Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

PWYLLGOR DATBLYGU STRATEGOL A CHYFLENWI GWEITHREDOL
STRATEGIC DEVELOPMENT AND OPERATIONAL DELIVERY COMMITTEE

DYDDIAD Y CYFARFOD: DATE OF MEETING:	23 February 2023
TEITL YR ADRODDIAD: TITLE OF REPORT:	Options appraisal for Board: Reducing Health Inequalities in the Hywel Dda University Health Board
CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR:	Dr Jo McCarthy, Deputy Director of Public Health
SWYDDOG ADRODD: REPORTING OFFICER:	Ms Annie Ashman, Specialty Registrar in Public Health

Pwrpas yr Adroddiad (dewiswch fel yn addas) **Purpose of the Report** (select as appropriate)
Er Sicrwydd/For Assurance

ADRODDIAD SCAA
SBAR REPORT

Sefyllfa / Situation

The Public Health directorate has responsibility for the Health Board's strategic planning objective 4K:

> *By March 2023, arrange a facilitated discussion at Board which is aimed at agreeing our approach to reducing Health Inequalities. This must include an analysis of current health inequalities, trends and causes, potential options to address the inequalities (eg allocate disproportionate resource to the most disadvantaged or by "Proportionate Universalism") and identify tools and interventions aimed at addressing the causes. Develop specific planning objectives by September 2023 in preparation for implementation in 2024/5.*

Work on the options appraisal paper for discussion at Board has been undertaken by a Specialty Registrar in Public Health currently on placement with the Public Health directorate. A first draft of the paper is now complete, ahead of schedule. The Deputy Director of Public Health brought a draft of this paper to SDODC's December 2022 meeting for assurance that this planning objective is on track, and to advise that the directorate planned to present this paper to Board in January 2023.

SDODC suggested some changes to the document, primarily around the inclusion of more up-to-date Census data following the publication of the headline results from the 2021 Census, and reference to digital inclusion as a driver of health inequalities. The report has been updated and is brought to SDODC's attention again; firstly to confirm that the suggested amendments have been taken into account, and secondly, to update that Board has asked to delay presentation of the report to them until the April 2023 Board Seminar.

Cefndir / Background

Health inequalities are unfair, preventable differences in health across the population and between different groups in society. While health inequalities ultimately lead to differences in people's health status and life expectancy, it is important to note that there are also inequalities

in the access people have to healthcare services and in their opportunities to lead healthy lifestyles. Health inequalities can include differences in:

- Health status, for example, life expectancy and prevalence of health conditions
- Access to care, for example, availability of treatments
- Quality and experience of care, for example, levels of patient satisfaction
- Behavioural risks to health, for example, smoking rates
- Wider determinants of health, for example, quality of housing.

In terms of the policy context, the Wellbeing of Future Generations Act (2015) includes equality among its seven wellbeing goals. Specifically, the Act requires public bodies to take "preventative, integrated approaches to end poverty and reduce inequalities", but tackling inequalities is intrinsically linked to the delivery of all seven goals. Since March 2021, public bodies in Wales, including the Welsh Government, local health boards and local authorities, have been required to comply with the socioeconomic duty. This duty aims to put tackling inequality at the heart of decision-making. Tackling inequalities is also a central principle of two major Welsh Government national strategies, the economic plan Prosperity for All and A Healthier Wales, the long-term plan for health and social care in Wales.

Asesiad / Assessment

The options appraisal paper presents evidence that inequalities exist when comparing Hywel Dda University Health Board with other areas of Wales, and when comparing the three counties comprising the Health Board Area. Issues which may be exacerbating inequalities locally include the rural nature of the area, and the cost of living crisis and its impact on wellbeing and ability to travel and access services. The paper suggests that some of the available data warrants further investigation to understand barriers and challenges, such as uptake of GP services in Hywel Dda being below average, and relatively low numbers of residents agreeing that they had the information they needed to lead a healthy lifestyle when questioned.

The paper presents examples of interventions already underway in the Hywel Dda University Health Board area to reduce inequalities. It also summarises a review of evidence around the available models, theories and tools for reducing health inequalities, and provides examples of interventions used elsewhere in Wales and the world.

The paper provides evidence that both the COVID-19 pandemic and the cost of living crisis have widened and exacerbated health inequalities in the local population. Without intervention and as the financial crisis continues, the situation is likely to worsen. A strategy to tackle inequalities will not only ensure fairness between population subgroups and improve health and wellbeing, but will also reduce demand on health services from patients presenting with preventable conditions.

The Strategic Development and Operational Delivery Committee is asked to note the delay in this paper being submitted to Board due to competing priorities. We would ask the Committee to support the presentation of the paper at the Board Seminar in April 2023 without further delay.

Argymhelliad / Recommendation

The Strategic Development and Operational Delivery Committee is requested to receive assurance with regard to the progress and ongoing work in relation to addressing health inequalities in HDdUHB.

Amcanion: (rhaid cwblhau) Objectives: (must be completed)	
Committee ToR Reference: Cyfeirnod Cylch Gorchwyl y Pwyllgor:	2.1 To receive an assurance on delivery against all relevant Planning Objectives falling in the main under Strategic Objectives 4 (The best health and wellbeing for our individuals, families and our communities) and 5 (Safe, sustainable, accessible and kind care), in accordance with the Board approved timescales, as set out in HDdUHB's Annual Plan.
Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	1193 – Broadening or failure to address health inequalities. Current risk score 9 1194 – Increasing uptake and access to public health interventions. Current risk score 9
Safon(au) Gofal ac Iechyd: Health and Care Standard(s):	1. Staying Healthy 1.1 Health Promotion, Protection and Improvement 6.2 Peoples Rights
Amcanion Strategol y BIP: UHB Strategic Objectives:	4. The best health and wellbeing for our individuals, families and communities
Amcanion Cynllunio Planning Objectives	4K Health Inequalities
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2018-2019	4. Improve Population Health through prevention and early intervention, supporting people to live happy and healthy lives

Gwybodaeth Ychwanegol: Further Information:	
Ar sail tystiolaeth: Evidence Base:	Please refer to references in options appraisal paper
Rhestr Termau: Glossary of Terms:	N/A
Partïon / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Datblygu Strategol a Chyflenwi Gweithredol: Parties / Committees consulted prior to Strategic Development and Operational Delivery Committee:	N/A

Effaith: (rhaid cwblhau) Impact: (must be completed)	
Ariannol / Gwerth am Arian: **Financial / Service:**	N/A
Ansawdd / Gofal Claf: **Quality / Patient Care:**	N/A
Gweithlu: **Workforce:**	N/A
Risg: **Risk:**	N/A
Cyfreithiol: **Legal:**	N/A
Enw Da: **Reputational:**	N/A
Gyfrinachedd: **Privacy:**	N/A
Cydraddoldeb: **Equality:**	• Has EqIA screening been undertaken? No – not required at options appraisal stage of this work • Has a full EqIA been undertaken? No – not required at options appraisal stage of this work

Planning Objective 4K: Options appraisal for reducing Health Inequalities in the Hywel Dda University Health Board area, for presentation to Board (DRAFT)

January 2023

Annie Ashman, Specialty Registrar in Public Health, Public Health Wales, and Dr Jo McCarthy, Deputy Director of Public Health, Hywel Dda University Health Board

Contents

Introduction

What are health inequalities?

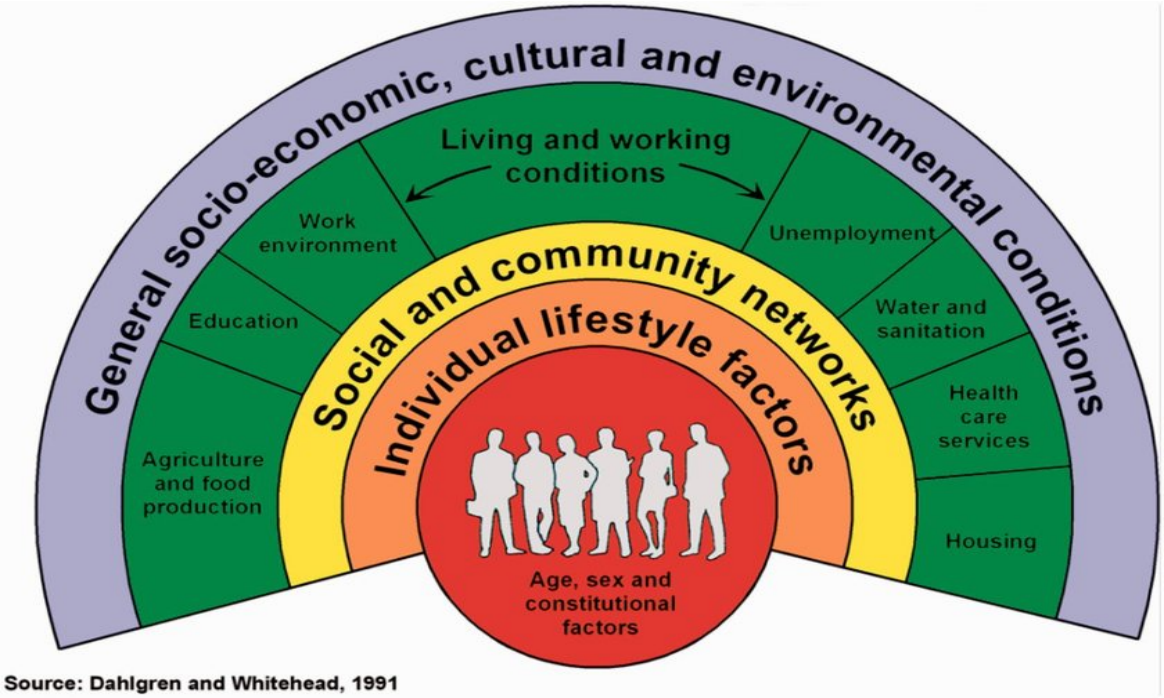
Health inequalities are unfair, preventable differences in health across the population and between different groups in society. While health inequalities ultimately lead to differences in people's health status and life expectancy, it is important to note that there are also inequalities in the access that people have to healthcare services, and in their opportunities to lead healthy lifestyles.

