

Report of the Acting Director of Public Health

Goal #1 in the York Health and Wellbeing Strategy 2022-2032: ‘Reduce the gap in healthy life expectancy between the richest and poorest communities in York’.

Summary

1. Over the next ten years, the York Health and Wellbeing Strategy sets out our ambition to reduce the gap in healthy life expectancy between the richest and poorest communities in our city.
2. The Strategy made clear that this was an ‘overarching goal’, one that can’t be approached through single actions but will instead be the result of a whole-system shift to greater health equity and to a health-generating city.
3. This paper is intended to present to the Board the current data on inequalities in life expectancy and healthy life expectancy in York, and thus to set out the scale of the challenge, with some guidance on where and how the inequalities arise and ‘where to look’ for solutions, in order to guide discussion.

Recommendations

4. The Board are asked to:
 - Note and comment on the current data on inequalities in life expectancy and healthy life expectancy in York.
 - Discuss where and how the inequalities arise, and ‘where to look’ for solutions.

Reason: So that the Board is aware of the current data on inequalities in life expectancy and healthy life expectancy in York.

What is Life Expectancy and Healthy Life Expectancy?

5. The life expectancy of any given area is:

‘The average number of years a person would expect to live based on contemporary mortality rates, if he or she experienced the age specific mortality rates for that area and time period throughout his or her life’ (Office for Health Improvement and Disparities; OHID, 2023).
6. Life expectancy can be measured at birth, and at age 65. The first measurement will reflect the impact of infant mortality on life expectancy, to a higher degree than the second. Both will reflect the determinants of health across the life course.
7. The healthy life expectancy of any given area is:

‘A measure of the average number of years a person would expect to live in good health based on contemporary mortality rates and prevalence of self-reported good health.’ (OHID, 2023)
8. This essentially means that healthy life expectancy (HLE) is a composite measure, combining a local area’s life expectancy (LE) with the proportion of people reporting ‘good’ or ‘very good health’ from the Annual Population Survey (Office for National Statistics; ONS).

Measuring and understanding the gap

9. Whilst the definitions of LE and HLE are clear, measuring the gap in these statistics (i.e., the inequalities) between local areas is more complex. This may explain why there are sometimes several ‘versions of the truth’ for York’s health inequality gaps.
10. Firstly, because of the sample size of the Annual Population Survey, data on HLE is actually not available for small areas, such as council wards. The only comparisons which can be made are between York and another local authority (or with regional/national data).
11. Secondly, LE data is available at a small area level (down to areas with populations of a few thousand people). This presents another challenge: whether to highlight the LE difference between one council ward and another council ward, or between the most deprived small areas in a local authority (which could be located across a number of different council wards) and the least deprived.
12. Thirdly, sometimes data on inequalities in HLE / LE is presented as the difference between the lowest and highest areas, but also sometimes as the gradient of the line between them.

13. Locally, we have decided that as part of the Health and Wellbeing Strategy Population Health Monitor which will come regularly to the board, we will take this last approach and measure the Slope index of inequality in life expectancy at birth (3-year average). The Slope Index is:

‘A measure of the social gradient in life expectancy, i.e., how much life expectancy varies with deprivation. It takes account of health inequalities across the whole range of deprivation within each area and summarises this in a single number’ (OHID, 2023).

Trends in York’s Life Expectancy and Healthy Life Expectancy

14. The table below presents the current LE and HLE data for York, comparing it with national / regional data and breaking down LE into ward and deprivation decile:

HEALTHY LIFE EXPECTANCY			
	Male Healthy Life Expectancy at birth (years)	Female Healthy Life Expectancy at birth (years)	Time period
York	65.3	64.6	2018-20
Y+H	61.1	62.1	2018-20
England	63.1	63.9	2018-20

