Director of Public Health Report 2020/2023

Learning and Recovery from Covid-19 as a Population Health Organisation

GIG CYMRU NHS WALES

Bwrdd Iechyd Prifysgol
Cwm Taf Morgannwg
University Health Board

Contents

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Foreword

As the current Interim Deputy and acting Director of Public Health, I bring you this report as an opportunity to reflect on the past few years of unprecedented challenges faced by the Health Board and the population it serves. It summarises the impact of Covid-19 and the legacy this has left behind.

This report initially outlines a period when Professor Kelechi Nnoaham, as Executive Director of Public Health, laid down a clear strategic pathway for the Health Board to work towards its ambition of becoming both an effective Population Health Organisation and part of a wider wellbeing system to help tackle inequalities and improve outcomes for our population. This included the development of new approaches using population segmentation and risk stratification tools to help maximise resource use and outcomes.

Changes to the health board boundary in 2019 with the transfer of Bridgend County Borough area from Abertawe Bro Morgannwg University Health Board to form Cwm Taf Morgannwg (CTM) University Health Board created additional population health challenges, with nearly two thirds of the 450,000 resident population living in the most deprived areas of Wales. Early partnership approaches to improving population health and reducing the health inequalities gap were promising, though within a few months, by March 2020 partnership attention was diverted to respond to the unprecedented Covid-19 pandemic. The pandemic brought to the forefront local inequalities that exist because of deprivation and poverty as well as those that exist between and within population groups.

In 2021, Professor Nnoaham in his lead role of the CTM regional response to Covid-19 pandemic, commissioned analyses to learn from local experience and apply it to our Population Health approach going forward. The intention of my report is to revisit that work, understand our current position and the increased challenges the pandemic has created. It includes how these combine with threats such as the United Kingdom's withdrawal from the European Union ('Brexit'), the cost of living crisis and climate change, which are also having a cumulative impact on the population's health and well-being in Wales.

Amongst so many challenges, however there is also opportunity to take some positives from the many lessons learnt through the management of an incident of such scale, the numerous multiagency partnerships developed and /or strengthened to new levels and the skills, commitment and resilience shown by our workforce to whom we can never show enough appreciation.

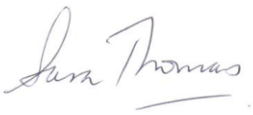
These factors will prompt and continue to support the transformational change needed to allow the Health Board to develop from a system focused on diagnosing and treating illness towards one that supports people to live well by promoting wellbeing and preventing ill health. An important element will be an approach that places individuals in a central role in both planning their care and adopting key responsibilities in the promotion and protection of their own health.

The transfer of the Public Health Team from Public Health Wales to the employment of Cwm Taf Morgannwg University Health Board in November 2022 was another landmark. I would like to acknowledge the warm welcome received and the many opportunities this integration and embedding of public health within the UHB affords population health in CTM.

This report highlights some of the evidence on the toll the pandemic has taken on the people who live in Cwm Taf Morgannwg and outlines a vision for working through recovery in partnership.

By working together to deliver the actions in this report we can build a stronger and more equal future.

Ymlaen i'r dyfodol gyda'n gilydd!



Sara Thomas

Interim Deputy and Acting Director of Public Health

1.0 Introduction

The purpose of this report is to reflect on the impact of Covid-19 on our population, the lessons learnt and the legacy the pandemic has left within our area. It summarises the current challenges and outlines the actions and approaches undertaken by Cwm Taf Morgannwg (CTM) University Health Board in order to resume its ambition to adopt an effective population health approach, continue to strengthen partnership working and reduce inequalities and improve outcomes for our communities.

2.0 Background

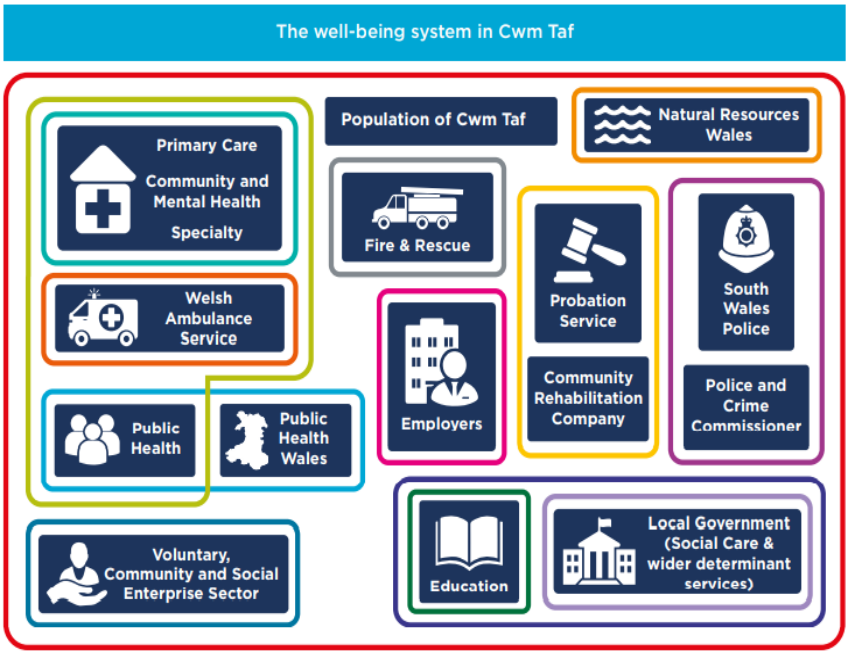
The appointment of Professor Kelechi Nnoaham in 2016, as Executive Director of Public Health, Cwm Taf University Health Board marked the next step in developing local commitment to increase the focus on prevention and embedding a population health approach for delivery of healthcare services.

Population Health as defined by the Kings Fund is:-

'An approach aimed at improving the health of an entire population. It is about improving the physical and mental health outcomes and wellbeing of people within and across a defined local, regional or national population, while reducing health inequalities. It includes action to reduce the occurrence of ill health, action to deliver appropriate health and care services and action on the wider determinants of health. It requires working with communities and partner agencies.' (Buck et al, 2018)

In his first annual report in 2017 (1) Professor Nnoaham reflected on previous population health approaches over the centuries and their influence on our population's health and wellbeing. These approaches ranged from improving sanitation and water supplies through to education and the development of health and welfare systems. The report described a further '*fifth wave*' of change needed to address our key population challenges of frailty, obesity, inequalities and loss of well-being. A vital component of the proposed approach was to develop a 'well-being system' to deliver a whole society approach to improving health and well-being as illustrated in Figure 1.

Figure 1 Well-being system in Cwm Taf (DPH Annual Report 2016-17) (1)



The report recommended a strategic approach with three key elements. These and a brief outline of the progress made against them are presented in Figure 2:

Figure 2 Fifth Wave Strategic Approach (1) and Progress

Recommendations of 2016-17 DPH report	**Progress 2023**
Development of a strategic plan for population well-being delivered through the Public Service Board with the involvement of our communities	Individual Public Service Boards for Cwm Taf and Bridgend produced Wellbeing Plans in 2016/17 as required by the Future Generations and Wellbeing Act. Following a comprehensive, community needs assessment during 2021/22; a new Wellbeing plan for Cwm Taf Morgannwg has been produced for 2023.
Investment in a Population Health Management plan, embedding value-based health care in our NHS services. Population Health Management includes data driven methodology to identify specific populations to be prioritised for certain healthcare and wider interventions.	The Health Board has fully committed to becoming a Population Health Organisation with value-based healthcare and population health management at its core. This has included investment in the development of a local population segmentation and risk stratification tool (PSRS). Early work has centred on the

	identification of patient groups at potential risk of deterioration and/or requirement of greater healthcare input and piloting proactive interventions to prevent this.
Developing a Population well-being research centre to inform and evaluate progress	CTM has led the way in Wales in its approach to population health and focus on population wellbeing research. The local experience with population segmentation is being shared on an all Wales basis to help determine the basis for a national rollout plan. The Health Board has partnered with local authorities, academics and third sector to develop a Health Determinants Research Collaboration. The partnership is currently seeking NIHR funding to establish a centre of population health research excellence, developing local capacity and capability for research and evaluation across partners. See appendix 1 for Further info on Population Health Research

In 2019 Health Board boundary changes to form Cwm Taf Morgannwg University Health Board required service restructure and forging of new partnerships. Within 12 months, the promising early progress to shine light on the wider population health challenges of the new health board footprint and define a new partnership focus on improving population health and reducing inequalities was suspended by the Covid-19 pandemic.

In common with other Health Board areas across Wales and the UK, from March 2020 all health and wider public services experienced severe disruption because of the unprecedented challenges of the Covid-19 pandemic. Sections 3 and 4 outline

a profile of our population at that time and reflect on the impact of and legacy left by the pandemic.

3.0 Our local Profile – An overview of Health Inequalities within CTM UHB pre Covid 19

Health inequalities are unfair and often avoidable differences in an individual's health, when comparing different people or groups, that are due to biological, social, geographical or other factors. These factors interact in a dynamic way across the life course and can persist through generations. They are known as the 'determinants of health' and are illustrated in the representation of Dahlgren and Whitehead's model (2) in Figure 3.

Some differences, such as ethnicity are fixed. Others caused by for example, social or geographical factors such as income, employment, education and environment are potentially avoidable or have the ability to change. These differences can have a huge impact and result in people experiencing poorer health and shorter lives. Addressing the wider determinants of health will help address health inequalities and improve health equity.

Figure 3 Dahlgren and Whitehead Determinants of Health Model (2)

This model places the individual and their 'constitutional factors' such as age and genetics in the centre, surrounded by lifestyle factors. Outside these individual factors are the wider determinants: the conditions of people's daily lives and then the broader contextual socioeconomic, cultural and environmental condition within which our lives take place. Crucially, the different layers of the model are interlinked, highlighting the complex relationships, which determine people's health.

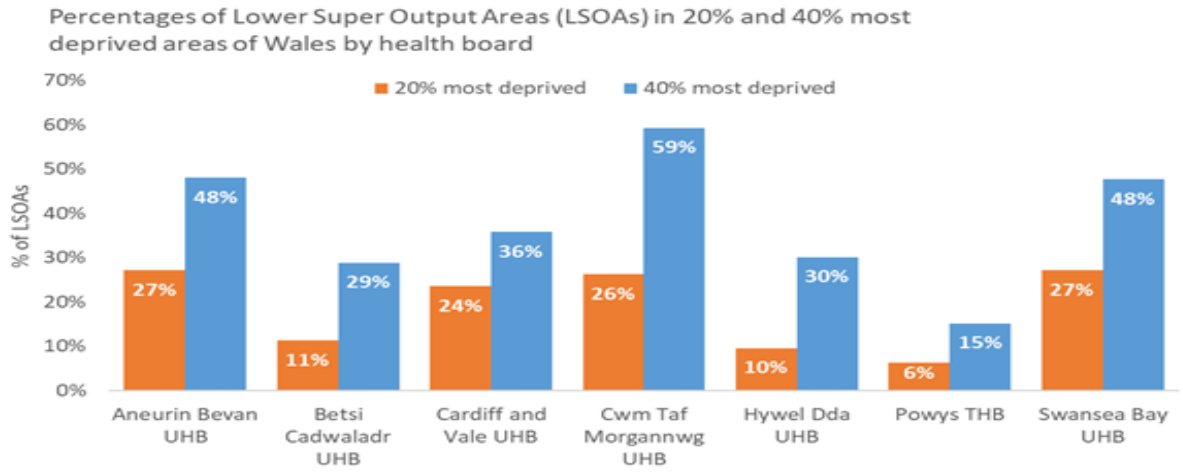
The Determinants of Health (1992) Dahlgren and Whitehead

The Welsh Index of Multiple Deprivation provides the official measure of relative deprivation for small areas in Wales. It identifies areas with the highest concentrations of several types of deprivation including overall deprivation, health, education, income, employment, community safety, housing, access to services and the physical environment.

Deprivation levels across geographical areas can be compared using Lower Super Output Areas (LSOAs). These comprise between 400 and 1,200 households and have a usually resident population between 1,000 and 3,000 persons.

WIMD Data (2019) demonstrates CTM has a higher percentage of more deprived areas than other Health Board areas in Wales. Over a quarter of LSOAs in CTM are in the most deprived quintile or fifth (20%) of LSOAs in Wales; CTM has the highest proportion of LSOAs (59%) in the most and next most (40%) deprived quintiles when compared with other health boards (Figure 4).

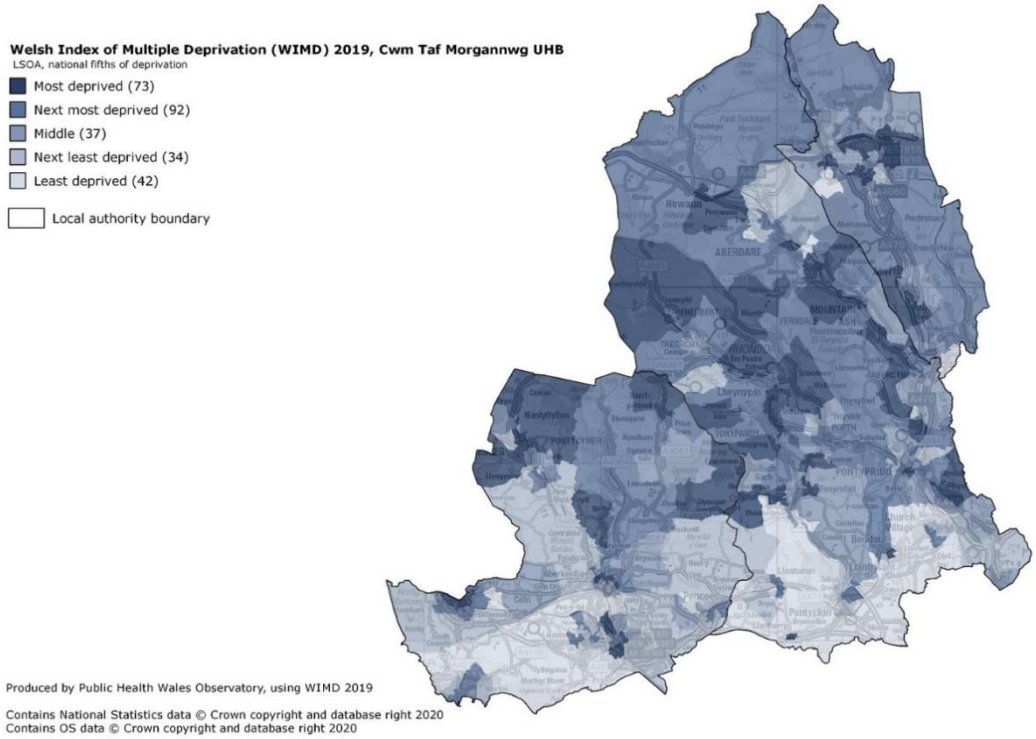
Figure 4 Most deprived and next most deprived fifths (quintiles) of deprivation. 20% and 40% of all Lower Super Output Areas (LSOAs) in Health Boards in Wales



Produced by Local Public Heath Team using Welsh Index of Multiple Deprivation 2019 data

The distribution of deprivation (as measured by WIMD), across Cwm Taf Morgannwg footprint (Figure 5) highlights deprivation in the post-industrial areas and valley communities towards the north of the Health Board.