The King's Fund[1] has identified that health inequalities can include differences in:

- Health status, for example, life expectancy and prevalence of health conditions
- Access to care, for example, availability of treatments
- Quality and experience of care, for example, levels of patient satisfaction
- Behavioural risks to health, for example, smoking rates
- Wider determinants of health, for example, quality of housing.

In the 2010 report *Fair Society Healthy Lives*[2] – the culmination of a year-long comprehensive independent review of health inequalities in England – Professor Sir Michael Marmot described how such inequalities arise as a result of the conditions "in which people are born, grow, live, work and age." These factors are often described as the wider determinants of health, a complex network of influences on individuals throughout the life course. It is broadly agreed that by addressing inequalities that exist in the wider determinants of health, we can also reduce health inequalities.

The graphic below, reproduced from Dahlgren and Whitehead (1991)[3] is commonly used to illustrate the wider determinants that influence the health and wellbeing of the individual.



Source: Dahlgren and Whitehead, 1991

[1] King's Fund. 2022. *What are health inequalities?* Available at: https://www.kingsfund.org.uk/publications/what-are-health-inequalities [Accessed: 8 August 2022].
[2] Marmot, M. and Bell, R. 2012. Fair society, healthy lives. *Public Health* 126. doi:10.1016/j.puhe.2012.05.014.
[3] Dahlgren, G. and Whitehead, M. (1991). Policies and strategies to promote social equity in health. Institute for Future Studies, Stockholm (Mimeo).

Why is it important to address health inequalities, and why now?

Quite simply, health inequalities are unfair. It is difficult to argue that we should not be taking action to reduce differences between individuals and groups that are known to be preventable, and which impact on health, happiness and life expectancy.

More broadly, health inequalities cost money. A 2021 report by Public Health Wales[4] calculated the cost of health inequalities to NHS Wales as £322 million in 2018/19, or just under 9% of total hospital service expenses.

At the time of writing, action to reduce health inequalities is arguably more important than ever. The 2020/21 annual report by the Director of Public Health for Hywel Dda University Health Board[5] focused on how the COVID-19 pandemic has widened existing health inequalities even further. The report found that both the impacts of COVID-19 itself, in terms of morbidity and mortality, and the impact of measures to reduce spread of infection such as national lockdowns, have caused "further hardship to those who were already suffering." The pandemic has overlapped with what has been described by the media as a "cost of living crisis" in the United Kingdom. Families are coming under significant, and increasing, financial pressure as household gas and electricity bills, vehicle fuel costs, and the price of food all continue to rise. The annual inflation rate in the UK rose to 9.4% in June 2022, the highest rate since the early 1980s. In an article published in April 2022, Professor Sir Michael Marmot predicted that if inflation rose above 8%, 1.3 million people in the UK, including half a million children, would be pushed into poverty.[6]

In July 2022, a joint report[7] from the Welsh NHS Confederation and Royal College of Physicians stated that 60% of adults in Wales said that their wellbeing was suffering as a result of the cost of living crisis. The same report showed that Wales now has the worst rate of child poverty of all UK nations, with almost a third of children living in poverty, and that people in Wales have a higher risk of dying in poverty than in any other part of the UK.

At a global level, the World Health Organization has declared climate change to be the single biggest health threat facing humanity.[8] A 2017 article describing the link between climate change and

---

[4] Public Health Wales. 2021. *Cost of health inequality to the NHS in Wales.* Available at: https://phw.nhs.wales/publications/publications1/cost-of-health-inequality-to-the-nhs-in-wales/. [Accessed: 8 August 2022].

[5] Hywel Dda University Health Board. 2021. *Director of Public Health Annual Report 2020-2021.* Available at: https://hduhb.nhs.wales/about-us/your-health-board/board-meetings-2021/board-agenda-and-papers-25th-november-2021/agenda-and-papers-25th-november-2021/item-3-1-5-hdduhb-director-of-public-health-annual-report-2020-21/. [Accessed: 8 August 2022].

[6] The Guardian. 2022. *Studying health inequalities has been my life's work. What's about to happen in the UK is unprecedented.* Available at: https://www.theguardian.com/commentisfree/2022/apr/08/health-inequalities-uk-poverty-life death?CMP=fb_gu&utm_medium=Social&utm_source=Facebook&fbclid=IwAR3QfCbv9TFT43cnSfaoKH-0aJ875VUqLeChoTDT-PvJDiaoU5iaw4KE6js#Echobox=1649495748. [Accessed: 9 August 2022].

[7] RCP London. 2022. *Mind the gap: The cost-of-living crisis and the rise in inequalities in Wales.* Available at: https://www.rcplondon.ac.uk/projects/outputs/mind-gap-cost-living-crisis-and-rise-inequalities-wales. [Accessed: 8 August 2022].

[8] World Health Organization. 2021. *Climate change and health.* Available at: https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health. [Accessed: 9 August 2022].

inequalities in the UK warned that the impacts would be disproportionately greater for those already vulnerable to poor health.[9]

The policy context

In Wales, the unique Wellbeing of Future Generations Act was passed in 2015, and includes equality among its seven wellbeing goals. Specifically, the Act requires public bodies to take "preventative, integrated approaches to end poverty and reduce inequalities"[10], but tackling inequalities is also intrinsically linked to the delivery of all seven goals. Public Service Boards have been established in each local authority area of Wales to drive delivery of the Act. The membership of each Board includes the local leaders for public services in the area and other organisations that can contribute to their aim of improving well-being together. Every five years, the Public Services Boards must assess the wellbeing of their area and then publish a local wellbeing plan, the next plans being due for publication in May 2023.

Since March 2021, public bodies in Wales, including the Welsh Government, local health boards and local authorities, have been required to comply with the socioeconomic duty. This duty aims to put tackling socioeconomic inequality – a key driver of health inequalities - at the heart of decision-making.

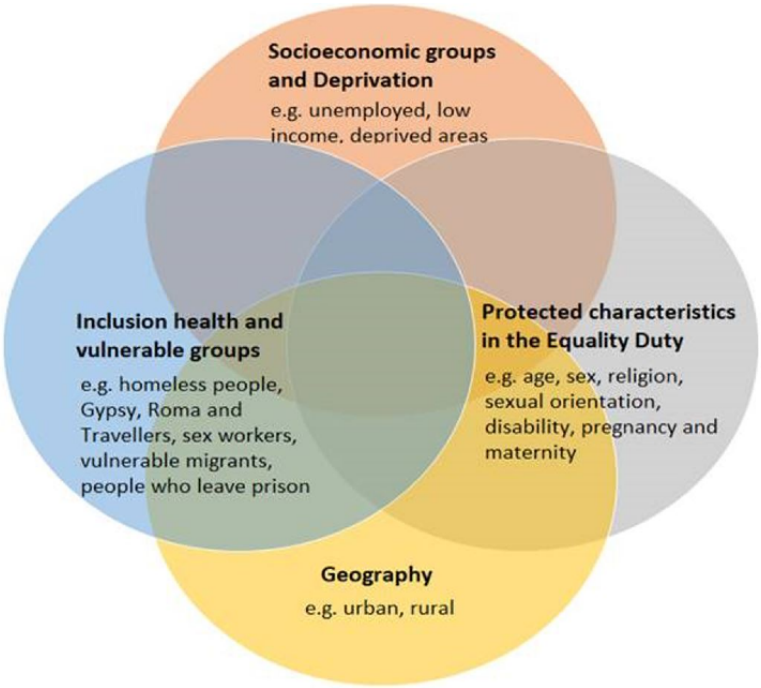
Tackling inequalities is also a central principle of two major Welsh Government national strategies, the economic plan Prosperity for All and A Healthier Wales, the long-term plan for health and social care in Wales.

[9] Paavola, J. 2017. Health impacts of climate change and health and social inequalities in the UK. *Environmental Health* 16 (113). doi: 10.1186/s12940-017-0328-z
[10] Future Generations Commissioner for Wales. 2022. *A more equal Wales.* Available at: https://www.futuregenerations.wales/a-more-equal-wales/. [Accessed: 9 August 2022].

Who experiences health inequalities?

A model developed by Public Health England[11], shown in Figure 1 below, suggests that we should consider all of these factors when identifying the individuals and groups in a population who are most likely to experience health inequalities. It is important to understand that these factors overlap, so that some members of the population will fall into two or more affected groups, and that this may be a causal relationship - for example, having a low income may lead to homelessness. This section considers the available data on each of these dimensions in describing the health inequalities that exist in Hywel Dda.