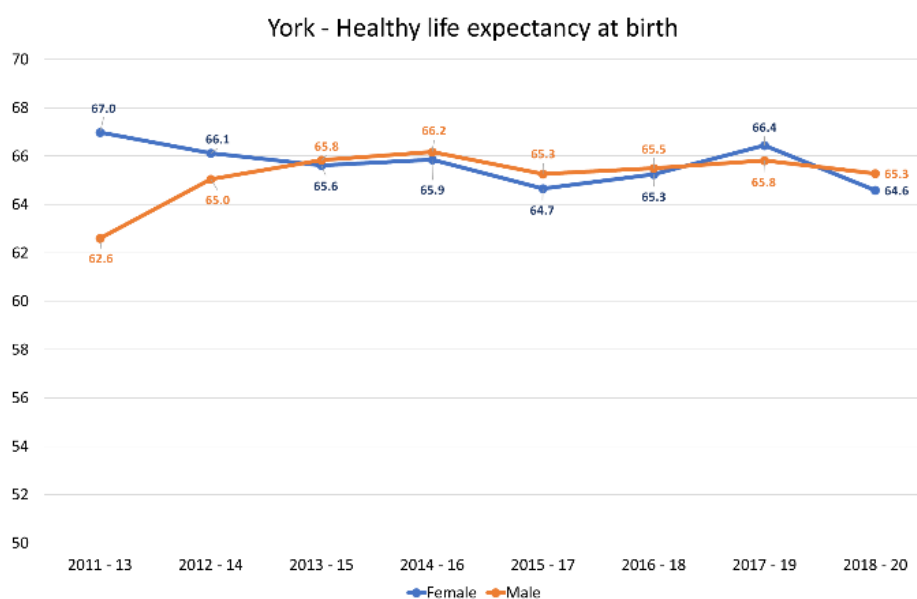
LIFE EXPECTANCY			
	Male Life Expectancy at birth (years)	Female Life Expectancy at birth (years)	Time period
York	79.9	83.6	2018-20
Y+H	78.4	82.2	2018-20
England	79.4	83.1	2018-20

GAP IN LIFE EXPECTANCY			
	Male Life Expectancy at birth (years)	Female Life Expectancy at birth (years)	Time period
Lowest Ward in York (Westfield)	76.1	80.6	2016-20
Highest Ward in York (Copmanthorpe)	87.1	91.8	2016-20
Gap between wards	11.0	11.2	2016-20

SLOPE INDEX OF INEQUALITY IN LIFE EXPECTANCY			
	Slope index of inequality in Male LE at birth (years)	Slope index of inequality in Female LE at birth (years)	Time period
York	8.4	5.7	2018-20
Y+H	10.7	8.8	2018-20
England	9.7	7.9	2018-20

Source: OHID fingertips tool

15. This table also illustrates that men can expect to live on average 14.6 years and women 19 years in 'bad or very bad' health.
16. It should be noted that the most recent data ends in 2020 and is therefore slightly out of date and will not reflect the impact of the COVID-19 pandemic to its fullest extent.
17. York's trends in HLE over the last decade are shown in the graph below. Fluctuations between years are to be expected, and the general trend over time should be where attention is focussed. HLE in females started the decade higher than males, but had declined to be lower by 2018-20, whilst male HLE improved at the start of the decade but remained broadly static since 2013-15.

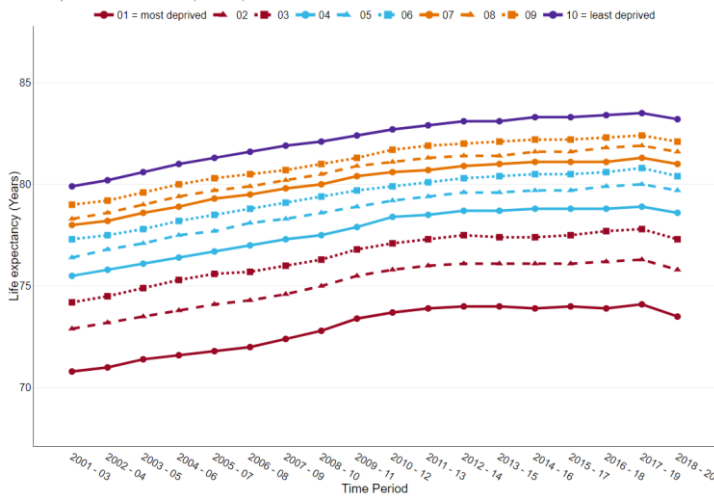


Source: OHID Health Inequalities tool

18. Trends in LE over two decades in our city are shown below, with each line of the graph representing 10% of York's population according to deprivation levels. Three long-term shifts can be seen: first the gap in LE has grown between the most and least deprived deciles, from 9.1 to 9.7 years in males, and from 6.3 to 8 years in females. Secondly, improvements in LE were made in the first decade of the century and stalled in the second. Thirdly, the gap between the most deprived decile and second most deprived decile is large that all other decile gaps (the 'cliff edge' effect).