Figure 5 Map of Deprivation, CTM 2019

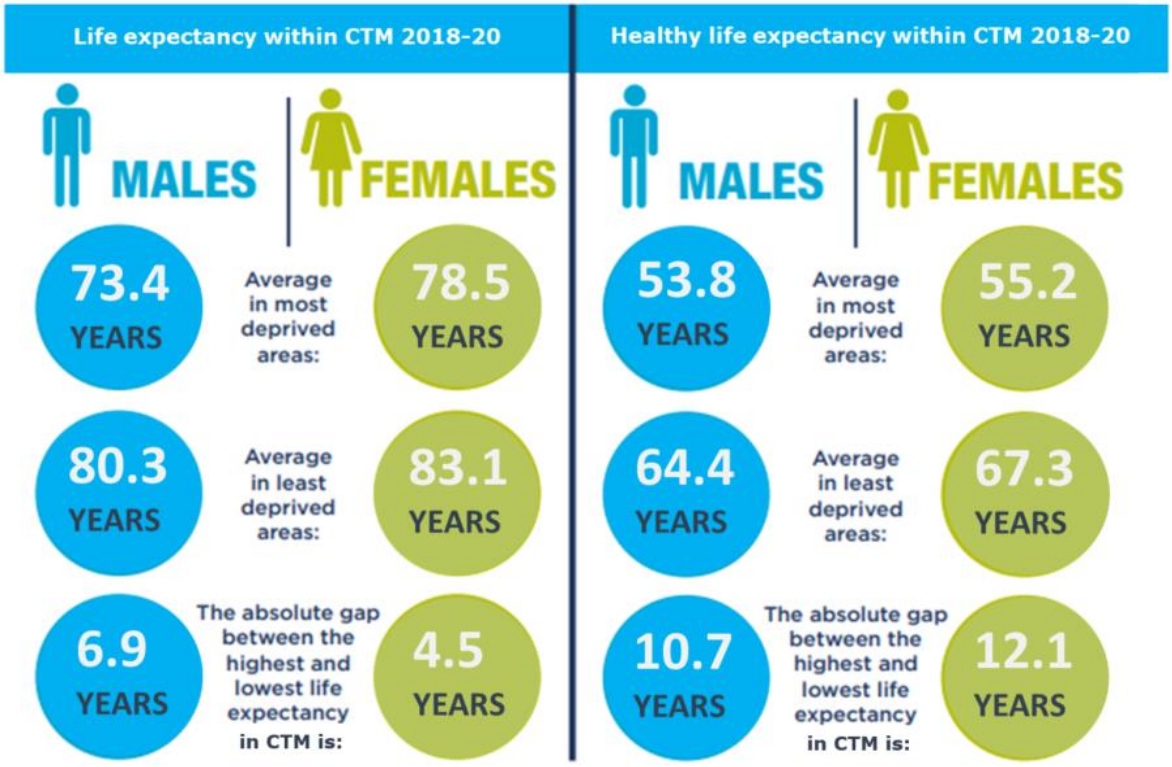


There is a clear association between health and deprivation. Profiles of health behaviours such as smoking, obesity and chronic disease from the pre Covid-19 period indicate a generally poorer picture within CTM than the Welsh average.

Despite promising improvements from the preceding decade, a continuing picture of health inequalities within our population remained evident when comparing Life Expectancy and Healthy Life Expectancy across geographical areas within CTM.

Life expectancy at birth is a widely used statistical measure of the average expected years of life for a new-born based on currently observed mortality rates. Healthy life expectancy at birth (HLE) represents the number of years a person can expect to live in good health and is equally important in considering quality of life. Figure 6 demonstrates the gap in both Life Expectancy and Healthy Life Expectancy between the areas of most and least deprivation in CTM.

Figure 6 Life Expectancy and Healthy Life Expectancy in CTM (2018-20)



4.0 Impact of the Covid-19 pandemic

It was this local picture, illustrating areas of high deprivation, existing inequalities and poorer health, which strongly influenced the effects of Covid-19 on the CTM UHB area. The profile of increased risk meant the effects of Covid-19 have been particularly significant for our residents. The pandemic highlighted and potentially widened the health inequalities that exist within CTM, as well as between CTM and other parts of Wales and the UK. Moreover, it not only interrupted the work being developed to address population health but also caused much loss of wellbeing, ill health and death.

Daily Covid-19 surveillance monitoring data presented by Public Health Wales to UHBs in Wales, from the start of the pandemic, revealed this significant impact in CTM. Data presented as a Covid-19 Recovery Profile (3) has been used to monitor and understand trends in broader health related to Covid-19. In addition, in his role as chair of the Regional Strategic Oversight Group (RSOG) of Covid-19 response, the Director of Public Health commissioned an analysis of available epidemiology and intelligence (4). The aim was to inform our understanding of the local population and support partnerships to lead the recovery from Covid-19 in a proportionate and determined effort to close the inequality gap in CTM and improve outcomes in the most deprived communities. Data from these sources combined

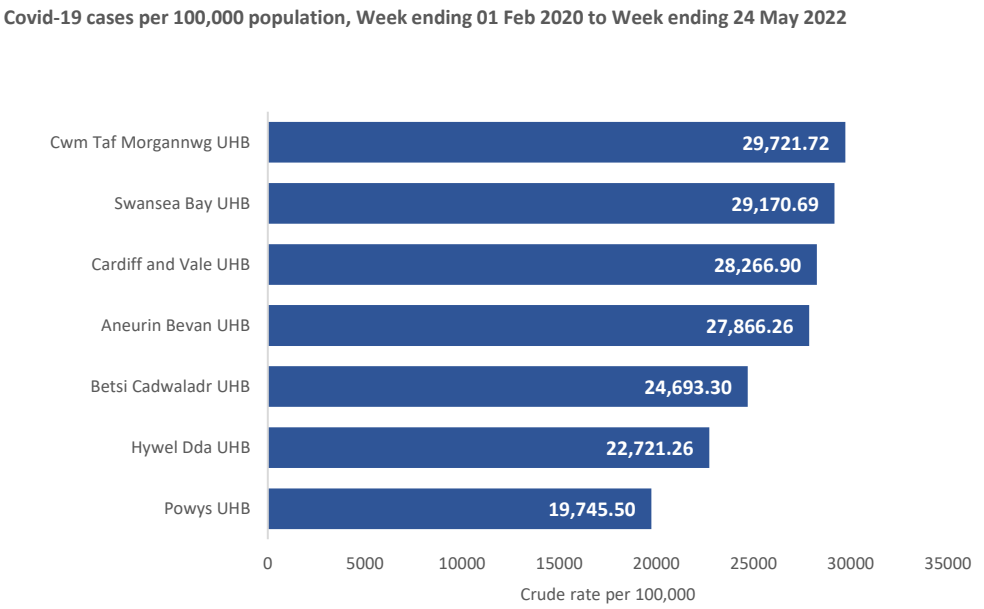
with Office of National Statistics (ONS) COVID-19 surveillance data and additional community intelligence are outlined in this section.

4.1 Direct Impacts of Covid-19

Incidence and Mortality related to Covid-19

CTM experienced a higher rate of recorded Covid-19 infection than other health board areas in Wales during the period February 2020 to May 2022 as shown in Figure 7.

Figure 7 Covid-19 Incidence in Health Boards in Wales (01 February 2020 to 24 May 2022 Public Health Wales)



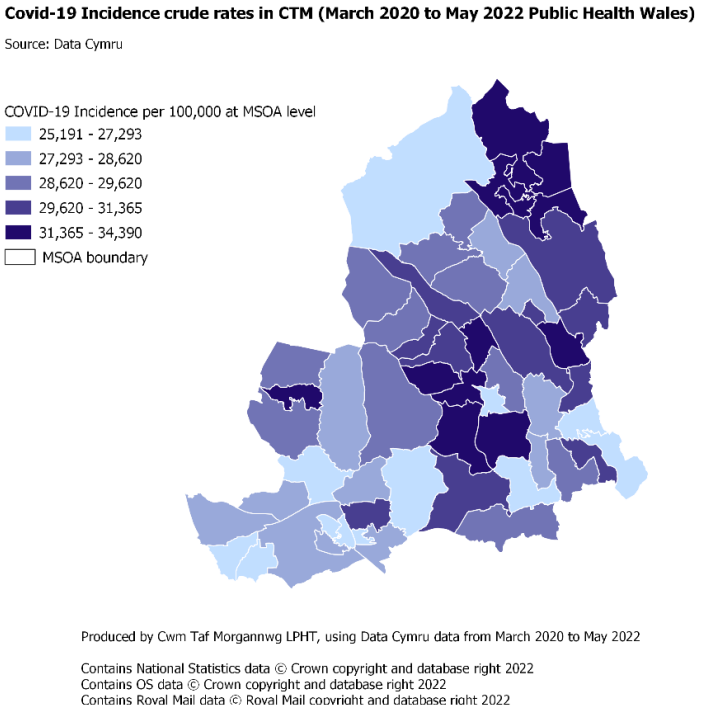
Produced by Local Public Heath Team using data from the Office for National Statistics (ONS) and Public Health Wales Observatory

The distribution of Covid-19 cases across CTM differed across geographical areas. Figure 8 shows the total case rate per 100,000 people at Middle Super Output (MSOA) level across Cwm Taf Morgannwg University Health Board from March 2020 to May 2022.

During this period, Covid-19 incidence was highest in Tonypandy West & Clydach Vale in RCT (34,390 per 100,000 population), followed by Pentre-bach & Mountain Hare in Merthyr Tydfil (34,085 per 100,000 population), and Tonyrefail West in RCT

(33,431 per 100,000 population). Covid-19 incidence was lowest in Cefn-glas & Bryntirion MSOA in Bridgend (25,191 per 100,000 population).

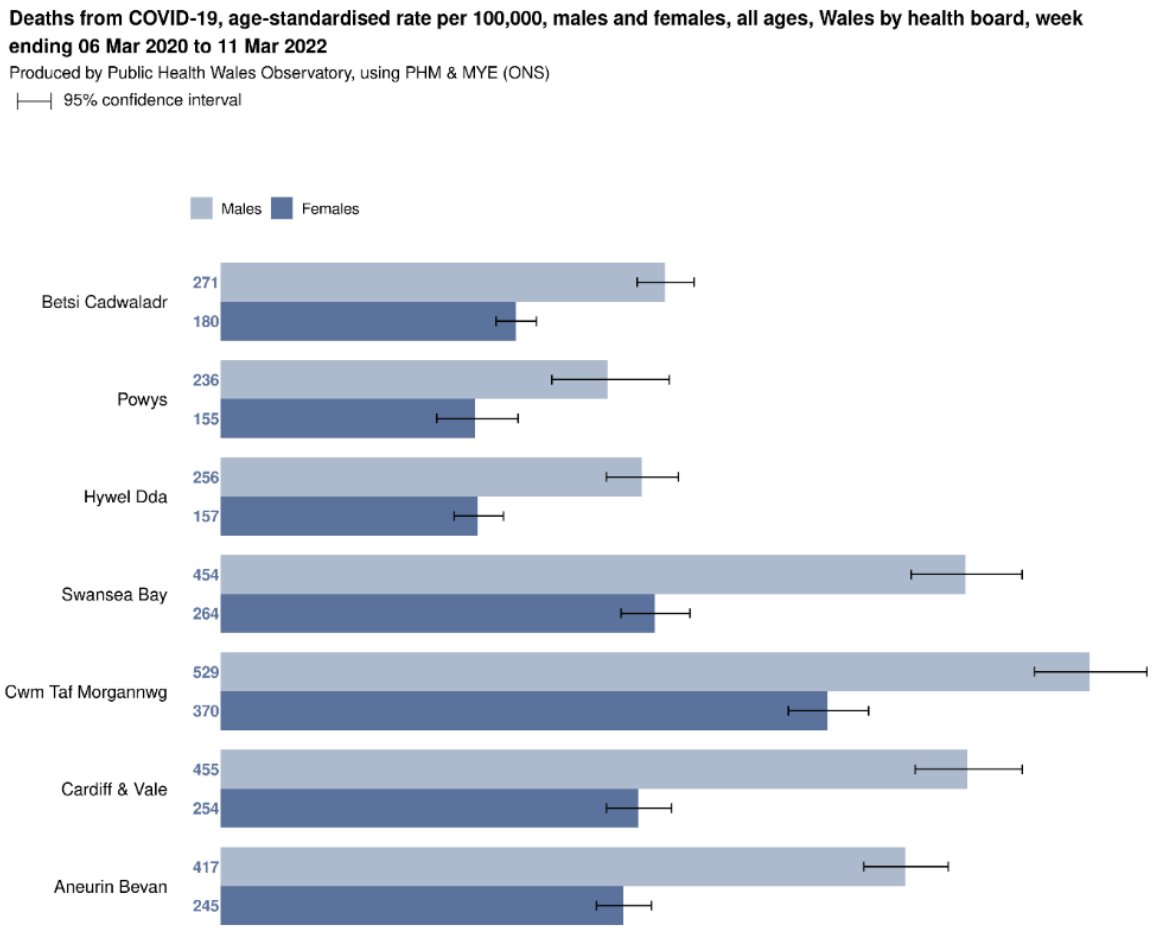
Figure 8 Covid-19 Crude Incidence rates in CTM (March 2020 to May 2022 Public Health Wales)



Note: Calculation of rates uses mid-year 2020 population estimate from the Office for National Statistics. Crude Covid-19 incidence rates do not take account of different age profiles within a geographical area.

In addition to higher infection rates, CTM also had the highest death rates from Covid-19 in Wales for both males and females as shown in Figure 9

Figure 9 Death rates from Covid-19 in Health Boards in Wales (06 March 2020 to 11 March 2022 Public Health Wales)



Across Wales, the age-standardised rate for Covid-19 deaths in males was statistically significantly higher than the rate for females during this period. This suggests that males were disproportionately affected by Covid-19 mortality, after adjusting for age.