Figure 1: Overlapping dimensions of health inequalities



Socioeconomic groups and deprivation

The association between deprivation and poor health is well-established. In Wales, the Welsh Index of Multiple Deprivation[12] is the official measure of relative deprivation for small areas in Wales, ranking 1909 areas from least to most deprived. The indicators of deprivation used include health, education, income, employment, community safety, housing, access to services and the physical environment. Ten neighbourhoods in the Hywel Dda area fall into the most deprived decile (the most deprived 10%) in Wales. Five of these are in Carmarthenshire, four in Pembrokeshire and one

[11] Public Health England. 2021. *Health Equity Assessment Tool (HEAT).* Available at: https://www.gov.uk/government/publications/health-equity-assessment-tool-heat/health-equity-assessment-tool-heat-executive-summary. [Accessed: 28 July 2022].
[12] Welsh Government. 2019. *Welsh Index of Multiple Deprivation.* Available at: https://gov.wales/welsh-index-multiple-deprivation-full-index-update-ranks-2019 [Accessed: 15 August 2022].

in Ceredigion. This demonstrates that there are pockets of deprivation in each of the three counties that comprise the Health Board area, but they are not distributed equally, and this must be taken into account when planning interventions to reduce inequalities.

In 2019/20, the National Survey for Wales[13] reported that 11% of participating households in Carmarthenshire, 11% in Ceredigion and 8% in Pembrokeshire were in material deprivation, compared with 12.9% across Wales. Meanwhile, more recent data from End Child Poverty revealed that Pembrokeshire has the joint fourth highest proportion of children living in poverty of all of the local authorities in Wales (35.5%) and that for the most deprived electoral wards in Carmarthenshire, this rate is as high as 41.3%. Growing up in poverty puts children at significant risk of experiencing health inequalities both immediately and in later life.

Recently published headline data from the 2021 Census shows the proportion of households in each county of the UK that are deprived based on four characteristics – education, employment, health and housing. In each county of Hywel Dda, more than half of households were deprived in at least one of these dimensions on the date of the Census in March 2021 (54.7% in Carmarthenshire, 54% in Pembrokeshire and 52.9% in Ceredigion).[14]

Protected characteristics

Under the Equality Act 2010, it is illegal to discriminate against people based on their age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity status, race, religion or belief, sex or sexual orientation. Health services and interventions should not therefore, by law, be planned or delivered in a way that provides an unequal offer. However, evidence shows both that individuals with protected characteristics may find it more difficult to access services, thus experiencing a health inequality, or may otherwise be more at risk of experiencing inequalities in health. In many cases, it is not possible to access robust data on the numbers of people who have these characteristics or the inequalities they experience. Understanding who in the Health Board population has protected characteristics, and how this impacts upon their health and access to services, is therefore an area requiring more research.

There is data available, collected through the UK Census, showing the ethnic make-up of our population. The most recently available data, from 2021, showed that in the three counties comprising Hywel Dda, between 96.2% and 97.6% of the population were of white ethnicity[15]. Therefore, people from other ethnic groups made up a significant minority of the population. Across the UK, it is known that people from black and minority ethnic groups experience worse health outcomes than white people. This is for a variety of reasons including different patterns of disease related to ethnicity, discrimination, challenges related to health literacy where there are language barriers and cultural differences that impact on how people access health services. When planning interventions to reduce inequalities, it will be important to consider these needs.

[13] Welsh Government. 2022. *National survey for Wales.* Available at: https://gov.wales/national-survey-wales. [Accessed: 17 August 2022].
[14] Office for National Statistics. 2022. *2021 Census maps.* Available at: https://www.ons.gov.uk/census/maps [Accessed: 9 January 2023].
[15] Office for National Statistics. 2022. *NOMIS: Ethnicity.* Available at: https://www.nomisweb.co.uk/census/2011/qs201ew. [Accessed: 9 January 2023].

Geography

Significant numbers of people served by Hywel Dda University Health Board live in rural, relatively isolated areas. According to 2014 Wales Rural Observatory data[16], the entire population of Ceredigion lived in areas defined as sparsely populated, as did roughly half of the population of Pembrokeshire and a third of the population of Carmarthenshire. Recently published 2021 Census population density data shows that as of March 2021, there were 40.0 people living in each square kilometre of Ceredigion, 76.2 in Pembrokeshire and 79.3 in Carmarthenshire. This compares with more than 2,500 people per square kilometre of Cardiff.[17]

A 2017 Local Government Association report[18] suggested that there are multiple health benefits associated with living in rural areas, such as increased access to green spaces and less air pollution, and data[19] show that, in general, people in rural areas of Wales live longer than in urban areas, are more affluent and have fewer health harming behaviours. However, rural populations tend to be older and therefore more at risk of experiencing poor health, and there will often be fewer available health services, or poorer transport links making it more difficult to reach services.

When planning interventions to reduce health inequalities across the Health Board area, it will be important to consider the differing health outcomes associated with living in urban and rural areas, and to consider the availability and accessibility of health services for the large numbers of individuals living in rural areas.

Vulnerable groups

Another area requiring more research is the collection of data around vulnerable groups living in the Hywel Dda area, and the health impacts upon them. There are, for example, multiple gypsy traveller communities in the Health Board area, whose sometimes transient lifestyle means that they experience income deprivation, poor access to health services and poor housing, all of which will lead to health inequalities. These communities, and others in vulnerable groups such as sex workers, homeless people and vulnerable migrants, are seldom heard, but there is potential to reduce health inequalities by understanding their needs.

Digital inclusion

In recent years, increasing numbers of day-to-day transactions have been conducted online, with many public bodies now offering some services as online-only. During the lockdown periods of the COVID-19 pandemic, many primary and secondary care services conducted video consultations in place of those that would previously have taken place face-to-face, and in some areas there has not been a return to holding all consultations in person. It is therefore important to consider that for

---

[16] Wales Rural Observatory. 2014. *Using our rural statistics.* Available at: https://www.walesruralobservatory.org.uk/rural-statistics.html [Accessed: 15 August 2022].
[17] Office for National Statistics. 2022. *NOMIS: 2021 Census.* Available at: https://www.nomisweb.co.uk/sources/census_2021 [Accessed: 9 January 2023].
[18] Local Government Association. 2017. *Health and wellbeing in rural areas.* Available at: https://www.local.gov.uk/sites/default/files/documents/1.39_Health%20in%20rural%20areas_WEB.pdf#:~:text=The%20health%20of%20people%20in%20rural%20areas%20is,older%2C%20the%20prevalence%20of%20these%20conditions%20is%20higher. [Accessed: 16 August 2022].
[19] Public Health Wales. 2022. *Public Health Outcomes Framework.* Available at: https://phw.nhs.wales/services-and-teams/observatory/data-and-analysis/public-health-outcomes-framework/ [Accessed: 8 August 2022].

those who do not have internet access, or who are not confident in using the internet, there may be inequality of access to services.

Digital Inclusion Wales reports that there is a higher proportion of digitally excluded people in older age groups, with 59% of those aged over 75 years having no basic internet skills. They also state that digital exclusion is higher in people with disabilities, lower income households, people with lower educational attainment, people in rural areas and people who do not speak English as a first language.[20]

Data from the 2021/2022 National Survey for Wales showed that 8% of households in Wales are not connected to the internet, and this rises to 9% in Carmarthenshire (compared with 8% in Pembrokeshire and 6% in Ceredigion). The same survey showed that 9% of people said they had not found information online in the last three months, with a further 1% saying they had only been able to do this with help, meaning that almost one person in 10 in Wales is not routinely using the internet (breakdown by local authority area not available).[21]

[20] Digital Communities Wales. 2022. *Digital inclusion in Wales.* Available at: https://www.digitalcommunities.gov.wales/digital-inclusion-in-wales-2/ [Accessed: 9 January 2023].
[21] Welsh Government. 2022. *National survey for Wales.* Available at: https://gov.wales/national-survey-wales. [Accessed: 9 January 2023].

Where are we starting from in Hywel Dda?

Life expectancy and healthy life expectancy

Life expectancy tells us how long people are expected to live, on average, from birth, and is a key measure of the health of a population. However, measuring life expectancy only tells us part of the story about health inequalities. It is important to also consider healthy life expectancy; this tells us how much time people spend living in good health, and how many years of poor health they will, on average, experience before they die. The association between income and health is widely recognised, and it is therefore unsurprising to find that across Wales, there is significant variation in both life expectancy and healthy life expectancy between people living in the most and least deprived areas. This inequality in health has significant implications for people's quality of life, mental wellbeing and ability to work, and on demand on local health and social care services.

Data published by the Office for National Statistics in April 2022[22], using 2018-2020 data, showed that:

- Male life expectancy at birth in the most deprived areas of Wales was 74.1 years compared with 81.6 years in the least deprived areas. This means that males in the most deprived areas can expect to live 7.5 years less than those in the least deprived areas.
- For females, the same comparison was 78.4 years and 84.7 years respectively – a life expectancy gap of 6.3 years between the most and least deprived areas.
- For females, life expectancy in the most deprived areas has decreased significantly; in 2015-2017, those in the most deprived areas could expect to live 0.7 years longer than in 2018-2020.
- Male healthy life expectancy at birth in 2018-2020 was just 54.2 years in the most deprived areas compared with 67.6 years in the least deprived areas – a gap of more than 13 years.
- For females, the healthy life expectancy gap was even greater at almost 17 years; those in the most deprived areas had a healthy life expectancy of 53.3 years compared with 70.2 years in the least deprived areas respectively.

