your self-esteem to death."

40 year old male (interviewee) cited in Paudyal et al., 2020



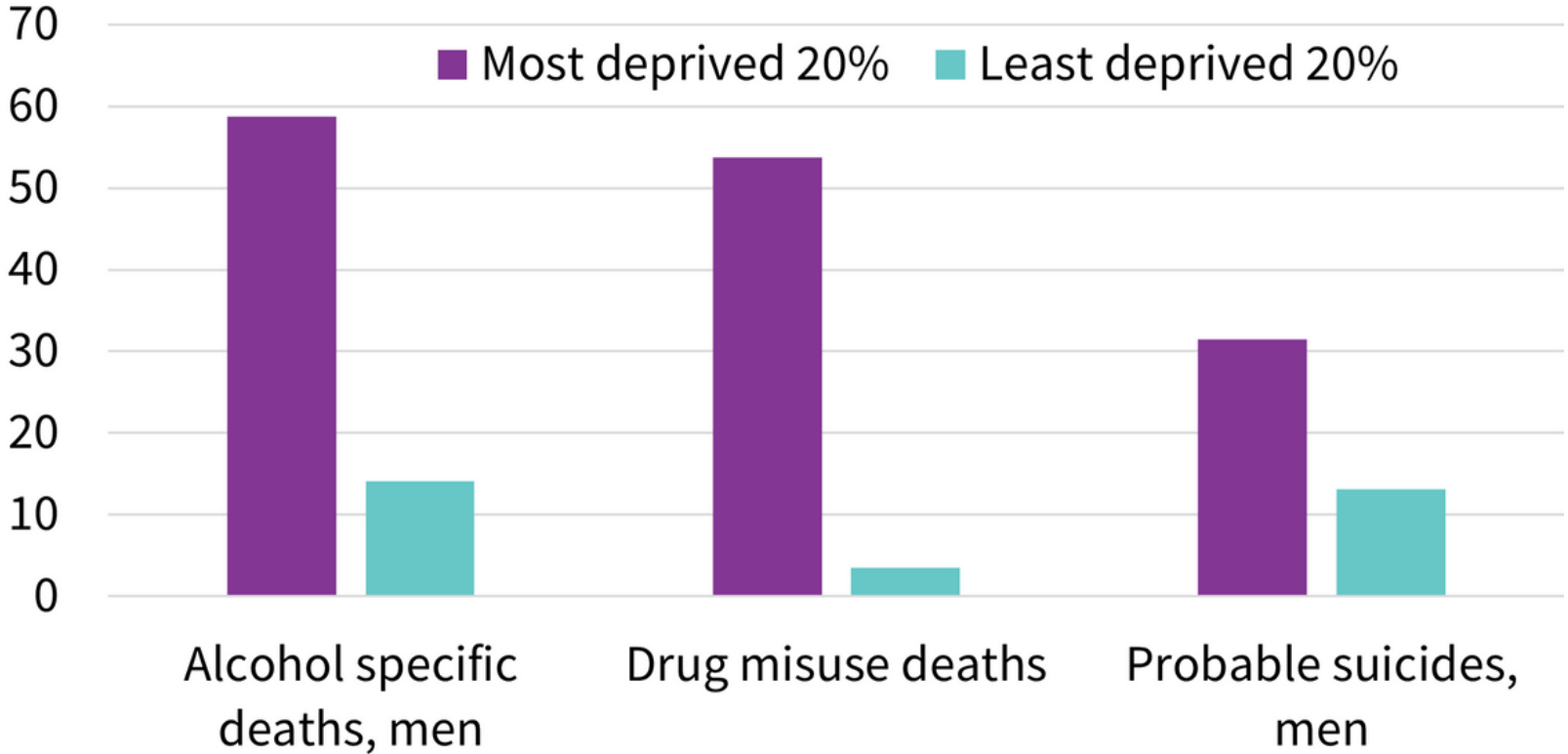
Men are of particular concern, **with higher mortality rates from alcohol, drug misuse, and suicide.**

Average mortality rates for men from alcohol, drug, and suicide (age-standardised mortality rate per 100,000)



These “deaths of despair” have **wide gaps in outcomes** between deprived and non-deprived parts of Scotland.

Alcohol, drug, and suicide mortality rate and deprivation (age-standardised mortality rate per 100,000 people), 2023



“What made me keep doing it [using drugs]? Fear. In the fear in thinking there’s no hope for any kind of decent life [...] So, I think that’s why I continued, just try to block it all out. Wasn’t caring about the consequences. I overdosed something like 28 times. Pronounced dead something like 18 times. And did it stop me doing it? Nothing stopped me doing it.” Lee (interviewee), cited in Farmer et al., 2023



Key findings

- Key outcomes related to inequalities and health are not improving significantly
- Some are in fact getting worse
- We have not found evidence that policy is driving improvements in socioeconomic or health inequalities
- A lack of publicly available data of sufficient quality makes it very difficult for us to assess whether policies are working or not



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