Older people were more likely to die from Covid-19. The number of deaths and mortality rates in CTM were higher in the over 75 age group and highest in the over 85 age group (Figures 10a and 10b)

Figure 10a Number of deaths from Covid-19

Deaths from COVID-19 by age group, count, persons, Cwm Taf Morgannwg, week ending 06 Mar 2020 to 11 Mar 2022

Produced by Public Health Wales Observatory, using PHM (ONS)

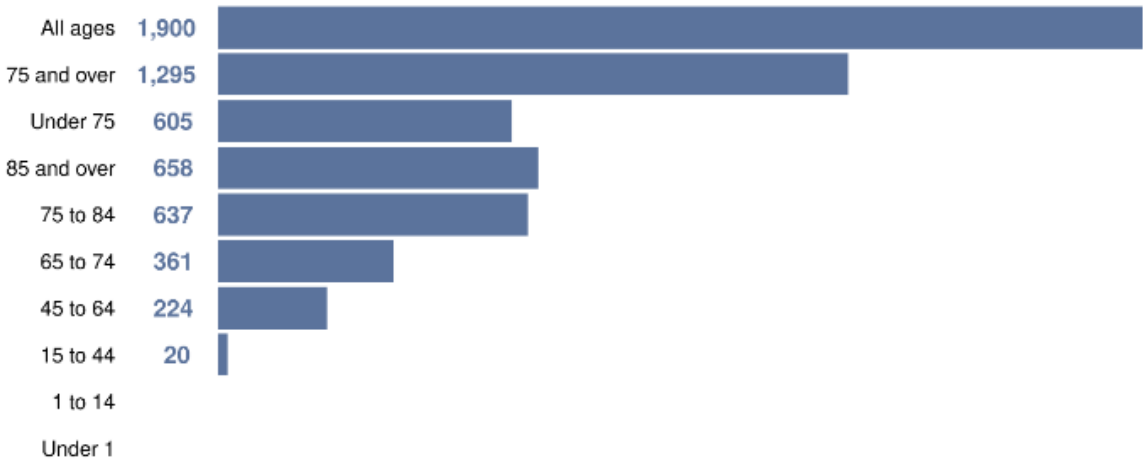
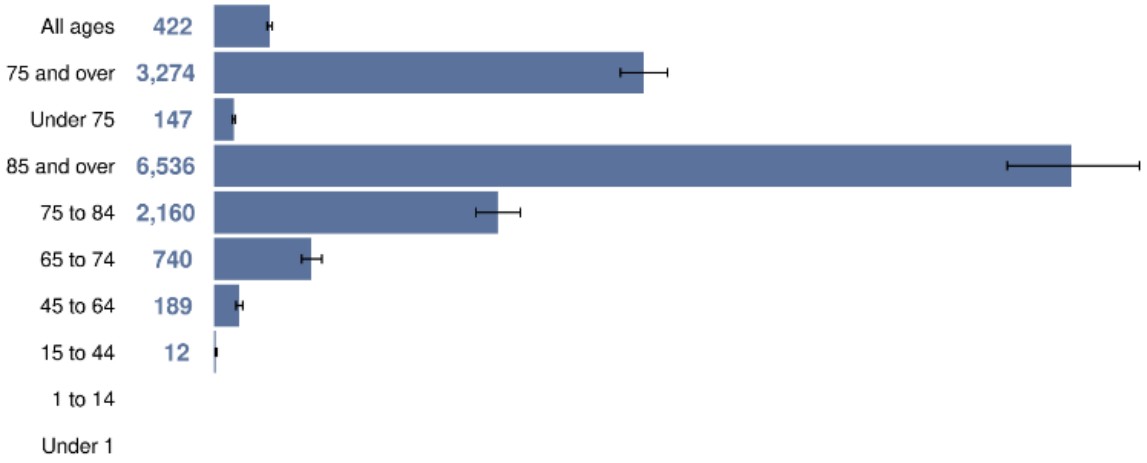


Figure 10b Mortality rates from Covid-19 by age group age-group

Deaths from COVID-19 by age group, age-specific rate per 100,000, persons, Cwm Taf Morgannwg, week ending 06 Mar 2020 to 11 Mar 2022

Produced by Public Health Wales Observatory, using PHM & MYE (ONS)

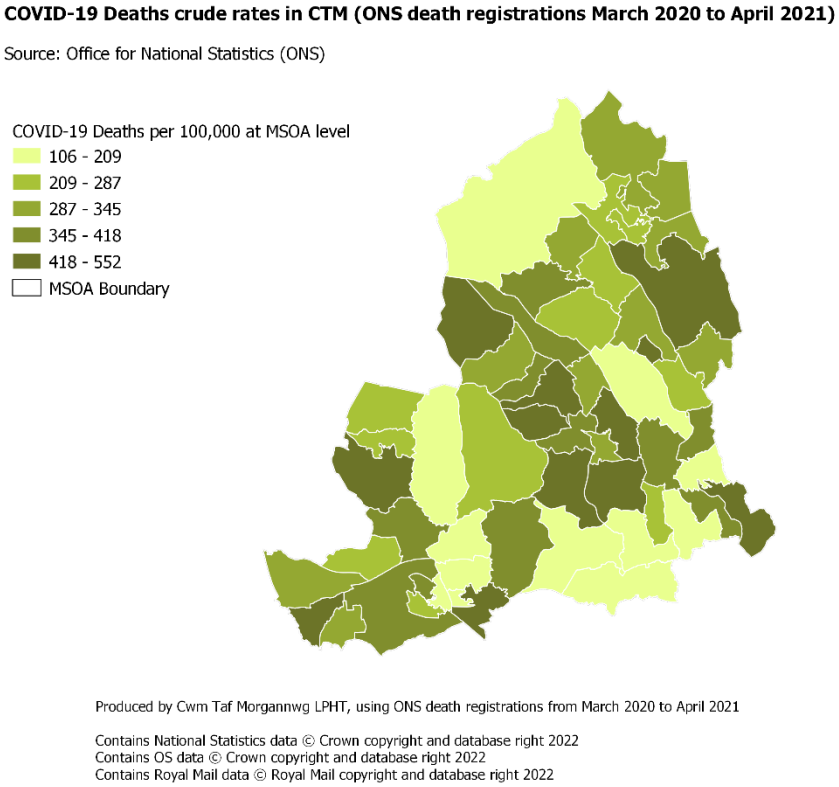
95% confidence interval



The map featured in Figure 11 presents the distribution of deaths due to Covid-19 across CTM. It illustrates the crude mortality rate per 100,000 people at Middle Super Output (MSOA) level across Cwm Taf Morgannwg University Health Board from March 2020 to April 2021.

During this period, deaths due to Covid-19 were highest in Tonyrefail West MSOA in RCT (551.5 per 100,000 population), followed by Porth East & Ynys-Hir (528.4 per 100,000 population), and Treherbert (509.4 per 100,000 population). Death rate was lowest in Trefforest MSOA in RCT (106.1 per 100,000 population), an area with a large student population.

Figure 11 Deaths due to Covid-19 in CTM, crude death rate (March 2020 to May 2022 Public Health Wales)



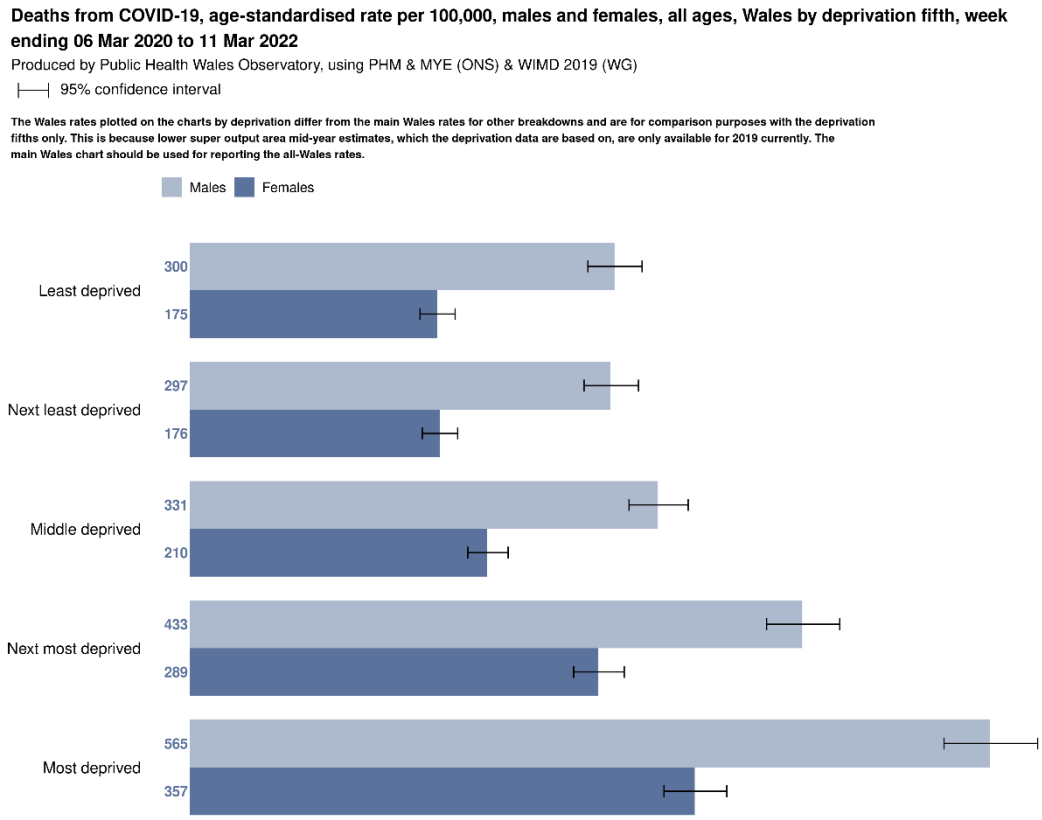
Note: Calculation of rates uses mid-year 2020 population estimate from the Office for National Statistics. Crude Covid-19 mortality rates do not take account of different age profiles within a geographical area.

This map represents deaths "due to COVID-19" where coronavirus (Covid-19) was the underlying (main) cause. It does not include deaths “involving Covid-19” where the underlying cause was not Covid-19 but Covid-19 was mentioned on the death certificate as a contributory cause of death.

Across Wales, the links between Covid-19 mortality and deprivation are evident. Office of National Statistics (ONS) and PHW analyses have shown the age standardised rate of deaths from Covid-19 in Wales was almost twice as high in the most deprived areas as the least deprived areas (Figure 12).

At deprivation fifth level, the most deprived fifth report the highest age-standardised rate per 100,000 deaths from Covid-19 in females (357 per 100,000) and males (565 per 100,000).

Figure 12 Age-standardised death rates from Covid-19 by deprivation fifth, Wales

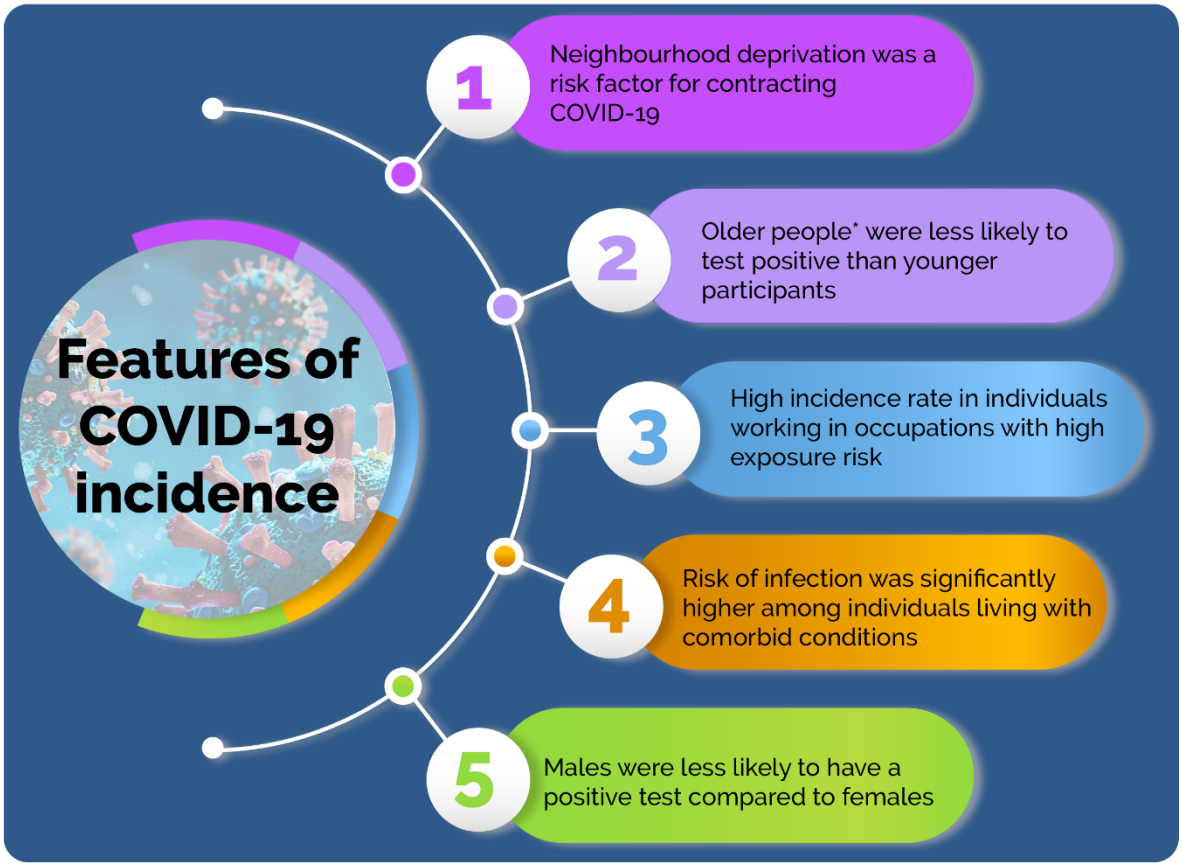


The CTM Covid-19 Outcomes report (4), a deep dive into Covid-19 incidence and mortality, exposed some key characteristics of more susceptible populations during the period January 2020 to September 2021. The report added further depth to the existing intelligence in CTM and has the prospect to support health, care, economic and social planning of the future.

Analysis of Covid-19 infection rates in CTM identified deprivation, female gender, younger age, employment in "at-risk occupations with high exposure" and existing comorbidities as risk factors for testing positive for Covid-19.