In recent years, life expectancy across the population in Wales, along with the rest of the UK, has been stalling. Previously, steady increases in life expectancy for both sexes had been seen since the end of the Second World War. A 2020 Public Health Wales report[23] reported 2015-2017 data, and found that male and female life expectancy in Wales has only increased by 0.2 years and 0.1 years respectively since 2010-12. Prior to this, between 2001 and 2012, the increases had been 2.6 years and 2 years respectively. Data available from the Public Health Outcomes Framework[24] published by Public Health Wales allows us to compare Hywel Dda to Wales using 2015 to 2017 data on life expectancy and healthy life expectancy. It shows that life expectancy in all counties of the Health

[22] Office for National Statistics. 2022. *Health state life expectancies by national deprivation quintiles, Wales 2018 to 2020.* Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/bulletins/healthstatelifeexpectanciesbynationaldeprivationdecileswales/2018to2020. [Accessed: 15 August 2022].

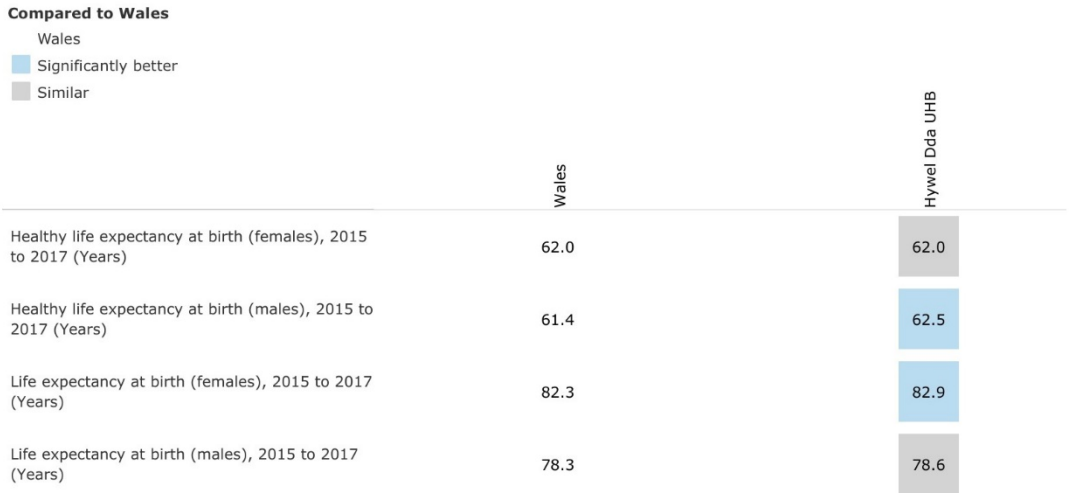
[23] Public Health Wales. 2020. *Life expectancy and mortality in Wales.* Available at: https://phw.nhs.wales/services-and-teams/observatory/data-and-analysis/life-expectancy-and-mortality-in-wales-2020/. [Accessed: 15 August 2022].

[24] Public Health Wales. 2022. *Public Health Outcomes Framework.* Available at: https://phw.nhs.wales/services-and-teams/observatory/data-and-analysis/public-health-outcomes-framework/ [Accessed: 8 August 2022].

Board area has decreased since 2012-14; differences of 0.8 years in Ceredigion, and 0.7 years in Pembrokeshire and Carmarthenshire.

Figure 2 below shows that across the Health Board area, life expectancy and healthy life expectancy for both sexes are either similar, or significantly better, than the Wales average.

Figure 2: Comparing life expectancy and healthy life expectancy in the Hywel Dda University Health Board area and in Wales



	Wales	Hywel Dda UHB
Healthy life expectancy at birth (females), 2015 to 2017 (Years)	62.0	62.0
Healthy life expectancy at birth (males), 2015 to 2017 (Years)	61.4	62.5
Life expectancy at birth (females), 2015 to 2017 (Years)	82.3	82.9
Life expectancy at birth (males), 2015 to 2017 (Years)	78.3	78.6

However, if the data is broken down further to investigate differences between the three counties that comprise Hywel Dda, a different picture emerges. Figure 3 shows that while all measures are significantly better in Ceredigion than the Welsh average, in Carmarthenshire, healthy life expectancy for females is significantly worse, and all measures are slightly below the Welsh average although are not statistically significantly different.

Figure 3: Comparing life expectancy and healthy life expectancy in the three counties of the Hywel Dda University Health Board area and in Wales

	Wales	Hywel Dda UHB	Ceredigion	Pembrokeshire	Carmarthenshire
Healthy life expectancy at birth (females), 2015 to 2017 (Years)	62.0	62.0	65.8	62.7	59.7
Healthy life expectancy at birth (males), 2015 to 2017 (Years)	61.4	62.5	67.4	62.5	60.4
Life expectancy at birth (females), 2015 to 2017 (Years)	82.3	82.9	84.2	83.3	82.2
Life expectancy at birth (males), 2015 to 2017 (Years)	78.3	78.6	79.5	78.9	78.0

Burden of disease and mortality

In Wales, there is clear evidence showing that the greatest burden of disease, and the greatest mortality, is from conditions that are largely preventable, and data shows that the picture in Hywel Dda is no different. This is important from a health inequalities perspective because preventable conditions and premature mortality are both more prevalent in more deprived populations. As with life expectancy, improvements in premature mortality have slowed in Wales since 2011. In fact, the rate of premature mortality in the most deprived quintile of the population has increased, and was found to be 2.3 times as high as the least deprived quintile by a 2020 Public Health Wales report.[25]

A 2018 report by Public Health Wales[26] showed that across Wales, cancer and cardiovascular disease were the main disease-related causes of disability, followed by mental health disorders, which were increasing in prevalence. For Hywel Dda, results from the National Survey for Wales[27] show that the proportion of adult respondents (aged 16 and over) reporting a mental health condition is broadly similar to the average across Wales of 10%. In Ceredigion and Pembrokeshire, proportions of adults reporting having a cardiac or respiratory condition were also similar to the Welsh average (12% and 13% compared to 13%) but this was higher in Carmarthenshire where 17% of adults reported having such a condition. This is an avoidable health inequality when evidence shows that lifestyle factors are closely associated with these conditions; this is discussed in more detail in the causes of health inequalities section below.

Perhaps unsurprisingly, data shows that cancer and heart disease are the greatest causes of hospital episodes and deaths in the Hywel Dda area. Investigating age-standardised mortality data for 2018, 2019 and 2020 shows that across Wales, cancer and cardiovascular disease were the leading causes of death in all three years, and this trend was the same in the three counties comprising the Hywel Dda area.[28] Deaths from ischaemic heart disease were higher in Pembrokeshire and Carmarthenshire than in Ceredigion in all three years and exceeded the Wales average death rate in 2020. In 2021, cancer and ischaemic heart disease were the two greatest causes of hospital episodes in Hywel Dda.[29]

Access to services

As mentioned previously, health inequalities commonly arise as a result of individuals and groups having unequal ability to access health services. As also discussed previously, in the Hywel Dda area there is potential for access to services to be challenging due to the rural nature of the area and the associated poor transport links in some areas. The impact of the cost of living crisis, which has increased fuel costs and therefore transport costs, could also become a cause of reduced access to

[25] Public Health Wales. 2020. *Life expectancy and mortality in Wales.* Available at: https://phw.nhs.wales/services-and-teams/observatory/data-and-analysis/life-expectancy-and-mortality-in-wales-2020/. [Accessed: 15 August 2022].
[26] Public Health Wales. 2018. *Health and its determinants in Wales.* Available at: https://phw.nhs.wales/services-and-teams/observatory/data-and-analysis/health-and-its-determinants-in-wales-2018/#:~:text=The%20Health%20and%20its%20determinants%20in%20Wales%20report,make%20up%20the%20picture%20of%20health%20in%20Wales. [Accessed: 17 August 2022].
[27] Welsh Government. 2022. *National survey for Wales.* Available at: https://gov.wales/national-survey-wales. [Accessed: 17 August 2022].
[28] Office for National Statistics. 2022. *NOMIS: Mortality statistics.* Available at: https://www.nomisweb.co.uk/datasets/mortsa. [Accessed: 17 August 2022].
[29] Patient Episodes Database Wales. 2022. *NHS hospital admitted patients: Hywel Dda university health board residents.* Available at: https://dhcw.nhs.wales/information-services/health-intelligence/annual-pedw-data-tables/pedw-publications-table/headline-figures-hywel-dda-lhb-residency-based-2020-21/ [Accessed: 17 August 2022].

services for groups with fewer material resources. Evidence also shows that groups with protected characteristics, or who are vulnerable, may have decreased ability to access services for numerous reasons already discussed.

An area requiring more research is the collection of data for the Hywel Dda area showing the sociodemographic profile of individuals who are lower users of services, in order to understand barriers to attendance and the interventions that could facilitate improved uptake of services. National Survey for Wales data for 2019-20[30] suggests that uptake of GP services is slightly lower in Hywel Dda than across Wales on average, with between 69 and 74% of respondents in the three counties reporting seeing a GP in the last 12 months compared with a Wales rate of 76%. In Ceredigion, 44% of people reported having a hospital appointment in the last 12 months compared to a Wales average of 48%, and this figure was 47% in Pembrokeshire and 50% in Carmarthenshire. These figures, however, are unable to tell us whether health service usage is generally lower than average because of access difficulties, and this is an area requiring more understanding.