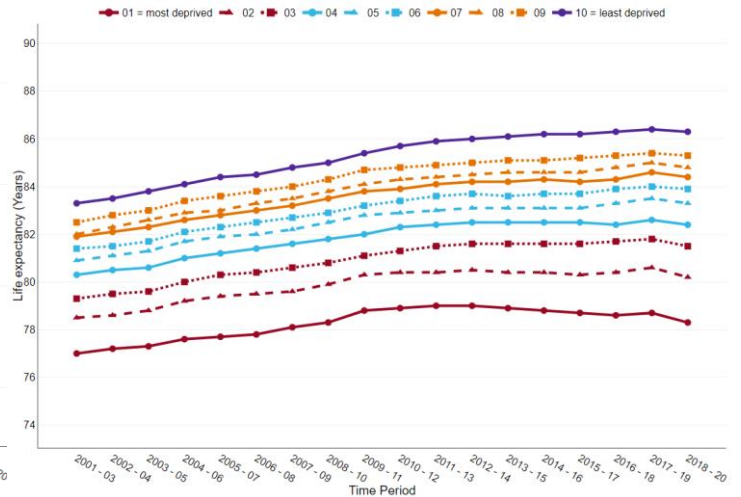
Life expectancy at birth - Male

LSOA11 deprivation deciles within area (IMD trend)



Life expectancy at birth - Female

LSOA11 deprivation deciles within area (IMD trend)

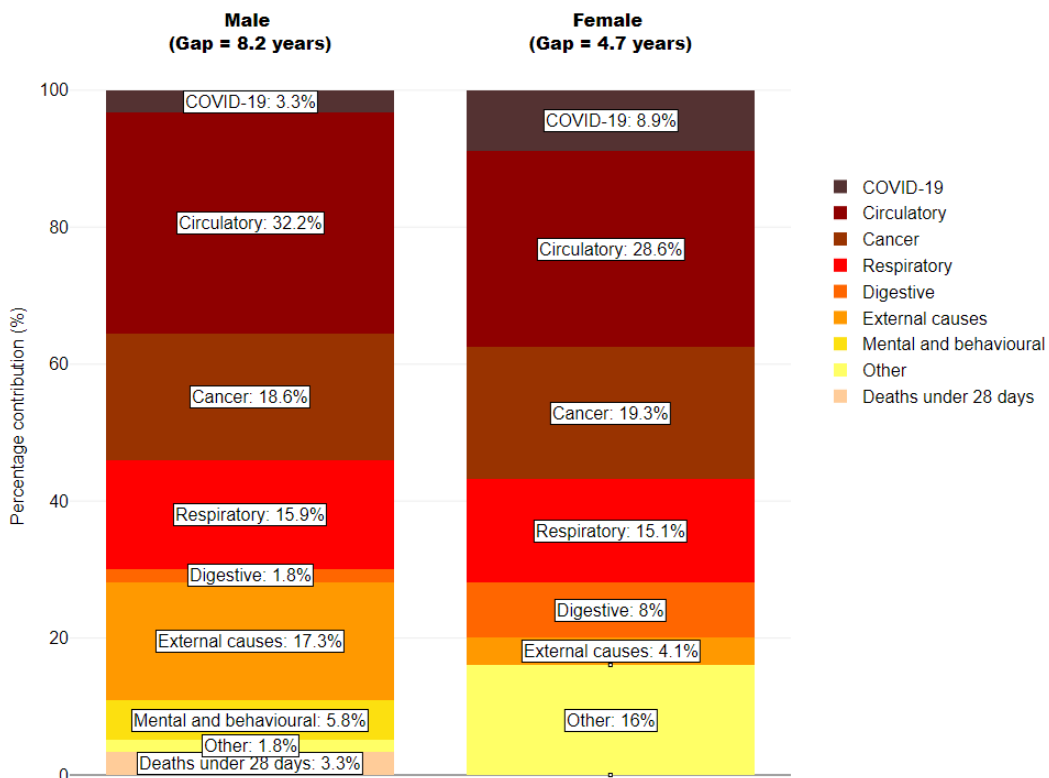


Source: OHID Health Inequalities tool

Explaining the gap

19. It is important to understand the drivers of these gaps so that action can be targeted to tackle them. One way of doing so is by breaking down the clinical reasons for the LE gap between richest and poorest areas:

Breakdown of the life expectancy gap between the most and least deprived quintiles of York by cause of death, 2020 to 2021

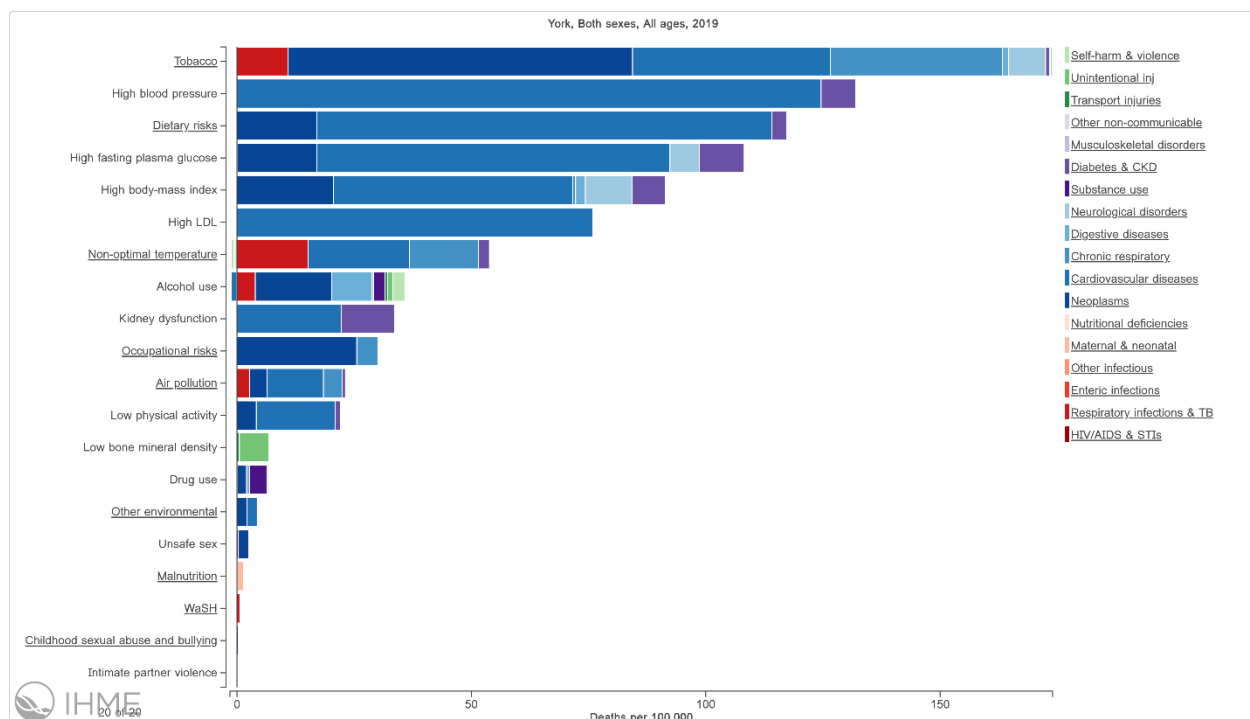


Source: OHID Segment tool

20. As the chart shows COVID-19 contributed within this year, following a pattern seen in other areas where higher death rates were seen in poorer communities from the virus. But in keeping with other years

where COVID was not a factor, around two thirds of the LE gap in both females and males comes from three areas: cardiovascular diseases (CVDs), cancer, and respiratory diseases.

21. An estimated 80% of CVDs are considered preventable (World Health Federation; WHF), 30% of cancers are considered preventable (World Health Organization; WHO) and around 60% of respiratory diseases are considered preventable (ONS).
22. Preventing these three diseases is, therefore, highly achievable, and likely to be the highest impact thing we can do to reduce health inequalities.
23. Lying behind these diseases areas there is a set of 'risk factors', as the following chart from the Global Burden of Disease study shows:



24. Unsurprisingly, the trio of tobacco use (20%), high blood pressure (15%) and poor diet (14%) are responsible for a large proportion of the diseases noted above which contribute the most to the LE gap.
25. In addition, 23.9% of York residents in the most deprived quintile live with more than one health condition, versus 21.3% living in the least deprived. The small area of York with the highest proportion of primary care patients in York with more than one long term condition happens to be the most deprived small area of York (York 018B, within the Westfield ward) (source: RAIDR). Living with multiple conditions makes its far more likely someone will report their health as 'bad or fairly bad' in the APS survey, the source of HLE data.