These findings could possibly be attributed to differences in health seeking behaviours, guidance based TTP testing regimens, shielding amongst older people and ability to work from home, as well as established association with deprivation (Figure 13). Of note, the greater likelihood of younger people testing positive for Covid-19 in CTM was different to the picture across the UK. Continued social interaction amongst this age group was a prominent feature in CTM during the pandemic.

Figure 13 Features of Covid-19 incidence Cwm Taf Morgannwg (4)

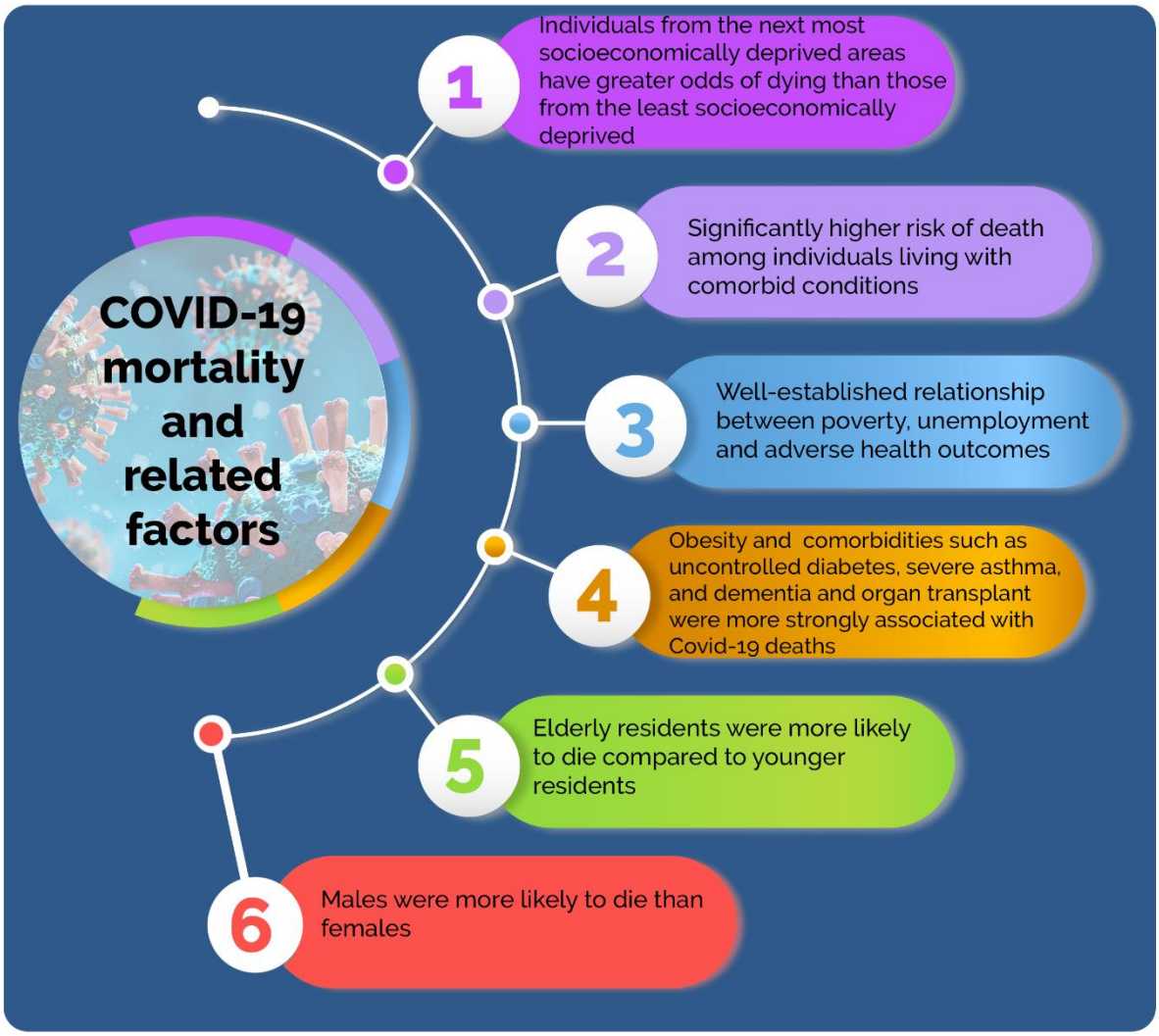


NB Some datasets were incomplete at the time of the report e.g. ethnicity and Covid-19 incidence impact could not be assessed
*This incidence differed from the UK picture

Analysis of mortality in the CTM Covid-19 Outcomes report (Figure 14) echoes much of the picture in the UK that the risk of Covid-19 morbidity and mortality increased steeply with age, deprivation; was higher in males than females; in Black, Asian and

Minority Ethnic (BAME) people compared to white people; and people living with obesity and certain comorbidities.

Figure 14 Features of Covid-19 mortality Cwm Taf Morgannwg (4)



NB mortality impact on ethnicity could not be assessed due to incomplete datasets.

Long Covid

One of the direct effects of Covid-19 that we do not have a clear picture of in terms of incidence is long-COVID. Long-COVID is a collective term used to represent the persistent symptoms in those who have recovered from a Covid-19 infection. It

includes both on-going symptomatic Covid-19 (from 4 to 12 weeks) and post Covid-19 syndrome (12 weeks or more).

In March 2023, ONS data estimated that 2.9% of people in the UK were experiencing self-reported long-COVID (5); a new and emerging condition that can have a significant effect on people's quality of life. Ongoing symptoms, including fatigue, shortness of breath and difficulty concentrating, can hamper treatment, recovery and impact negatively on mental health and wellbeing. If ONS estimates are accurate then a significant number of people in CTM communities could be experiencing Long COVID, impacting their ability to work and affecting families and wider communities.

4.2 Indirect Impacts of Covid-19

The indirect impacts of Covid-19 are wide and varied and at the height of the pandemic affected every aspect of our lives, with lockdowns and restrictions placing immense strain on economic and social systems. These harms did not fall equally on all groups, with those in areas of deprivation, with disabilities and chronic illnesses being more vulnerable to adverse impacts.

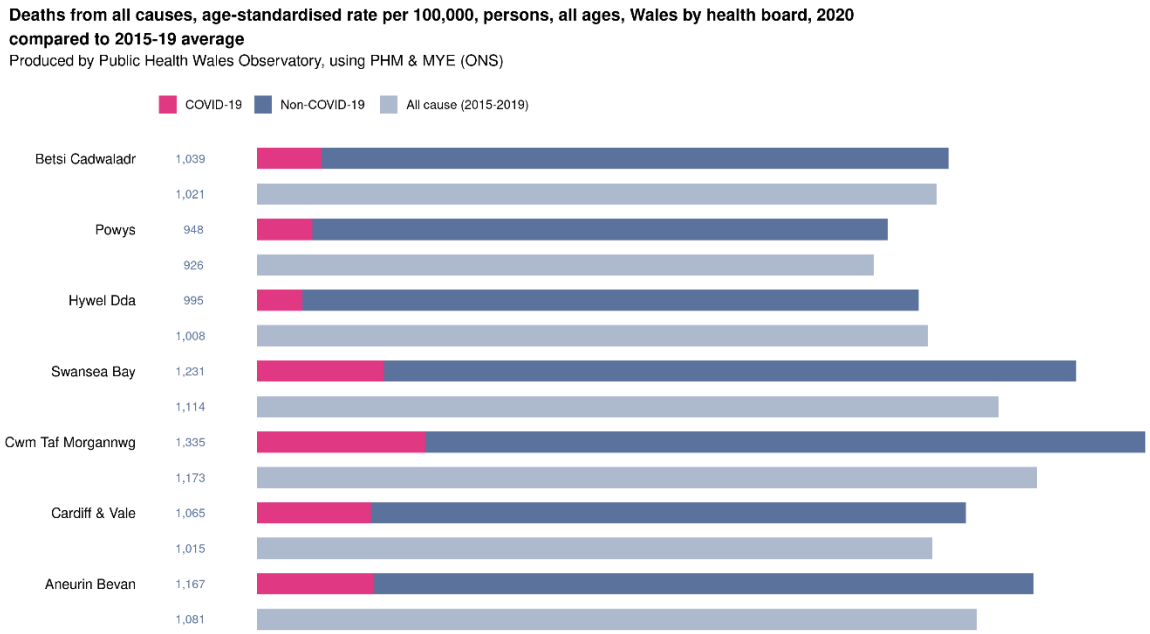
A phrase coined in the pandemic '*same storm but different boats*' reflects the need to appreciate the diversity of experiences amongst our population together with their differing levels of resilience to the effects of the pandemic, which continues into recovery.

This section does not aim to capture the full breadth of impact but attempts to highlight a number of key considerations for health services in moving forward.

Increase in all-cause Mortality

In addition to deaths from Covid-19, CTM in common with all health board areas in Wales had higher rates of all cause deaths for persons in 2020 compared to their 2015-2019 averages (Figure 15). The same pattern was evident in 2021.

Figure 15 Deaths from all causes, age standardised rates, 2020



The reasons for this are likely to be varied, including reduced health and social care provision, reluctance to access hospital care, late presentation of symptoms and restrictions on normal family and community support mechanisms.

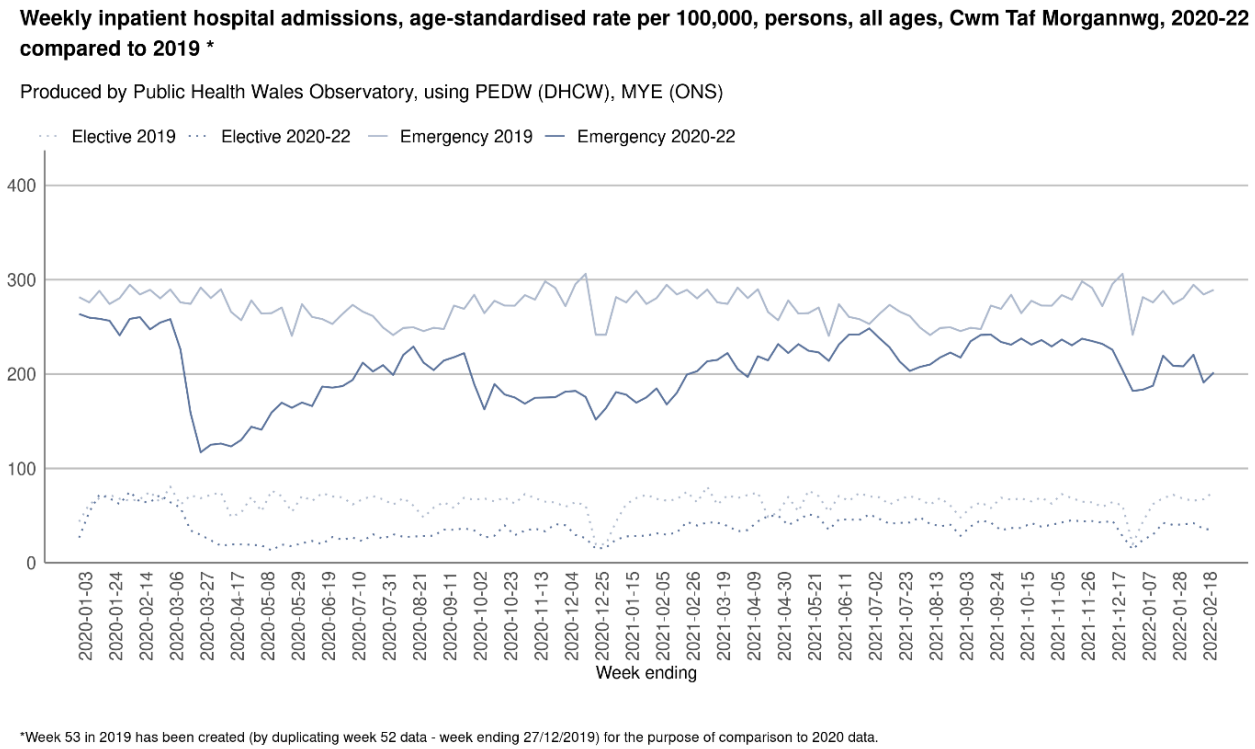
Restrictions on service provision not only created many issues during the height of the pandemic, but the effect on late presentation, reduced screening uptake and increased waiting list times will continue to create huge pressures on services, decrease optimum disease management and increase health inequalities in our area for some time.

Reduced admissions and appointments

During 2020-2022, both emergency and elective admissions were generally lower than the 2019 comparator (Figure 16). The largest reduction in admissions occurred during the first wave of the pandemic with less of a reduction occurring during the second wave. From July 2021, admissions were closer to 2019 figures, although the gap widened in early 2022. Smaller seasonal fluctuations mirror throughout the years.

Reduced levels of admissions may negatively affect both short-term and long-term health outcomes for those patients awaiting diagnosis and/or treatment for conditions.

Figure 16 Hospital admissions by week, CTM, comparing 2020-22 with 2019



Note: Analysis of inpatient elective and emergency hospital admissions by week does not include day case admissions however does include transfers.

Pandemic "Lockdown" and enhanced Infection Prevention Control Measures impacted on access to primary health care, with GP consultations dropping sharply during 2020. GPs played a key part in the vaccination of their population and protection from ongoing Covid-19 threat.

GP appointments are important to identify early signs of serious conditions, which, if caught early enough can be treated. This helps avoid serious impacts on the health of individuals and reduces the need for more costly secondary care. If delays occur and patients have reduced access to their primary care providers this may lead to a knock on effect of poorer health outcomes in the future years, with late diagnoses of serious health conditions putting strains on both the NHS and the social care system in years to come.

Many fundamentals of effective disease management such as regular monitoring and treatment reviews of chronic conditions were hugely disrupted during the pandemic.

In addition, the postponement of elective admissions during periods of the pandemic has resulted in longer waiting lists across all specialities for elective treatment and surgery.

It is widely acknowledged that action is required to minimise the impact of unavoidable delays on the health of those waiting. There is a move to reframe "waiting lists" to be "preparation lists" where the service tries to optimise patients waiting for an operation in order to reduce complications and improve outcomes. This prehabilitation encompasses both physical and psychological preparation, providing an opportunity to introduce a lot of lifestyle modification intervention such as smoking cessation and reduction of alcohol intake.