One available metric warranting more investigation, is that when surveyed, 29% of residents of Hywel Dda said that they had enough information to live a healthy life, compared with 42% of Welsh residents.[31]

[30] Welsh Government. 2022. *National survey for Wales.* Available at: https://gov.wales/national-survey-wales. [Accessed: 17 August 2022].

[31] Hywel Dda University Health Board. 2021. *Director of Public Health Annual Report 2020-2021.* Available at: https://hduhb.nhs.wales/about-us/your-health-board/board-meetings-2021/board-agenda-and-papers-25th-november-2021/agenda-and-papers-25th-november-2021/item-3-1-5-hdduhb-director-of-public-health-annual-report-2020-21/. [Accessed: 8 August 2022].

What causes health inequalities in our population?

As highlighted already, a range of factors including socioeconomic conditions, geography, belonging to a protected group or vulnerable group can all result in health inequalities. They shape the environmental, social and economic contexts of people's lives, which in turn impact on health outcomes and ability to access services.

It is important to note, in any approach to reducing health inequalities, that the ability to lead a healthy lifestyle is greatly influenced by people's living conditions and access to material resources. This in turn causes physiological consequences that become risk factors for disease, which in turn contributes to the unequal distribution of largely preventable health conditions. Some examples are:

- Individuals with lower incomes are less likely to be able to engage in regular physical activity due to lack of access to safe green spaces and lack of disposable income to spend on leisure activities. Reduced physical activity leads to obesity and overweight, which are the greatest causes of disability in Wales, and are risk factors for health conditions including disability, cancer and cardiovascular disease[32].
- There is an association between growing up in a deprived area and taking up smoking, the biggest contributor to the burden of disease in Wales, particularly cancer and respiratory diseases.[33] People from deprived areas are also less likely to access smoking cessation services.
- Individuals in deprived areas are less likely to eat a healthy diet due to lack of money to buy fresh food, lack of access to shops offering healthy options, and disproportionate availability of fast food premises. This again leads to obesity and overweight, but can also lead to malnutrition, which is a risk factor for multiple diseases.

Data from the Public Health Wales public health outcomes framework shows, for all of the unhealthy lifestyle factors listed above, clear gradients in which unhealthy behaviours are most prevalent in the most deprived quintile of residence in Wales, and least prevalent in the least deprived. For example, smoking prevalence varies from 26.2% in the most deprived populations to 10.9% in the least deprived.

The Hywel Dda University Health Board Director of Public Health Annual Report 2019/20 detailed the prevalence of healthy behaviours as shown in Figure 4 below[34]. The data shows some progress to be made in several areas, such as smoking and obesity rates above the Welsh average. It is worth noting that as these figures are not broken down to smaller areas, there will be pockets of deprivation across the Health Board area where prevalence of unhealthy behaviours is much higher, and this is where there is opportunity to intervene and to reduce preventable health inequalities.

---

[32] Public Health Wales. 2018. *Health and its determinants in Wales.* Available at: https://phw.nhs.wales/services-and-teams/observatory/data-and-analysis/health-and-its-determinants-in-wales-2018/#:~:text=The%20Health%20and%20its%20determinants%20in%20Wales%20report,make%20up%20the%20picture%20of%20health%20in%20Wales. [Accessed: 17 August 2022].

[33] ibid

[34] Hywel Dda University Health Board. 2021. *Director of Public Health Annual Report 2020-2021.* Available at: https://hduhb.nhs.wales/about-us/your-health-board/board-meetings-2021/board-agenda-and-papers-25th-november-2021/agenda-and-papers-25th-november-2021/item-3-1-5-hdduhb-director-of-public-health-annual-report-2020-21/. [Accessed: 8 August 2022].

Figure 4: Health indicators in the Hywel Dda University Health Board area

Indicator	Ceredigion	Pembrokeshire	Carmarthenshire	Hywel Dda	Wales
Adults with fewer than two healthy behaviours (2019/20)	10.8%	11.3%	12.4%	11.7%	10.0%
Adults (aged 16+) who smoke (2019/20)	20.5%	20.5%	16.2%	18.5%	17.4%
Adults aged 16+ drinking more than 14 units of alcohol per week (2019/20)	17.7%	19.2%	21.5%	19.9%	18.6%
Adults aged 16+ active for fewer than 30 minutes per week (2019/20)	25.3	36.9	27.6	29.9	33
Adults aged 16+ who ate fewer than five portions of fruit or vegetables the previous day	23.3	25.0	21.7	22.9	24.3
Adults aged 16+ who are overweight or obese (BMI of 25 or above)	58.4	59.3	63.6	61.1	59.9
Children aged 4-5 years at a healthy weight/underweight (2018/19)	78.1	69.2	69.6	70.9	73.1

What are we already doing to reduce health inequalities?

This section describes some of the projects, interventions and activities already underway in the Health Board area to reduce health inequalities. The examples provided are not intended to be exhaustive and it is acknowledged that other good work is underway at Wales, Health Board and local level.

Wales interventions

There are a number of national level public health interventions focused on reducing health inequalities and delivered across all areas of Wales including Hywel Dda. These include:

- ACTivate Your Life, a free Public Health Wales online self-help course for individuals experiencing mental health issues
- Designed to Smile, a national oral health improvement programme that has run in Wales since 2009 and delivers nursery and schools-based tooth brushing programmes
- Help Me Quit, delivering smoking cessation services including through pharmacies and hospitals in the Hywel Dda area
- The National Exercise Referral Scheme (NERS), overseen by Public Health Wales and allowing health professionals to refer individuals with a range of chronic health conditions for supervised physical activity sessions
- The Healthy Schools Scheme, providing teaching on healthy lifestyles for pupils and allowing school communities to take ownership of health and wellbeing issues
- Flying Start, a Welsh Government initiative providing free childcare to children aged 0 to 4 living in the most deprived areas of each local authority in Wales
- The Programme for Government 2021 to 2026 includes a commitment to roll out social prescribing to all areas of Wales – enabling health professionals to connect individuals to non-clinical help and support services, usually those delivered by community and voluntary organisations.
- Public Service Boards were established in every local authority area of Wales under the Wellbeing of Future Generations Act 2015, to improve joint working across public services. Each board must publish an annual wellbeing plan showing how it will work towards the seven wellbeing goals outlined by the Act, including “a more equal Wales.”
- Gwent has recently become the first “Marmot region” in Wales, signifying a collective intent among public bodies in the area to reduce inequalities in accordance with the objectives set out in the seminal *Fair Society Healthy Lives* report.

Hywel Dda University Health Board interventions

<u>Health Equity Group</u>

The Health Equity Group was originally established to ensure equity of access to vaccines, but has developed over time to become a forum to discuss, support and advise on how to ensure all people in Hywel Dda have fair access to Health Board services, and fair opportunity to receive the best support and outcomes. This is a partnership group including representation from local authorities and the third sector, in addition to Health Board colleagues.

While the group currently meets to share best practice and discuss initiatives underway or in development by the membership, there is potential – with exact mechanisms being discussed at the time of writing - for it to link directly into the Executive Team and Board, highlighting inequity issues requiring high-level intervention.

Community Development Outreach Team

Based within the Health Board, the Community Development Outreach Team was initially established to support Black, Asian and minority ethnic communities in following COVID-19 guidelines and accessing the vaccine. However, as it became clear that pre-existing health inequalities affecting engagement with the COVID-19 response would continue to impact on communities more broadly, the team's remit was expanded to supporting other vulnerable communities and the wider health inequalities agenda.

Activities now undertaken by the team include supporting Ukrainian refugees arriving in Wales, visiting mosques to engage with communities around health and wellbeing, and engaging with people living at traveller sites. The team also works with homeless people and those struggling financially to facilitate uptake of services such as soup kitchens and food banks. Well-being Walks have been arranged in conjunction with Llanelli Multi-cultural Society to encourage walking for well-being and have positively impacted on reducing loneliness and isolation and providing a platform for conversations about health needs and promoting public health messages.

The Community Development Outreach Team is small, with 3.6 whole time equivalent members of staff. There is potential to increase capacity within the team to increase the number of communities and individuals that they are able to support.

Early Years Intervention Team

Based in the Gwendraeth Valley area, this initiative seeks to support families with young children through working with health visitors and midwives to ensure that those needing additional support are identified and referred. Projects include one to one and group support for those experiencing parenting issues, support for parents of children with additional learning needs, perinatal mental health support, and play sessions.

Mental health support through 111

In June 2022, Hywel Dda University Health Board became the first Health Board in Wales to launch a dedicated mental health advice service, offering support for all age groups through the established 111 call line. People are able to access the service by phoning 111 and selecting option 2 where they will are put through to a mental health practitioner.

The service was initially accessible from 9am to 11.30pm, seven days a week, but moved to a 24/7 service from November 2022.

Tywi Taf Social Prescribing

An example of one of 14 social prescribing projects funded by the Health Board, Social Prescribers/ Well-being Advisors in Tywi Taf are link workers, based in GP practices, who support patients with their non-medical issues and help them to access appropriate support within the local community. This includes support around volunteering, employment, benefits, housing, debt, parenting and physical activity, with wellbeing walks among the available services. The Tywi and Taf localities currently fund two full-time social prescribers. Patients are able to self-refer through their GP practice.

ChatHealth

ChatHealth is run by the Health Board's Youth Liaison Team, in collaboration with school nursing teams, and is a text-based service across Carmarthenshire, Ceredigion and Pembrokeshire to support young people. The initial rollout supported people aged 11-19 but the success of the project led to additional funding being received and the offer being extended to include those aged up to 25 years.