26. Underlying the clinical areas and their risk factors are, of course, the wider determinants of health, and again significant variation is seen in these:

	Variation between wards in York	
	Households in fuel poverty	16.9% (Westfield)
Child Poverty (IDAC)	19.8% (Hull Road)	2.2% (Bishopthorpe)
Older people in poverty (IDAOP)	16.6% (Clifton)	4.0% (Heworth)
Unemployment	5% (Westfield)	1.3% (Wheldrake)
Overcrowded housing	21.3% (Guildhall)	0.9% (Copmanthorpe)
Prevalence of overweight and obesity in Reception	28.6% (Heworth)	14.7% (Rural West York)

Source: Local Health (OHID)

Key conclusions to inform work on tackling the gap.

27. This data leads us to conclude that:

- Trends in our key Health and Wellbeing Strategy indicator are heading in the wrong direction, and the direction of travel will need to be reversed first before a reduction in the inequalities gap is seen.
- Female HLE is worsening in York, and females are living longer in poorer health. Male LE, both for the city as a whole and in terms of an inequality gap, is worse in absolute terms.
- The number of people living with multiple long terms conditions is a large driver in the downward trend in HLE in York.
- There is variation across the city in the distribution of the physiological factors which lead to early disease and death, for instance high blood pressure, which could be tackled fairly swiftly (within a 3–5-year window)
- There is variation across in the distribution of the risk factors which lead to early disease and death, for instance poor diet, which could be tackled within a reasonable time frame (within a 5–10-year window)
- Ward based outcomes in LE largely follow the pattern of the wider determinants of health in each ward. These will take longer to shift (within a 10–15-year window)

- Amongst the many wider determinants of health which need 'levelling up' in the city, Michael Marmot's six priorities from his seminal report 'Fairer Lives, Health Society' (2010) are still the most evidence-based way to reduce health inequalities in the long term:
 - Good early child development.
 - Education and lifelong learning.
 - Employment and working conditions.
 - Having enough income to lead a healthy life.
 - Healthy and sustainable places to live and work.
 - Taking a social determinants approach to prevention.

- Given the challenge to public sector finances, universal approaches to the distribution of health, council and third sector support are unlikely to address the gaps highlighted in this paper and should be reinforced by targeting to those in greatest need. This will include area-based targeting, but also the increased use of personalised approaches given that at any geography, the average masks variation (for instance Heworth ward contains small areas which are the 12th least and the 108th most deprived out of York's 120 small areas).
- There are significant co-benefits in reducing health inequalities. There is evidence that for each of eleven different health and social problems (physical health, mental health, drug abuse, education, imprisonment, obesity, social mobility, trust and community life, violence, teenage pregnancies, and child well-being) outcomes are significantly worse in more unequal rich countries (Wilkinson and Pickett 2007). The 10-year Health and Wellbeing, Climate Change and Economic Strategies for our city all emphasise how these issues inter-relate.

Consultation

28. This is a discussion document and thus the HWB are being consulted on a variety of issues related to the Board's work.

Council Plan and other strategic plans

29. This paper reinforces some of the key aspirations of the Council Plan 2023-27 and the

Implications

30. The HWB has no decision-making responsibilities for service provision or finance. There are no known implications in this report in relation to the following:

- Financial
- Human Resources (HR)
- Equalities
- Crime and Disorder
- Property
- Other
- Legal Implications

Recommendations

31. The Board are asked to:

- Note and comment on the current data on inequalities in life expectancy and healthy life expectancy in York.
- Discuss where and how the inequalities arise, and 'where to look' for solutions.

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Report Approved ✓ **Date** 20.09.2023

Specialist Implications Officers

Not applicable

Wards Affected:

All

For further information please contact the author of the report

Background Papers

Joint Local Health and Wellbeing Strategy

<https://democracy.york.gov.uk/documents/s163774/Annex%20Di%20Health%20and%20Wellbeing%20Strategy%202022-32.pdf>