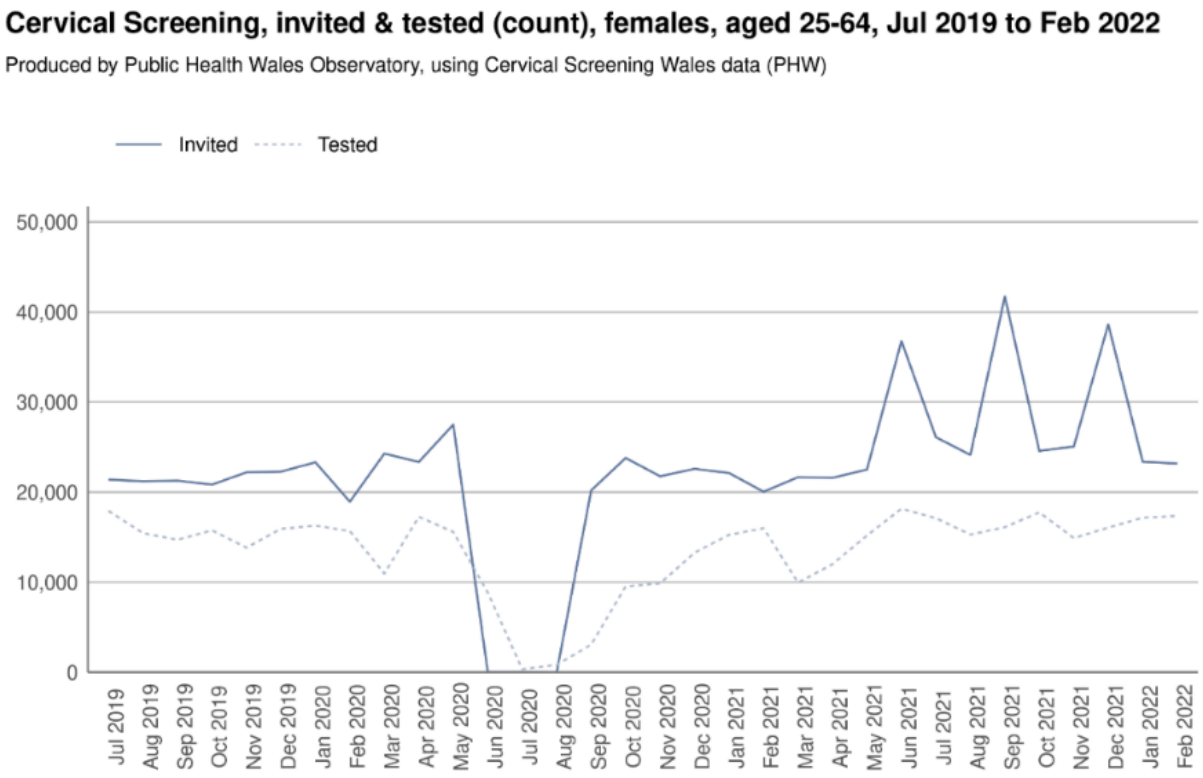
Screening uptake

Screening for disease before symptoms appear is a cornerstone of timely and effective healthcare and has a key role in early identification of screen-detectable cancers such as bowel, breast and cancer of the cervix.

Early in the pandemic (Summer 2020) interviewees of a screening survey were acutely aware of the strain on the NHS and did not feel worthy of using healthcare resources during this time to treat or investigate their symptoms. As the pandemic progressed, participants expressed a growing frustration that cancer screening and treatment services were being left behind with ever-increasing backlogs and waiting lists. In this mixed methods study led by Cardiff University (6), almost 1 in 5 participants agreed that they were less likely to engage in cervical or bowel cancer screening compared to before the pandemic. Respondents described worries about wasting the doctor's time, putting strain on healthcare services and not wanting to make a fuss, reluctance to contact the GP due to concerns about Covid-19 and fear of attending hospitals, and described putting their health concerns on hold.

The impact on Covid-19 on the uptake of screening has been substantial. Figure 17 illustrates a prolonged reduction in cervical cancer screening uptake in Wales due to enforced service shutdown. Despite a number of attempts to recover by increasing invites to encourage uptake and re-engage lost clients, take up levels remain at the same level (Figure 17).

Figure 17 Cervical Screening, Wales



Wellbeing

Restriction measures on working, education, leisure, culture and travel had considerable direct and indirect negative impacts on health and well-being, as well as some potential for positive effects. An increase in unhealthy lifestyle behaviours and social isolation will impact on long-term health and well-being outcomes. An early appreciation and understanding of the indirect effects was critical, in order to mitigate or minimise harm wherever possible. In 2021, the Welsh Government launched a three year loneliness and Social Isolation Fund, which along with the Substance Misuse Delivery plan 2019-2022 would seek to mitigate these issues.

Mental Wellbeing

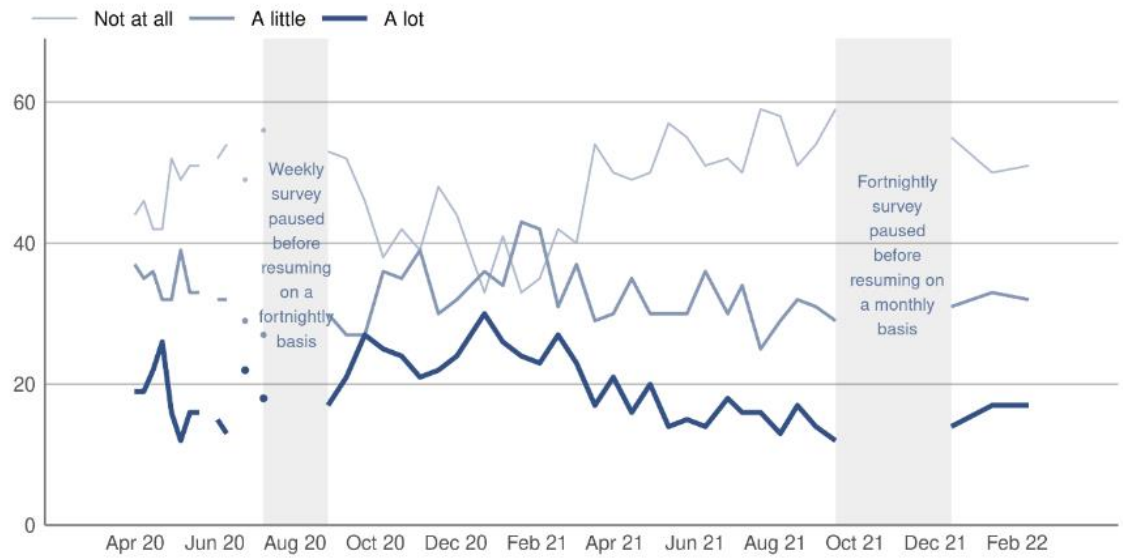
One of the greatest and most widespread harms of the pandemic was its effect on mental health and wellbeing. Research undertaken by Cardiff University indicated that in the period immediately before the pandemic, 11.7% of Welsh people suffered severe mental health issues climbing to 28.1% in April 2020 (7).

Data from the PHW Public Engagement Survey on Health and Wellbeing during Coronavirus Measures for Wales (8) indicates the extent and changeable nature of individual's worries during the pandemic (Figure 18). Throughout the pandemic there have been concerns around the impact of lockdowns and social isolation on the mental health of the population. This data gives an insight into how worried the people of Wales were about their own mental health and wellbeing during this period.

Figure 18 Worried about Mental health and wellbeing (%)

Worried about own mental health and wellbeing, percentage, Wales, week ending 19 Apr 2020 to Feb 2022*

Produced by Public Health Wales Observatory, using Public Engagement Survey (PHW)



*Gaps in the data are due to the survey not being conducted every week. Please see technical info for further information.

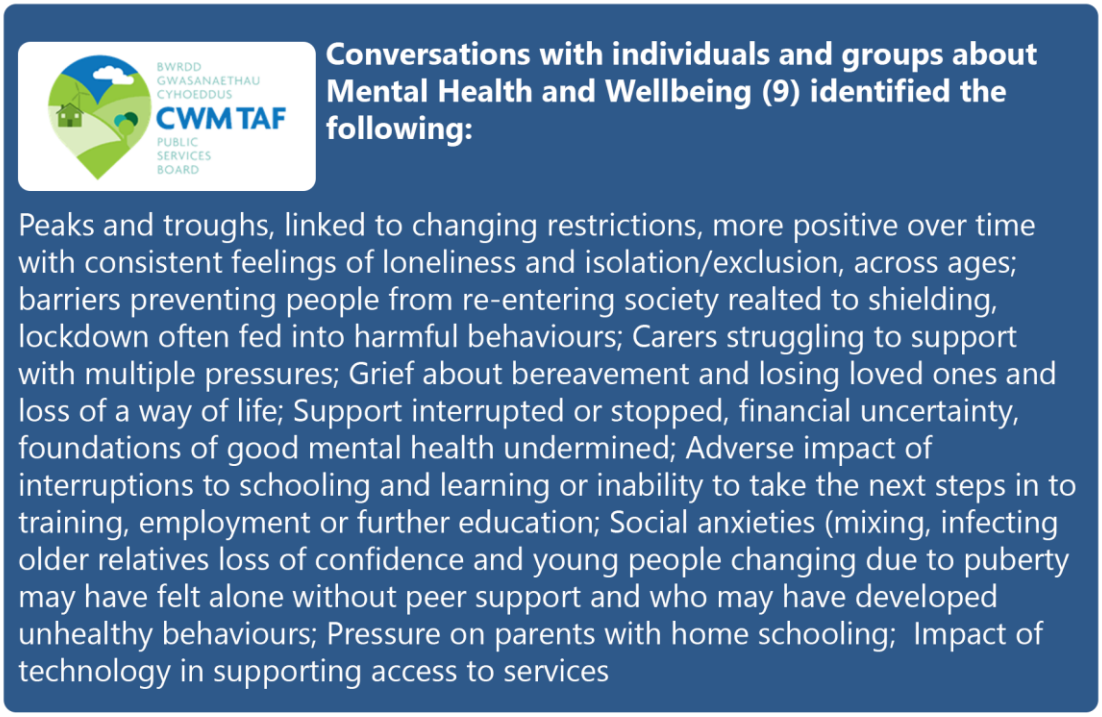
Although we do not have pre-pandemic comparison data, throughout the study period, the majority of respondents indicated they were not at all worried about their mental health. However, a considerable proportion 'worried a lot about their mental health' with percentages of up to 30% during January 2021. This peak coincided with the highest number of hospitalisations and deaths due to Covid-19 throughout the entire pandemic period. The move to alert level zero, which took place on 05 August 2021, appeared to have had a positive impact on mental wellbeing in Wales.

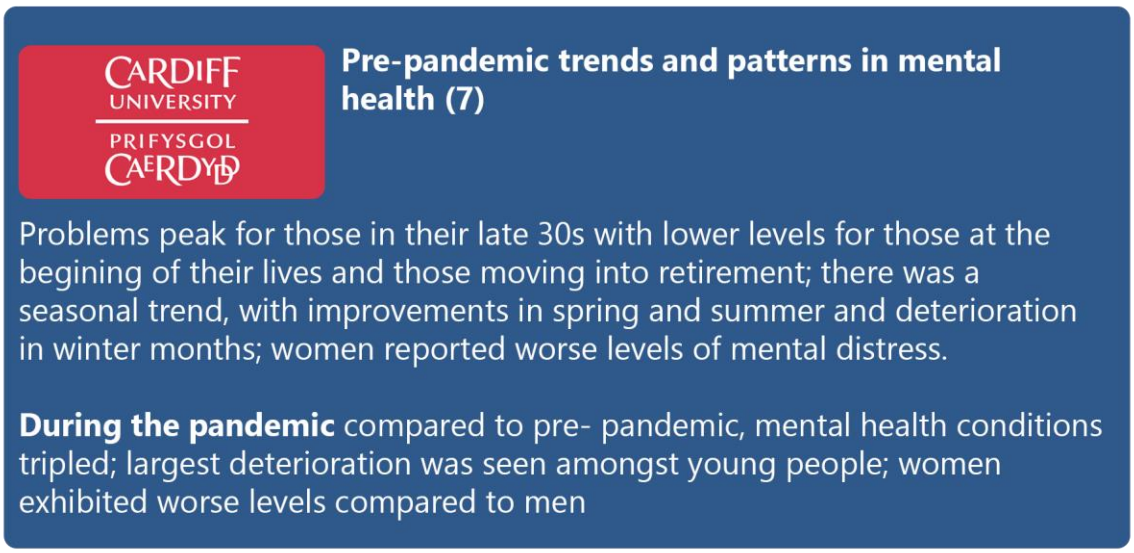
The data suggests that people worry the most about their mental health and wellbeing when restrictions are imposed which may have a negative impact on their ability to manage and control their own wellbeing.

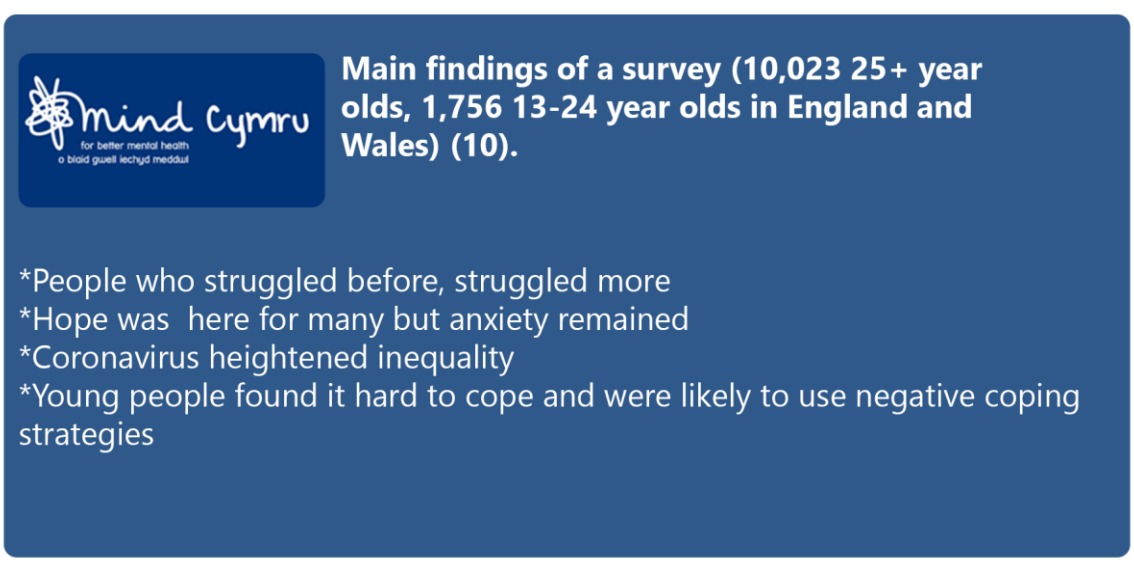
More generally, there are very few individuals who did not suffer to some extent. Experiences shared in conversation by individuals and groups resident in CTM (9) are generally reflected in the published survey findings of Cardiff University (7), PHW (8) and MIND(10) (Figure 19) pertinent to the impact of COVID-19 on mental health and wellbeing.