ChatHealth allows young people to text a helpline and get confidential support from a team of qualified nurses. The service can support young people with a range of issues, from emotional health and wellbeing, including anxiety, anger, low mood and panic attacks, to relationships, self-harm, bullying, sexual health, and alcohol, smoking and drugs.

Armed Forces Covenant

Hywel Dda University Health Board has demonstrated its commitment to supporting military veterans by signing the Armed Forces Covenant. The covenant is a promise by the nation ensuring that those who serve or who have served in the armed forces, and their families, are treated fairly. The covenant supports serving personnel, service leavers, veterans, and their families. The Health Board gained the Defence Employer Recognition Scheme Gold award in July 2021.

Interventions within the Health Board to reduce the inequalities experienced by veterans have included implementation of the NHS Priority Treatment guidance and the provision of the Veterans NHS Wales service locally to support those affected by mental ill-health.

Local government interventions

West Wales Walking for Wellbeing

A joint project between Pembrokeshire National Park and Ceredigion and Carmarthenshire County Councils, this project aims to develop a sustainable model for health and wellbeing walking groups across Hywel Dda. This is a universal intervention but particularly supports individuals who currently lead sedentary or relatively sedentary lifestyles in becoming more physically active. By creating and developing these new walking groups with GP practices and other community settings, this model seeks to empower the setting to take ownership of the walking group once established.

The project has been running for four years and following external evaluation, is to continue into the 2023/24 financial year.

Carmarthenshire Family Intervention Service

This service was established under the Children First programme, which identified five priority areas of Wales to deliver “children’s zones” enabling the community and local organisations to work together to meet the needs of children and young people. In Carmarthenshire, focus is on the Glanymor and Tyisha ward, one of the most deprived areas of Hywel Dda. Targeted support is provided for children and young people less able to have their needs met by other local authority services, such as those with difficult and challenging behaviour, emotional health needs and complex family situations.

Third sector interventions

West Wales Action on Mental Health

Health promotion work by West Wales Action on Mental Health supports staff and volunteers in mental health services in the statutory and voluntary sector (including peer led groups) to improve the physical health of the people they support. The organisation also works with people with lived experience and carers to ensure that their experiences and knowledge about what matters the most are taken into account when planning services, and to help promote good health and wellbeing through a combination of free training, information, support and working with a recovery approach.

Recent projects have included helping to develop the West Wales Nature Based Health Service Network in partnership with the Pembrokeshire Coast National Park Authority, delivering mental Health awareness training to a range of physical health organisations, and working with the Health board on interventions to support smoking cessation.

Community Connectors

Community Connectors services are running in each local authority area in Hywel Dda, provided by each area's association of voluntary services in partnership with the Health Board and local authorities. Connect Pembrokeshire, Connect Ceredigion and Connect Carmarthenshire provide information and signpost to activities that can help individuals to improve their health and wellbeing. This includes access to healthy behaviours advice via coaches provided by the Health Board.

Pembrokeshire Community Hub

Originally set up by the local authority to support vulnerable members of the community through the COVID-19 pandemic, the hub is now run by Pembrokeshire Association of Voluntary Services. It aims to be a one-stop shop for information, advice and signposting and for development of new community initiatives.

Reducing health inequalities – what does the evidence tell us?

Unfortunately, but perhaps unsurprisingly given the complexity and persistence of the issue, there is no single "magic bullet" for reducing health inequalities. As this report has already described, inequalities exist in all measures of health and wellbeing, and arise from a complex interaction of multiple influences on individuals throughout the life course. This means that it is impossible to identify single, evidence-based interventions that will reduce all health inequalities.

However, by reviewing the published literature and looking at best practice examples from elsewhere in Wales, the UK and the world, it is possible to identify evidence-based approaches, models and theories that could underpin an approach to reducing health inequalities in Hywel Dda.

The evidence for reducing health inequalities – published literature

A non-systematic database search for published papers on effective strategies to reduce health inequalities revealed more than 2,300 articles from the last decade, with nearly 200 papers remaining when the search is narrowed to only include review-level articles. The majority of these focus on the evidence for specific interventions to reduce specific inequalities in sub-populations, leaving very few articles that investigated broad approaches to the reduction of all health inequalities within a population. However, a number of articles were identified that were helpful in summarising the evidence for population-level approaches.

A 2016 review article by Thornton et al.[35] examined the evidence for interventions to reduce health inequalities that focus on addressing social determinants of health. The reviewers found that while many approaches to the reduction of health inequalities have focused on investment in health services, this is ineffective compared to policy interventions that focus on the social determinants of health. Evidence was found of effective interventions targeted at education and early childhood, urban planning and community development, housing, income enhancements and employment. The authors state that early childhood interventions have demonstrated consistent effectiveness at improving long-term health outcomes for disadvantaged children and their families, are associated with accrued health-related benefits into adulthood, and are cost-effective. They warn that effective approaches to reducing health inequalities require long-term investment, stating that "the complex interplay of factors that has resulted in persistent health disparities cannot be reversed with short-term investments."

A 2018 umbrella review by Thomson et al.[36] reviewed more than 150 primary studies looking at the effect of public health interventions aimed at reducing inequalities across a range of domains including tobacco, environmental health and food and nutrition. The study concluded that while it was possible only to make a "cautious" assessment of what works in reducing health inequalities, there was evidence that using fiscal, regulatory, education, preventative treatment or screening mechanisms - may be effective. Key examples included taxes on unhealthy food and drinks, food subsidy programmes for low-income families, incentive schemes linked to immunisation status, and some nutritional education programmes. The study also identified approaches that were ineffective and some that actually increased health inequalities, such as lowering tax on alcohol and some educational interventions including campaigns aimed at increasing folate intakes.

[35] Thornton, R. et al. (2016). Evaluating strategies for reducing health disparities by addressing the social determinants of health. *Health Affairs* 35 (8), pp. 1416-1423. doi: 10.1377/hlthaff.2015.1357
[36] Thomson, K. et al. (2018). The effect of public health policies on health inequalities in high income countries: an umbrella review. *BMC Public Health* 18 (869). doi: 10.1186/s12889-018-5677-1

Similar conclusions were reached by a 2014 review conducted by the Scottish Public Health Observatory, which found that policy-level interventions around taxation and regulation were more effective in reducing health inequalities than those targeting individual behaviour change. However, the report also noted that while behaviour change interventions may not reduce inequalities, they may be useful in preventing increases in inequalities in some areas.[37]

Garzon-Orjuela et al. (2020)[38] reviewed 97 articles describing strategies and interventions implemented by governments across the world to reduce health inequalities. The authors found evidence that a systems-based approach to reducing inequalities is indicated, so that policies and interventions must be intersectoral and multidisciplinary, and should include all sectors of the health system. They conclude that "it is essential to continue generating interventions focused on strengthening health systems to achieve adequate universal health coverage, with a comprehensive and high-quality care process that leads to the reduction of health inequalities."

Review-level papers were found that looked at the evidence for widely-used approaches to reducing health inequalities at population level, namely community engagement, health equity audits and advocacy. Evidence for all of these approaches was, from the identified papers, weak. One paper from 2013[39] found "solid evidence" that community engagement positively impacts upon health behaviours, health consequences, social support and self-efficacy, but insufficient evidence to test the effects on health inequalities, there was evidence to suggest that interventions that improve social support may also reduce inequalities. Another study from 2020[40] reviewed 23 papers and found that only just more than half (56.5%) showed any evidence that the inclusion of community engagement in public health interventions can reduce inequalities, and also noted that the potential of such an approach was not yet fully recognised. A 2021 systematic review[41] found only weak, limited evidence of the effectiveness of health equity audits and found difficulty in separating the effects of audits from those of other interventions running concurrently. In 2015, a paper[42] investigating the effectiveness of advocacy for reducing inequalities found only "scant" evidence and suggested that more research was needed.

The evidence for reducing health inequalities - models and theories In recent years, a number of models and theories have been proposed as evidence-based approaches to development of a health

[37] Improving Health (2014). *Understanding what works to reduce health inequalities*. Available at: Understanding what works to reduce health inequalities (healthscotland.com). [Accessed: 24 October 2022].
[38] Garzon-Orjuela, N. et al. (2020). An overview of reviews on strategies to reduce health inequalities. *International Journal for Equity in Health* 19 (192). doi: 10.1186/s12939-020-01299-w

[39]O'Mara-Eves, A. et al. (2013). Community engagement to reduce inequalities in health: a systematic review, meta-analysis and economic analysis. *Public Health Research.* doi: 10.3310/phr01040

[40] Nickel, S. and von dem Knesebeck, O. (2020). Do multiple community-based interventions on health promotion tackle health inequalities? *International Journal of Equity in Health* 19 (157). doi: 10.1186/s12939-020-01271-8
[41] van Daalen, K. et al. (2021). Health equity audits: a systematic review of the effectiveness. *BMJ Open* 11 (11). doi: 10.1136/bmjopen-2021-053392.
[42] Farrer, L. et al. (2015). Advocacy for health equity: a synthesis review. *The Milbank Quarterly* 93 (2), pp. 392 – 437. doi: 10.1111/1468-0009.12112

inequalities approach. The following section summarises examples of some of these approaches for consideration, but is not intended to be exhaustive.

Policy-driven approach: WHO HERSI framework

WHO HERSI is the World Health Organization's Health Equity Status Report initiative, to promote and support policy action and commitment for health equity and well-being in the European Region. Specifically, the HESRi aims to shift political and policy focus from describing the problem to capturing progress and enabling action to increase equity in health.