A disproportionate impact on mental health and wellbeing was observed of Covid-19 among younger people, women, those in income poverty, with pre-existing health condition and those experiencing extant inequalities.

Figure 19 Impact of COVID-19 on mental health and wellbeing







Impact on early years and young people

While the actual coronavirus infection has generally not directly affected children as badly as adults, a combination of worsening financial strain within families and stay-at-home pandemic policies created the potential for immediate harm to the development and mental health of children.

Almost 1 in 3 children are currently living in poverty in Wales which has the highest rate of child poverty among the four U.K. nations (11).

Young people experienced the largest deterioration in their mental health due to Covid-19 (7). They have been affected by the closure of schools and higher education facilities and by the wider restrictions on their freedom to meet with their peers. Many young workers suffered economic disruption with employees under 25

almost three times as likely to have been working in shut-down sections of the economy(7).

CTM Community Intelligence

During the pandemic, community intelligence was obtained via the Risk Communication and Community Engagement (RCCE) and Protect work streams of the CTM Regional Strategic Oversight Group (RSOG). It supplemented the intelligence obtained from surveillance data, national surveys and UHB Communications channels. These insights were routinely shared with partners of RSOG, and informed the local Test Trace Protect (TTP) response (12).

National and local surveys identified high levels of commitment to follow TTP guidance, intention to test if symptomatic, to protect self, family and friends, confidence in self isloating and, high intention to accept vaccination among CTM residents who responded. The readiness was present even within the context of being 'worried about wellbeing' and 'worsening social relationships'.

Behaviours and utimately Covid-19 incidence were affected by circumstances beyond individual control e.g. limitations of physical environment for staff, income precarity and household transmission. Concerns and reasons for inability to adhere to guidance illustrate the wider considerations in effecting behaviour change.

More recent international understanding is that behavioural and social science guided the knowledge of the drivers of Covid-19 transmission and the design and delivery of effective interventions. However, changing behaviours is complex and may not happen even when life is at stake – it requires more than clinical and epidemiological expertise (13). This is illustrated in the insights gathered by the Protect work stream from CTM residents in Figure 20**.**

Figure 20 Insights from Protect Work stream of CTM Regional Strategic Oversight Group (13)

Working environment
Men of working age who sub-contracted in trades such as ground works, construction, railways were less likely to adhere to social distancing as they traveled en masse in one vehicle to work, often out of county and country

This same group were less likely to get tested if symptomatic, due to impact on employment (no work, no pay) and likely to discourage people in their households from doing so because of the consequences of contact tracing imposed self-isolation

Income precarity
Workers on zero-hour contracts often hold multiple jobs to ensure they get work every day and to make up a reasonable weekly income. As with subcontractors, these workers experienced a disproportionate financial detriment if required to self-isolate

Information about social isolation support and other forms of self-isolation support was typically available on-line. It was highly unlikely to be accessed by this group via the route or platforms used by PHW/HB/Locality. Evidencing eligibility by completing forms could have been challenging in terms of levels of literacy

'Dying for a pint down the Covid Arms'
- considerable evidence in CTM (mostly on social media) of people constructing 'pubs' at the bottom of the garden or creating 'safe' outdoor spaces in local fields in which to secretly continue their usual drinking patterns and social interactions

Spread of infection
- close family networks meant that grandparents often provided childcare for multiple children from different households, particularly for parents who were in low paid jobs including, front line care jobs. Spread of infection

6.0 Lessons Learned from COVID-19 partnership response

CTM as a region was particularly challenged by the Covid-19 pandemic. Indeed the factors that made the population vulnerable to the effects of Covid-19 in 2020 including patterns of health behaviours, profile of ill health and socioeconomic deprivation continue to persist or are even worse today. As such, the population of

CTM are most vulnerable to other infectious diseases and so it is imperative that the region learns from its pandemic experience and does all that it can to protect the health of the population from existing and new infectious disease hazards.

Test, Trace, Protect and Immunisation

The Test, Trace and Protect (TTP) response consisted of work streams that led on the delivery of Testing, Contact Tracing and Immunisation, which were critical to the management and ultimate control of the pandemic.

Throughout the pandemic and during the recovery period the testing, tracing and immunisation services have adapted and responded to incredible short term pressures such as the response to Covid-19 variants of concern and accelerated vaccination and booster campaigns.

The success of testing, contact tracing and scale of vaccination has been achieved through a tremendous partnership effort.

Leadership and Partnership working

The multiagency CTM Regional Strategic Oversight Group (RSOG) of the Covid-19 pandemic response led the Test, Trace and Protect (TTP) programme for the population of Cwm Taf Morgannwg. Success of the CTM TTP in responding to the COVID-19 pandemic is encapsulated in the quote from Audit Wales (14).

'The TTP programme has seen different parts of the Welsh public and third sector work together well, in strong and effective partnerships, to rapidly build a programme of activities that are making an important contribution to the management of COVID-19 in Wales'.

Reflecting on its experience during the pandemic the RSOG captured lessons learned. Most notable were the effective partnerships working across the CTM region with a greater understanding of the skill, value and flexibility of people and the workforce across the partnership, including innovative approaches to leadership and provision. In its Lessons Learned Report (15), the CTM RSOG recommended:

- Maintaining 'light touch' regulation and local empowered leadership, not a system which is driven by the more traditional '*command and control*'
- Further thought to be given, as to what more we can do to ensure the partnership agenda and working remains 'centre-stage', including short,

medium- and longer-term recovery actions to address the causes of greater burden of disease in Cwm Taf Morgannwg

In appreciation of the value of a continued partnership approach to tackling the big challenges to population health and wellbeing across CTM, the Chief Executive Officers (CEOs), Leaders of the three Local Authorities and UHB Chair have continued to meet regularly. A CEOs and Leaders' summit held in 2021 agreed the following four local actions in support.

Figure 21 CTM Chief Executive and Leaders agreement 2021

Areas of focus

- ✓ Addressing health inequalities
- ✓ Better integration of health and social care
- ✓ Simplify partnership working
- ✓ Sustainability including decarbonisation

Must do priorities underpinning the agreement were to:

1. Develop a Healthy Living strategy with an outcome to reduce obesity
2. Integration of health and social care by
   - Reshaping our structures
   - Refining data and intelligence
3. Agree that lessons learnt / relationships fostered during the Covid-19 pandemic be maintained.
4. Create a joint sustainability plan

Our Understanding of CTM Population

The epidemiology and softer intelligence gained during the pandemic provided useful insights into behaviours and the factors influencing those behaviours. The use of behavioural science in CTM is described in Figure 22 and learning from behavioural insights in Figure 23.

Figure 22 Good Practice Example – Use of Behavioural Science

During the course of the COVID-19 pandemic, the use of behavioural science, and gathering of community intelligence, played pivotal roles as behaviour change became a necessity to keep people, their loved ones, and colleagues safe. National and local restrictions/guidance put in place asked the public to engage and comply with a multitude of behaviours, such as Covid-19 testing, contact tracing and associated self-isolation periods, social distancing, and of course, the Covid-19 vaccination programme.

Within Cwm Taf Morgannwg (CTM), a Risk Communication and Community Engagement (RCCE) work stream was established early on in our Covid-19 response as a facilitating function to gather community/staff intelligence. Considerable insight was gained via this work stream, which informed the Test Trace Protect (TTP) response (via the CTM Regional Strategic Oversight Group), and enabled behaviourally informed communication approaches and campaigns.

Local and national intelligence was gathered via a number of mechanisms, largely underpinned by the *COM-B model, to enable the identification of facilitators and barriers to engagement:

- Fortnightly all Wales surveys conducted by Public Health Wales (PHW), of which, data could be obtained at a CTM level
- Bespoke surveys and focus groups at CTM level (conducted by RCCE work stream)
- Case control study of local area testing in Merthyr Tydfil and Lower Cynon Valley (conducted by PHW)
- Anecdotal intelligence from community partners (Protect Tactical Group)
- Survey reports by organisations such as Bevan Foundation and Children's Commissioner

As we moved into the recovery phase of the pandemic, the use of behavioural science, and gathering of community intelligence remained pivotal, and the Local Public Health team continues to work closely with PHW's Behavioural Science Unit to support and facilitate routine embedding of such.

*The COM-B model for behaviour change cites capability (C), opportunity (O), and motivation (M) as three key factors capable of changing behaviour (B). **Capability** refers to an individual's psychological and physical ability to participate in an activity. **Opportunity** refers to external factors that make a behaviour possible; **motivation** refers to the conscious and unconscious cognitive processes that direct and inspire behaviour

Figure 23 Learning from CTM Community Intelligence

The community level intelligence provided an insight to the behaviour of the CTM population which could have potential transferability and utility beyond Covid-19 pandemic response:

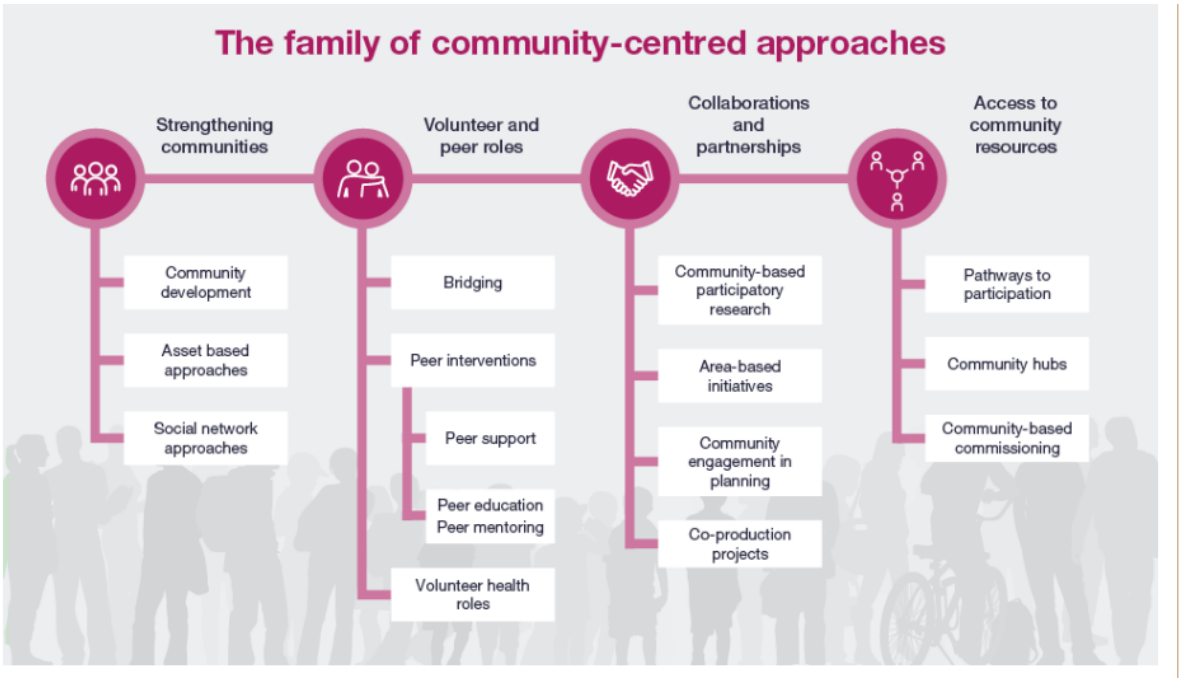
- **Communication with the general public** - Importance of clear and consistent messaging, Online surveys were an effective means of gathering public perceptions, novel uses of social media to engage with younger people
- **Making contact with individual members of the public** -residents would not answer a call from an unknown number
- **Improving access is not always the solution to increasing uptake** - Generally high intention to accept a COVID-19 vaccination when offered, with pockets of low uptake a feature of intent rather than access
- **Importance of understanding public perspective** - Reasons for vaccination non-attendance included concerns over vaccine safety, allergies and blood clots, thinking invite was a scam and forgotten appointment
- **Social structure and interaction** - Household transmission was a major factor, nature of employment and community cohesion are major influences on behaviour
- **Achieving behaviour change** - Use of a suitable behavioural diagnostic tool informed the approach to intervention; an in-depth understanding of facilitators and barriers in the work place included limitations posed by the physical environment, work patterns, nature of work, staff inability to access existing mechanisms and channels of communication, frequently changing guidance

Recognising our Community Assets

The voluntary sector played a key role in providing support to communities during the Covid-19 pandemic being uniquely positioned to respond rapidly and effectively. Key strengths included local knowledge and understanding of their communities, an ability to innovate quickly and engage effectively with the public and widespread collaboration with other organisations and services.

There is a need to build upon community resilience, invest in prevention and promote social connectedness to help reduce the negative impact of Covid-19. A Public Health England framework has attempted to describe the many ways in which communities can build resilience through a 'family of community-centred approaches' (16).

Figure 24 Community Centred Approach to resilience (16).



CTM Wellbeing Plan

In collaboration with wider CTM Public Service Board partners the UHB has endorsed a Wellbeing plan for 2023-2028, based on Assessment of population wellbeing. The overarching theme of the plan is "A More Equal Cwm Taf Morgannwg" which will drive every aspect of the PSB's work with the objective of creating:

- Healthy local neighbourhoods
- Sustainable and Resilient local Neighbourhoods

5.0 Additional considerations and challenges

There is a triple challenge facing Health Boards in Wales with the cumulative and individual impacts of Brexit, Covid-19 and climate change on health, well-being and equity. As outlined in a Public Health Wales report (17), these impacts are multifaceted, are not static and will affect Wales together with the current cost of living crisis in the immediate and long term.

Brexit

Leaving the European Union's single market and customs union has changed the legal and regulatory landscape around science and technology and presents challenges as well as opportunities for the NHS and wider health and care sector (18). Among the challenges faced is support from the European Structural and Investment Funds which have provided opportunities to invest in the social determinants of health and tackle health inequity. Wales received around four times more European structural and investment funding per person than the UK average. The loss of European structural funding could have significant impacts on deprived communities. Areas most affected by the loss of structural funding are industrial regions e.g. former mining and steel regions of South Wales, coastal towns and isolated rural areas, which have higher concentrations of less-educated workers. It is also clear that such changes will have complex and cumulative impacts and could further exacerbate social inequalities in Wales and have subsequent impacts on health and wellbeing (19)

Locally observed impact of Brexit include medicines and other supply constraints resulting in a switch in products; delays in supply chains affecting working practice; social care workforce shortages; changes in funding and access to grants reducing future employment opportunities and service sustainability

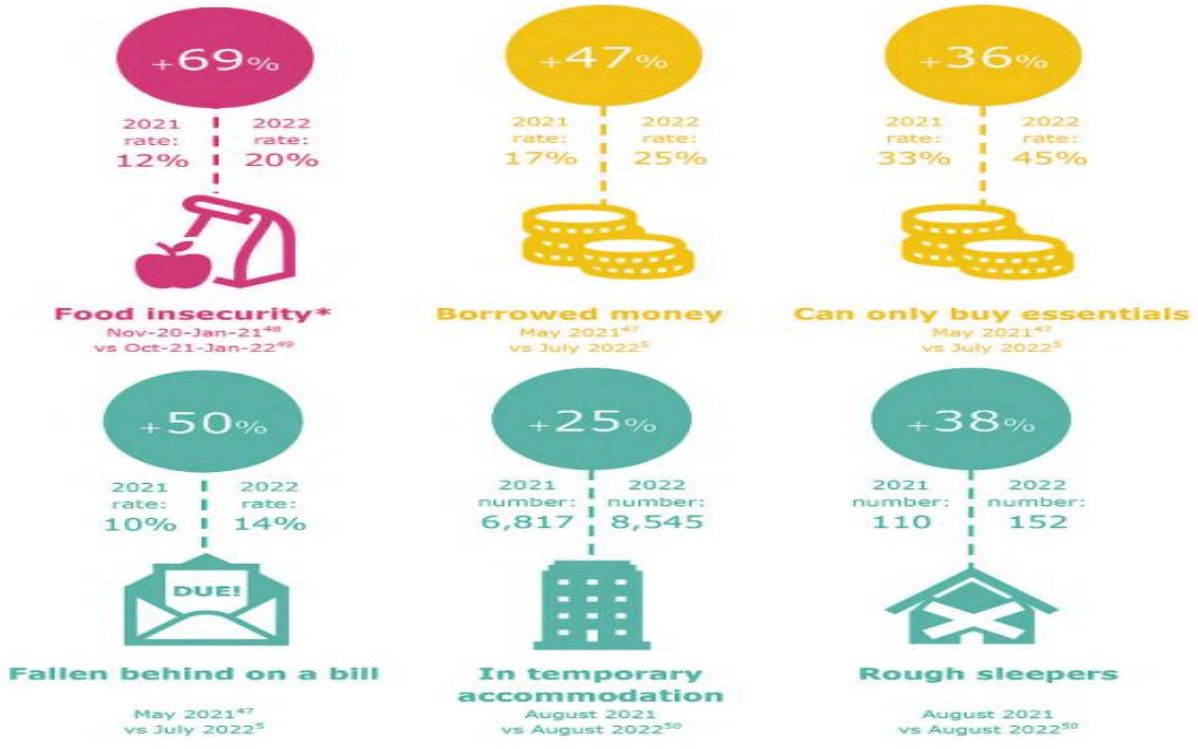
Cost of living crisis

Health inequalities and the unfair and avoidable differences in health and access to healthcare across the population, and between different groups within society – have long been an issue, but the Covid-19 pandemic and the rising cost of living has exacerbated them (20). The impact of the cost of living crisis in Wales, taken from a PHW report is illustrated in Figures 25 and 26.

Figure 25 Proportion of households in different states of financial well-being in October 2021 and June 2022 [20]

Source: Cost of living crisis in Wales. A public health lens. Public Health Wales

Figure 26 Comparisons of measures of financial difficulty in Welsh households between 2021 and 2022 [20]



*Data shown relates to those on incomes less than £32,000/year only. All sources cover Wales data.

Source: Cost of living crisis in Wales. A public health lens. Public Health Wales

The cost of living crisis has the potential to affect everyone, but those who were already the worst off are those who are (and will be) hardest hit. Worse off households have less flexibility in their budget to account for rising prices. The crisis will also push more people from just about coping to a state of struggling or crisis (21).

Public health perspective on Cost of living Crisis:

- wages and welfare payments are not keeping pace with rising living costs
- cost of living crisis will accelerate what were already increasing differences in health between those with more and less money
- significant and wide-ranging negative impacts on mental and physical health with long term consequences
- it is a long-term public health issue affecting the whole population
- The cost of living crisis requires an urgent public health response.

Climate change and impact in Wales

Climate change means that extreme weather, flooding and heatwave events are likely to occur more often in Wales. Climate change affects all parts of Wales. By the 2050s annual temperatures are projected to rise by 1.2˚C in Wales. More action is needed to address risks to human health, wellbeing and productivity (22).

Within current planning, the Health Board needs to consider the impact of Brexit, Cost of Living Crisis and impact of climate change to not only restore and repair, maintain health and well-being but also to mitigate/ avoid long term impact.

7.0 Rebuilding and transforming - Our direction and current activity

7.1 The current picture

In his Covid-19 review published in 2020 (23), Professor Sir Michael Marmot emphasised the need to do things differently and *build back fairer* with a fair distribution of health and wellbeing at the heart of this approach. The review builds on his earlier recommendations in the *10 Years On* and Marmot 2010 reports, where the main message was that levels of social, environmental and economic inequality in society were damaging our health and wellbeing. The pandemic and associated societal response amplified social and economic inequalities in all the domains that were analysed in *10 Years On*—early childhood, education, employment, having

enough money to live on, housing and communities. It also showed even steeper social gradients in mortality rates and strikingly high mortality rates among people from Black, Asian and minority ethnic groups. Much of this excess can be attributed to deprivation.

In the post pandemic recovery stage, it has been important for the Health Board to re-evaluate its position and understand our current profile of health and inequalities.

Comparative post Covid-19 data regarding our levels of deprivation and life expectancy/healthy life expectancy is not yet available, but is likely to illustrate a worsened picture, particularly with the current additional challenge of the cost of living crisis. We know this will impact unfavourably on our population's health and worsen patterns of inequality.

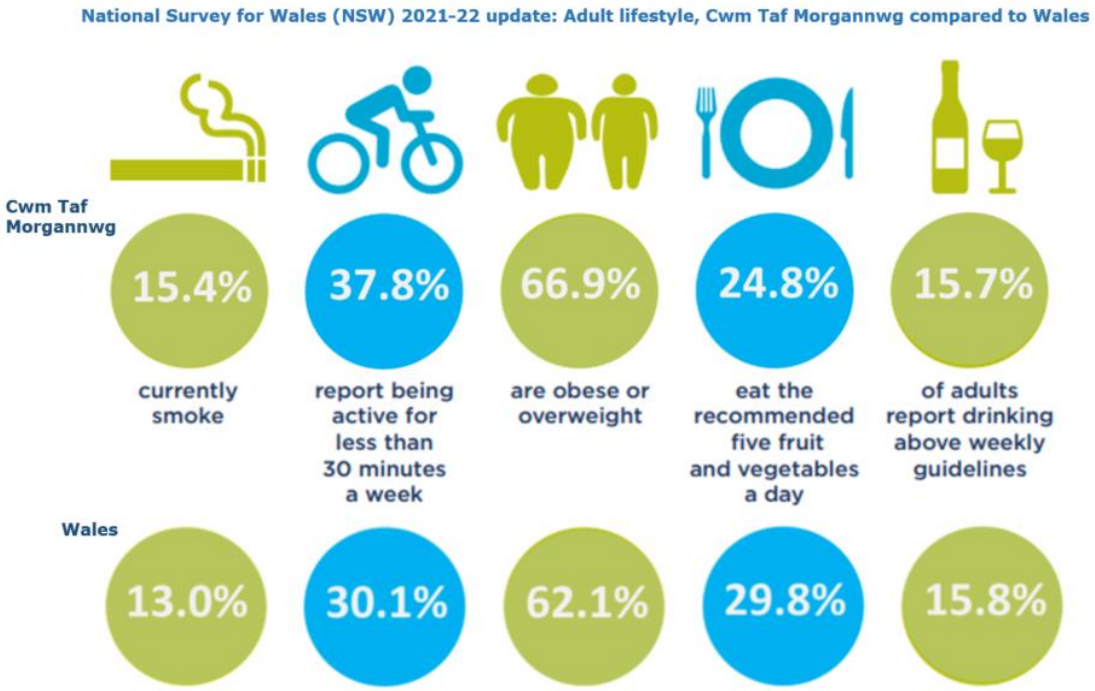
Additionally, we continue to lag behind Wales in terms of practising healthy behaviours as illustrated in Figure 27. Unhealthy behaviours influence levels of clinical risk and increase the rates of conditions such as diabetes, cardiovascular disease, dementia and cancers in our population.

Rates of smoking and obesity or being overweight are higher in our Health Board region compared to Wales, with the highest smoking prevalence in Merthyr Tydfil, where 19.8% of adults were reported as current smokers in the *2021/22 National Survey for Wales*. Merthyr Tydfil also reported the highest level of obesity or overweight in adults at 77%.

Physical activity and consumption of fruit and vegetables was lower than the Wales level with Merthyr Tydfil showing the highest percentage of inactive adults at 44.5% (statistically significantly higher than in Wales at 30.1%). Fruit and vegetable consumption at a local authority level, show Bridgend with 28.2% of adults eating at least five portions of fruit and vegetables, with lowest percentage is in Rhondda Cynon Taf (RCT) where only 23% of adults ate the suggested amount of fruit and vegetables, which is statistically significantly lower than the percentage in Wales.

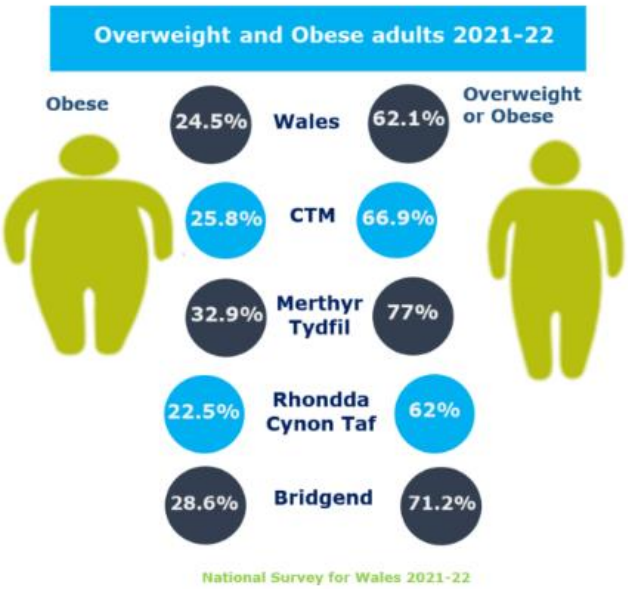
In CTM 15.7% of adults reported drinking above the weekly guideline amount of 14 units of alcohol Wales (15.8%). In Merthyr Tydfil, 16.2% of adults reported drinking above the weekly guidelines, the highest in the Health Board area.

Figure 27 Lifestyle & behaviours, National Survey for Wales, 2021-22



The increasing burden of obesity is a particular concern and was a key risk factor in determining outcomes from Covid infection. As demonstrated by the National Survey data in Figure 28 there is a differing picture across the health board footprint.

Figure 28 Overweight & Obese adults, National Survey for Wales, 2021-22



Survey findings (2021-22) classify 25.8% of CTM adults as obese (BMI 30+). This is higher than the average in Wales (24.5%), although the difference is not statistically significant. Merthyr Tydfil (MT) had the highest percentage of obese adults (32.9%).

66.9% of adults in CTM were overweight or obese (BMI 25+). This is higher than the average for Wales, 62.1%.

77% of Merthyr Tydfil adults were overweight or obese, which is statistically significantly higher than Wales. In Bridgend, 71.2% of adults were overweight or obese, which is also statistically significantly higher than in Wales.

Due to Covid-19 pandemic, the Child Measurement Programme in Wales which measures overweight and obesity in children was suspended. The latest data for CTM (2018-19) identified CTM with highest levels of children aged 4-5 years overweight or obese (29.3%) in Wales (26.9%). Merthyr Tydfil was the highest of all local authorities (35.4%). An updated position is expected during 2023.

A previous DPH report (2015) advocated the adoption of *one more healthy behaviour* based on academic research (24) of the benefits of a healthy lifestyle on disease prevention with the aim being to achieve 4-5 of the five components associated with positive health behaviours. Figure 29 illustrates that there remains a porportion of our population that are far from that goal.

Figure 29 Percentage of adults following fewer than two healthy behaviours 2021-22

In CTM, 9.7% of adults followed fewer than two healthy behaviours (2021-22). This is lower than the average in Wales (7.1%), although not significantly.

At a Local Authority level, Merthyr Tydfil had the highest percentage (16.9%) of adults who followed fewer than two healthy behaviours. This is statistically significantly higher than in Wales.

Bridgend (10.2%) and Rhondda Cynon Taf (7.9%) also have higher than the national average (7.1%) percentages of adults who followed fewer than two healthy behaviours in 2021-22.

The wide range of factors identified in earlier sections as the remaining impacts of Covid-19 and the emerging challenges of Brexit, the cost of living crisis and climate change all need to be considered in future planning.

7.2 Considerations for Planning

As we move out of the pandemic, the Health Board has resumed its ambition to become an effective population health organisation, aimed at improving the health and wellbeing of an entire population, while reducing health inequalities across our communities.