WHO has proposed the framework shown in the infographic below as a guide to the policy interventions that can be introduced across five priority areas addressing the wider determinants of health.[43]

In Wales, the framework has already been used by Public Health Wales as the approach to its 2021 report detailing the unequal impact of the COVID-19 pandemic on different population subgroups.[44]

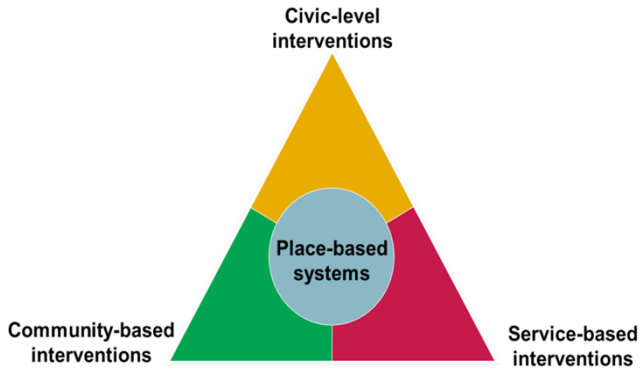
Life course approach: Fair Society Healthy Lives

[43] World Health Organization (2019). *Health equity policy tool: A framework to track policies for increasing health equity in the WHO European region.* Available at: https://apps.who.int/iris/rest/bitstreams/1377290/retrieve [Accessed: 25 October 2022].
[44] Public Health Wales (2021). *Placing health equity at the heart of the COVID-19 sustainable response and recovery: Building prosperous lives for all in Wales.* Available at: https://phw.nhs.wales/news/placing-health-equity-at-the-heart-of-coronavirus-recovery-for-building-a-sustainable-future-for-wales/placing-health-equity-at-the-heart-of-the-covid-19-sustainable-response-and-recovery-building-prosperous-lives-for-all-in-wales/ [Accessed: 25 October 2022].

Life course approaches to health improvement advocate introducing interventions at each stage of the life of an individual, often starting at the pre-natal stage and addressing the needs of individuals through birth, childhood, adolescence, early adulthood, middle age and old age. An example of such a strategy is that set out in the 2010 report Fair Society, Healthy Lives, the culmination of the Marmot Review into health inequalities in England. The report included a key principle of "giving every child the best start in life" and proposed that the first 1,000 days of a child's life are crucial in setting the direction for their future health and wellbeing.

Place-based approach: Population intervention triangle

Place-based approaches to health involve local commissioners and providers across sectors working together with local communities to meet the specific needs of that population. Working in the complex environments that place-based systems represent, single interventions are unlikely on their own to be sufficient. Strategies that are multifaceted and complementary are more likely to bring success. The figure below shows the population intervention triangle proposed by Public Health England.[45] This suggests a role for public sector policy, community interventions and engagement, and service-based interventions, working together to reduce health inequalities.



What has worked elsewhere?

Sweden – one of the most equal countries in the world

A 2022 report from Eurostat[46] summarised the latest data on both life expectancy and healthy life expectancy from across Europe. The report showed Sweden to have the highest healthy life expectancies at birth for both men and women, of 72.7 years for women and 72.8 years for men. This means that healthy life expectancy for both sexes is around a decade longer than in Wales, if we compare with the figures of 62.0 years of healthy life expectancy for women and 61.4 years for men in Wales (based on 2015-2017 data) provided earlier in this report.

This is perhaps unsurprising given that Sweden is widely considered to be one of the most equal countries in the world, and the most equal in Europe. This is based not only on its levels of healthy

[45] Public Health England (2017). *Reducing health inequalities: System, scale and sustainability.* Available at: Reducing health inequalities: system, scale and sustainability (publishing.service.gov.uk) [Accessed: 25 October 2022].
[46] Eurostat (2022). *Healthy life years statistics.* Available at: Healthy life years statistics - Statistics Explained (europa.eu) [Accessed: 14 November 2022].

life expectancy, but also on the relatively small gap in life expectancy between the most and least deprived areas, and its levels of income inequality.[47]

Some of the public health initiatives introduced in Sweden, and which are believed to have contributed to its relatively low levels of inequality, include:

- Investment in the early years: Family centres similar to the Sure Start initiative in the UK have been in place since the 1970s. Unlike in the UK where Sure Start funding has reduced over time, funding of these centres has remained a government priority in Sweden.
- Investment in education quality with a focus on disadvantaged children: In Sweden there is recognition that children from deprived areas are most in need of high-quality education to address the lack of support that they are likely to experience at home. In the most deprived areas of Sweden, there has been focus on increasing the number of teaching staff to ensure a higher ratio of teachers to students, in some cases by incentivising recruitment to these areas through the offer of higher salaries. There is no similar initiative in the UK.
- Protecting the workforce: The UK has one of the highest levels of in-work poverty in Europe, whereas Sweden has one of the lowest. While there is no national minimum wage in Sweden, average earnings are higher than elsewhere in Europe, and around 70% of workers are members of unions who protect them from low pay and poor working conditions (compared with 23% of workers in unions in the UK in 2018).

UK initiatives to reduce health inequalities

The organisation Health Action Campaign provides a useful summary of recent UK initiatives to reduce health inequalities that have proved successful on evaluation[48]. These include:

- A successful place-based approach to reducing health inequalities in Blackburn, one of the most deprived areas in England. The local authority, working with the charity Change, Grow, Live, worked collaboratively to deliver an integrated drug and alcohol recovery and prevention service to support vulnerable individuals and those living in areas with the greatest deprivation. The programme led to greater self-reported physical activity levels, improved access to education and employment, and an increase in volunteering among service users.
- The Alchemy Project, an arts-based intervention in South East London, focused on improving the wellbeing of individuals with common mental health conditions. At the end of the project, participants reported not only an increase in their wellbeing but also improvements in social skills leading to better relationships with peers and families.
- In Cambridgeshire, a local health and wellbeing partnership worked with the council's public health team to increase uptake of NHS health checks in migrants through outreach. Interventions included offering checks in workplaces, placing health check vans outside workplaces, and using health trainers. The programme achieved its objective of increasing the number of individuals receiving health checks.

[47] Health Action Campaign (2021). *Lessons from Sweden.* Available at: Lessons from Sweden - Health Action Campaign. [Accessed: 14 November 2022].
[48] Health Action Campaign. 2021. *Public health initiatives.* Available at: Public Health initiatives - Health Action Campaign [Accessed: 14 November 2022].

What can we learn from these examples?

All of these initiatives have tackled health inequalities by taking a multi-agency, systems working approach. They take community-based approaches rather than relying on individuals to change their own behaviour, and take targeted approaches, taking action where need has been identified to be greatest.

Key principles

Based on the evidence presented here, the Board is asked to agree to adopt the following principles in its approach to tackling health inequalities:

1	**We will embed reduction of health inequalities in everything we do**	We will ensure that planning of all of our activities takes place through a health inequalities lens, and that evaluation always includes consideration of whether we successfully impacted on the reduction of inequalities. This is not limited to the provision of health services – we are also an employer, a commissioner and a procurer of goods and services.
2	**We will work with our partners, as a public health system, and will provide strong leadership**	It is clear from the evidence presented in this report that an effective approach to reducing health inequalities requires working across the wider determinants of health, and therefore across organisations and sectors. We will encourage all partners to embed health inequalities in all of their activities, providing strong leadership and guidance, and will hold partners to account where necessary.
3	**We will take an evidence-based approach**	The evidence around what works – and what doesn't work – to reduce health inequalities is constantly involving. We will constantly monitor and consider new evidence, changing or reinforcing our own approach as indicated by the evidence.
4	**We will commit to investing in more research to understand our local populations**	This report highlights a number of gaps in the data that we collect, hold or can access, so that we don't know everything about health inequalities in our local populations. We must commit to conducting more research – prioritising understanding the implications for the Health Board of the 2021 Census data – to make sure we understand the needs of our populations.

5	**We will react to emerging events and crises through a health inequalities lens**	This report has highlighted that global and national crises – specifically the COVID-19 pandemic, climate change and the cost of living crisis – impact disproportionately on different groups in society. We must consider the potential of all of these issues, plus new, emerging crises to widen health inequalities, and we must act quickly and decisively to mitigate impacts from the outset.
6	**We will engage with our communities**	We cannot effectively tackle health inequalities without understanding what matters to our populations and which interventions would most positively impact upon their lives. We need to understand the difference between engagement and consultation, and ensure we are truly engaging, listening, and acting upon what we hear. The planned 10,000 Conversations work of the public health team is an ideal opportunity to begin this process and requires Board support, and investment where needed.
7	**We will recognise what we can't do, and we will communicate this clearly**	We will recognise that reducing health inequalities is a broader issue than how we plan and deliver healthcare services, and we will accept that taking a wider determinants approach includes divesting some control to our partners, and to our populations. We will clearly communicate to the public the links between social determinants of health, prevention, and the health they will experience. We will support our local population in taking individual action to improve their own health and wellbeing, and will help them to understand that pressure on many of our services is preventable. Where we see the need for action that we cannot mobilise at a local level – such as a policy requirement at Wales or UK level – we will lobby for change.
8	**We will make links with other areas of Wales, the UK and internationally to understand what works, learn from experience and forge working partnerships**	We will start this journey by making links with the Marmot Region in Gwent, to understand what is required to make Hywel Dda the second Marmot Region in Wales.

9	**We will not exacerbate health inequalities**	There is a risk that well-intended interventions to reduce inequalities could inadvertently widen the gap, for example by improving the health and wellbeing of the least deprived group while having no effect on the most deprived. We will be mindful of this as we plan our approach to health inequalities, and we will use the best available evidence to ensure that we do not end up making things worse.
10	**We will take a long-term, sustainable approach**	The evidence in this report has shown that there are no quick fixes or magic bullets to immediately reduce health inequalities, so we must be prepared to take a long-term approach. We must accept that it may take many months or years to see positive outcomes.

Evaluation metrics

The next section will set out some options for an approach to addressing health inequalities in Hywel Dda. Whichever approach, or approaches, the Board ultimately decides upon, it will be crucial to agree evaluation metrics at the outset. This will ensure that we hold ourselves to account in not just planning our approach, but continually monitoring its impact and effectiveness and taking corrective action if required.

Metrics could be quantitative (such as monitoring changes in the data presented earlier in this report, including life expectancy, healthy life expectancy and lifestyle behaviours). However, we need to be aware that there are multiple issues with some of these measures. These include:

- Data such as the Welsh Index of Multiple Deprivation (WIMD) telling us only part of the story. While this particular dataset can identify which postcode areas are most and least deprived, there will be inevitably be variation in the experiences of the individuals who live there. The cost of living crisis, which is already seeing an increase in "in-work" poverty, will further complicate the data presented by WIMD, as we can perhaps no longer consider being in employment as an indicator of being significantly less socioeconomically deprived than being unemployed;
- The lifestyle measures described earlier are self-reported. We rely on individuals to tell us accurately how many fruit and vegetables they eat, how much they smoke, how much alcohol they drink and so on – but we know that people may under- or over-estimate their own behaviour due to poor memory, shame around their own behaviour, or just wanting to give "socially acceptable" answers when surveyed.
- The relatively long timescale for some data to be produced. For example, in this report we have considered life expectancy data that in some cases dates back to 2018, so five years ago. While in the longer term, this data will help us in measuring our impact on reduction of health inequalities, we need to develop short- and medium-term measures that will allow us to evaluate the effectiveness of our approach on an ongoing basis.

Additional quantitative measures that could be adopted to monitor the impact of our approach might include uptake of services (both new interventions and the difference in uptake of existing services once changes have been implemented), completion of interventions by individuals, presentations at hospitals with preventable health conditions, and uptake of linked services (for example, presentations at mental health services in areas where wellbeing initiatives have been introduced).

Qualitative metrics will be equally important in measuring our impact on reduction of health inequalities. This means speaking to individuals and communities to understand, in their words, how our actions have impacted upon their health and wellbeing. We could collect qualitative feedback from service users, and for public health interventions, collect feedback at the beginning and end of each programme to understand how it has been received. Gathering feedback from non-attenders, or individuals who fail to adhere to interventions, will be equally important. Qualitative feedback around services and interventions should focus on understanding their accessibility, acceptability and effectiveness. Development of new services should include consideration of co-production – involving service users in the design from the outset.

Options for planning an approach to reducing Health Inequalities in Hywel Dda

It is clear from the evidence presented earlier in this report that a long-term approach to reducing health inequalities in the Health Board area is required. Below, options for the direction of a future approach to addressing health inequalities are set out, but it is recommended that other activities are undertaken prior to putting any of these options in place. These are:

1. Collection of more data and evidence in order to fully understand the prevalence of health inequalities across the area;
2. Engagement work with local communities (beginning with the 10,000 Conversations work) to understand the impact of health inequalities and the actions that would most benefit our populations;
3. Consideration of the programmes and interventions already operating in the Hywel Dda area, as set out earlier in this report, and how these can be upscaled or adapted in line with the agreed approach;
4. Consideration of the groups and programmes of work already taking a strategic or operational approach to reduction of health inequalities across the Health Board area (eg Healthy Equity Group, Public Service Boards, Regional Partnership Boards) and how the Health Board can influence these groups to work together effectively with clear and distinct goals that do not duplicate effort;
5. Agreement of evaluation metrics as per the previous section.

It is also important to assume that in any of these approaches, the principles set out earlier in this report will be adhered to.

A 2017 Public Health England report outlining potential approaches to tackling health inequalities recommends that a comprehensive strategy should include three elements – action to improve the "causes of the causes" of health inequalities, action to improve "the causes" and action to improve equity of access to health services. It is recommended that the following options are considered as a set from which more than one can be progressed to create such a comprehensive approach.[49]

[49] Public Health England (2017). *Reducing health inequalities: System, scale and sustainability.* Available at: Reducing health inequalities: system, scale and sustainability (publishing.service.gov.uk) [Accessed: 24 November 2022].

Option	How would this work in practice?	Pros and cons of this approach
Place-based approach: focusing on our most deprived communities	By diverting the Health Board's available resources to the most socioeconomically deprived areas, and working with partners to deliver services and interventions that are targeted at improving outcomes across the wider determinants of health. There is opportunity to further segment interventions within these areas to focus on, for example, recognised vulnerable groups, children and young people, elderly people, homeless people, etc.	Targets the most deprived individuals and communities in our population Delivers multiple interventions, likely to be more effective than single interventions Place-based approaches are shown by evidence to be effective A true example of partnership working, capitalising on the influence and expertise of each agency and allowing the Health Board to have influence beyond the services within its remit This approach might miss individuals living in "less deprived" areas who are in reality experiencing similarly high levels of disadvantage or vulnerability The most deprived communities can be the hardest to engage, so community engagement and a co-production approach to planning services must be undertaken properly for this approach to be successful
Risk-based approach: focusing on the lifestyle behaviours that evidence shows to be contributing to health inequalities	By focusing on developing, or strengthening, public health interventions to tackle risky lifestyle behaviours. This might include efforts to reduce	Evidence shows that risky lifestyle behaviours directly contribute to preventable ill-health and preventable burden on health services

	levels of smoking or alcohol consumption across the Health Board, or to increase levels of physical activity or consumption of a healthy diet. There is opportunity to take a proportionate universalism approach, delivering on a whole-population basis but with increased intensity for populations where there is most need.	Evidence shows that unhealthy lifestyle behaviours contribute to health inequalities Interventions are already in place nationally and locally that could be upscaled or refocused Because interventions are already in place and in many cases have had only limited impact, there will be a need to carefully consider what we can do differently or better If interventions are delivered on a whole population, or proportionate universalism, basis, we need to be mindful not to exacerbate inequalities
Policy-driven approach: using the WHO-HERSi model to drive action	By working with partners to drive policy change across the five priority areas identified by WHO and addressing the wider determinants of health. Some areas (health services, promoting community cohesion etc) are within the Health Board's remit. Others (planning, housing, etc) are not, and this would require not only strong partnership working but also the Health Board being willing to invest in interventions beyond its own remit to address health inequalities.	Tackles health inequalities on a wider determinants level, which evidence suggests is the most effective way to have impact The Health Board is already empowered to change policy around health service delivery, which is critical to this approach Investing time and money outside of the Health Board's own area of work may be beyond its comfort zone There is a limit to the policies that are developed locally and can be directly influenced; some desired changes may only be delivered at Wales or UK level

Life course approach: targeting action across life stages	By planning actions to improve health and wellbeing and reduce inequalities targeted at the five life stages identified within this model – pre-conception, early years, childhood and adolescence, working age adults, and older people. There is opportunity to upscale or adapt existing interventions across the Health Board area, and to further segment within the life stages, for example increasing intensity of interventions within the most deprived areas.	Tackles health inequalities on a wider determinants level, which evidence suggests is the most effective way to have impact By taking this approach, inequalities affecting the life course trajectory can be reduced, which could benefit the whole population across the lifespan, as well as future generations Evidence shows that the experiences of children within the first 1,000 days of their lives have huge impact upon their future health and wellbeing, and this approach emphasises early years support There is potential for this approach to treat all individuals at the same life stage as having the same needs, experiences and networks, which will not be the case in reality It may take many years to see the impacts of this approach, as there will be limited value in new interventions for people at later life stages who have already developed unhealthy lifestyles or ill health
Service-based approach: reducing inequalities in access to Health Board services	By taking action to make Health Board services equally accessible to everyone in our population. This requires the need to collect data to understand where there are currently accessibility issues, to understand the barriers and facilitators to access and address these. These may include issues beyond the Health Board's direct control and which need to be	It is within the Health Board's gift to rapidly collect the data needed to understand and address this issue. This addresses only one aspect of health inequalities; this option may work best if adopted along with other approaches to reducing health inequalities set out above.

	addressed through partnership working – for example, public transport may be a barrier for those in rural areas.	
Workforce-based approach: reducing inequalities within the Health Board's workforce	By acting as an exemplar institution, ensuring that inequalities are reduced in the way that the Health Board recruits its workforce, manages its workforce and retains its workforce. This has direct overlap with ongoing work to mitigate the impacts of the cost of living crisis on staff. This approach will lead to improved retention and wellbeing among the workforce, and will act as an example to other employers in the area.	This is an area in which the Health Board can quickly take action within its own remit. Members of staff are likely to be members of the community, resident in Hywel Dda, as well, so that this approach has wider population benefits. Interventions may be beneficial to the families of members of staff as well as the individuals themselves. This addresses only one aspect of health inequalities; this option may work best if adopted along with other approaches to reducing health inequalities set out above.