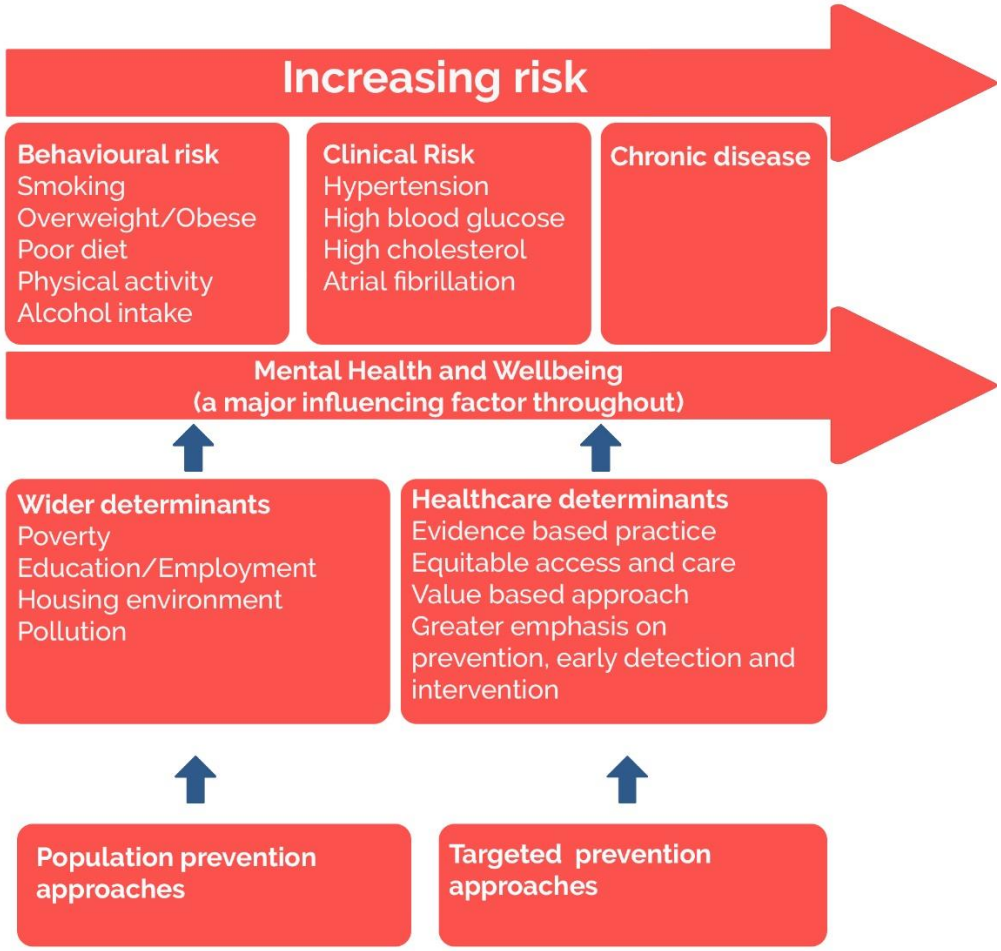
Population health outcomes are not performance measures of service delivery but the health outcomes of the population as a whole. They include factors such as mortality, healthy life expectancy and prevalence of chronic disease, certain lifestyle behaviours and levels of clinical risk.

Improving outcomes requires a multi-agency, system wide approach taking into account the wider determinants of health. The Health Board is committed to collaborating with wider partners via the Public Service Board and Regional Partnership Board, building on key relationships strengthened during the Covid-19 response.

It is important to note that the greatest impact on health is not from healthcare services but from a wider, whole system approach focussing on changing everyone's exposure to risk. At best health services contribute 15% to population health, if all effective interventions are in place this can rise to 43% (25).

There is a clear link between modifiable, behavioural risk and the development of clinical risk factors and subsequent disease. For example, physical inactivity can increase the risk of hypertension. Hypertension in turn, is a major risk factor for stroke and heart disease. Figure 30 demonstrates how we need to direct both population wide and targeted approaches at influencing wider social, economic and environmental determinants as well as healthcare determinants to effectively reduce disease risk in our population.

Figure 30 – A Framework for Prevention (26)



Acknowledgement: D Gibbons (2018)

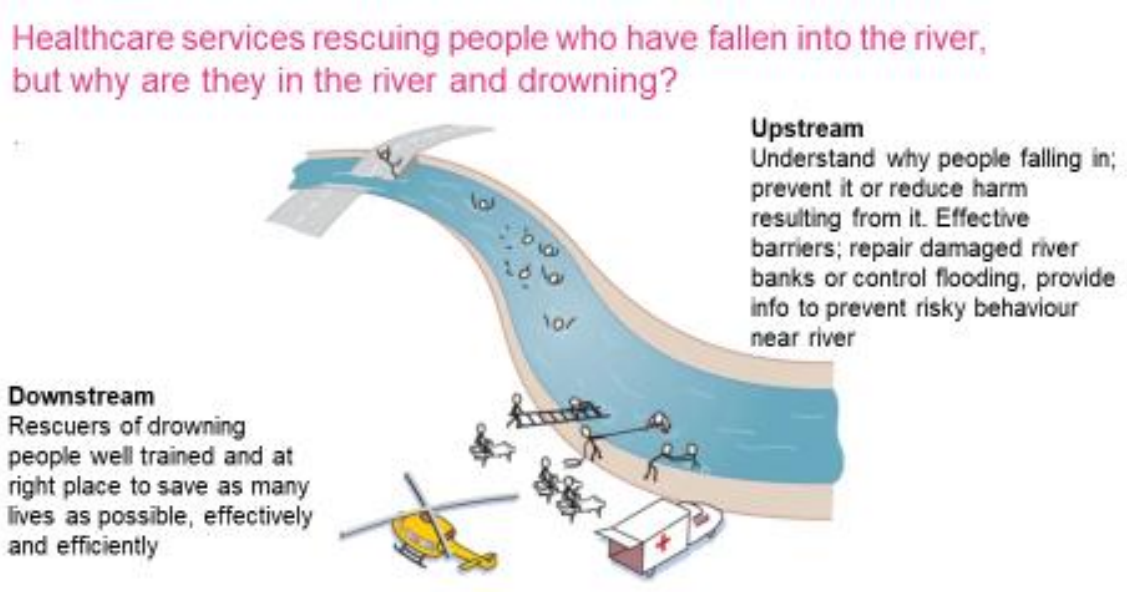
Within its own service delivery however, the Health Board has a key role in prioritising prevention and early detection and intervention.

There is a now famous allegory in public health adapted from a story told by Irving Zola (27) that uses a river analogy to make a distinction between downstream versus upstream encounters. As illustrated in Figure 31, this analogy is helpful in understanding the potential impact of prioritising prevention. So busy are healthcare services with saving those who are drowning that often there is a failure to focus on what is happening back upstream to find out why and prevent people falling in to begin with. There are different stages of prevention – primary prevention (stopping people coming to harm), secondary primary (minimising the risk of complications through early identification and intervention) and tertiary prevention (minimising the consequences of established disease).

All are important but the earlier the intervention the easiest to get out of the river

or ideally remain on land in the first place! To maximise effect, focus and investment needs to shift to primary and early secondary prevention approaches.

Figure 31 Prevention- Looking upstream (adapted from McKinley, 1986)



Health Board Commitment to Prevention

In challenging financial and operational circumstances, post Covid-19, the CTMUHB has invested in prevention services for its population including a new weight management service and increased smoking cessation support. In its 2013 IMTP, the Health Board has also committed to invest £0.5M in improving stroke pathways across the Health Board.

The challenge of moving resources towards prevention at the required scale whilst coping with operational demand, investment in service improvement and infrastructure within increasing financial constraints is huge.

In the current period of unprecedented backlog and financial challenges, it has never been more important that the Health Board organises its services and finite resources to best support the people who need it the most.

Efficient and Effective Healthcare

In addition to increasing focus on prevention, we need to ensure efficient and evidence-based use of healthcare resources - a healthcare provision designed around need, that minimises waste, avoids the delivery of interventions known to have limited value as part of an overarching value based healthcare approach.

Good progress has been made in regard to standardising a list of interventions not normally undertaken (INNUs) across CTM. The next stage is to monitor the implementation of this list (Figure 32).

Figure 32 Good Practice Example - INNUs

Interventions Not Normally Undertaken (INNUs) are interventions that are not routinely available, due to there being insufficient evidence of clinical and /or cost effectiveness. The geographical realignment of Health Board boundaries to include the Bridgend area generated a need to create a single and updated policy for INNU's across the new Health Board. A comprehensive review was undertaken, leading to the development of a single evidence-based policy for INNU's for CTMUHB. This policy will now be used to inform effective clinical decision making across CTMUHB.

At a recent meeting led by Health Technology Wales and attended by Public Health, Welsh Government and others, to discuss how to progress work on INNU's on an all Wales basis, it was agreed that the work undertaken by Public Health in CTM will be used as the template and foundation for commencing work across all Health Boards in Wales.

To achieve optimised healthcare services, the provision offer must be based on patient and population need. Figures 33a depicts the extant universal service offer with resultant waste and gaps. Figure 33b depicts a preferred optimal healthcare status for CTM where offer is tailored to need.

Figure 33a Status of healthcare offer and utility

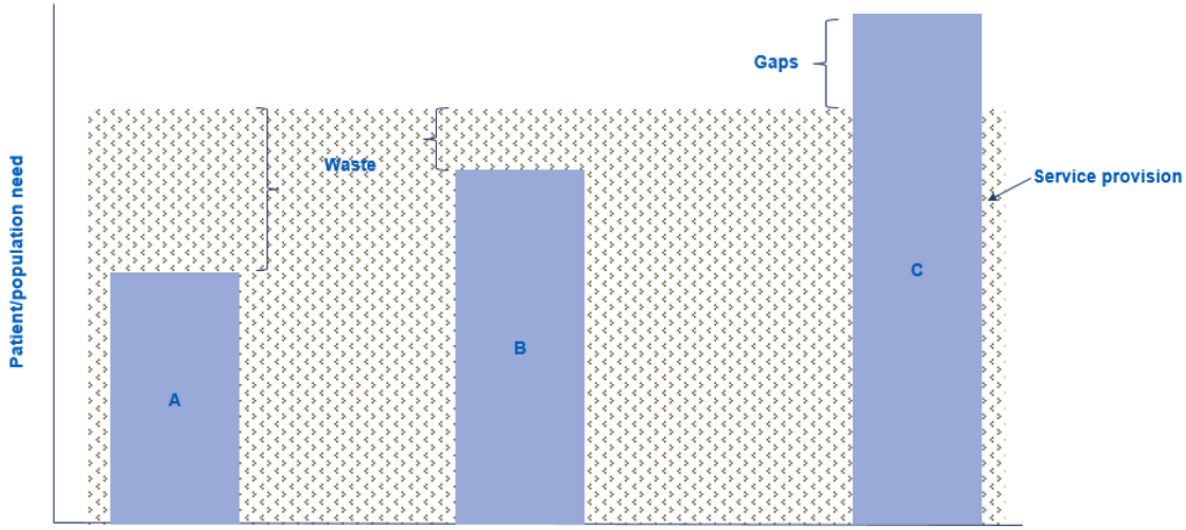
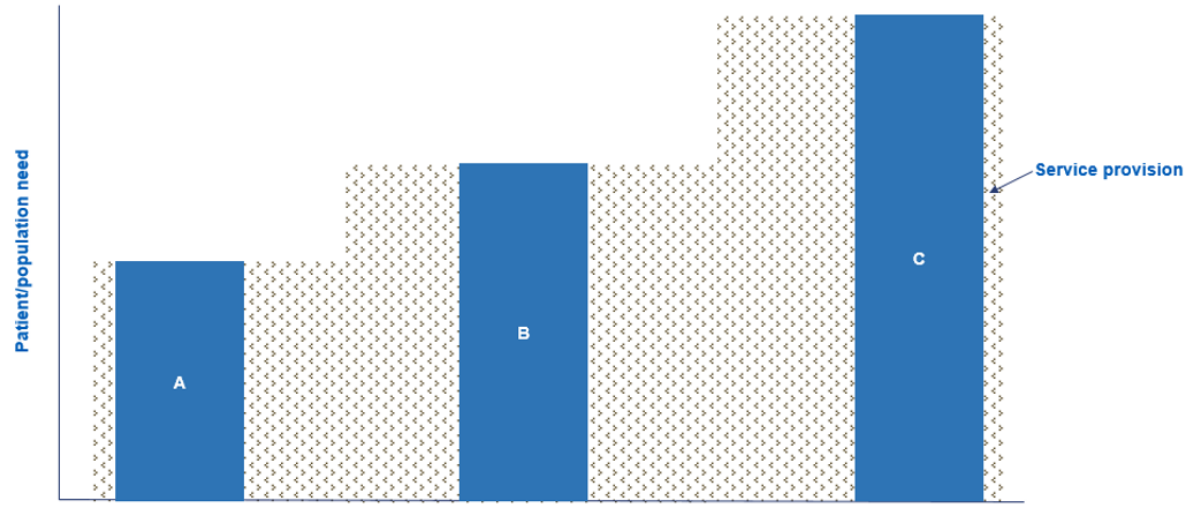


Figure 33b Optimum status of healthcare offer and utility



Services delivered within a population health management framework, can offer such an optimal response to need, improve outcomes and help achieve equity. Progress on Population Health management in CTM is described in Figure 34.

Figure 34 Good Practice Example – Population Health Management

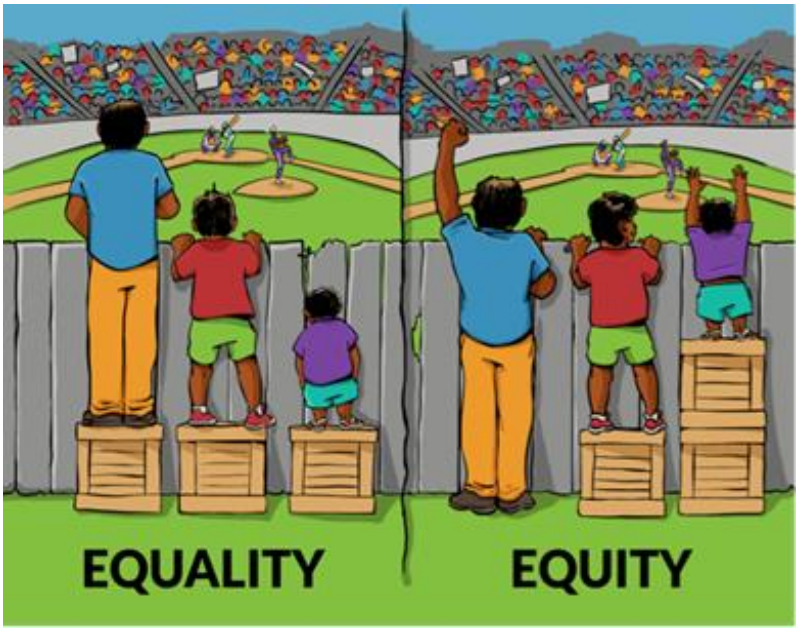
Population Health Management (PHM) aims to align services to best support the people who need it the most. The Public Health Team has led the PHM programme of work which aims to understand patient populations by characteristics related to their need and use of health care resources. Within CTM we have developed and implemented the Population Segmentation Risk Stratification 'PSRS' tool - which can help Primary Care and wider partners to decide how best to use limited time and resources to deliver anticipatory and pre-emptive care for patients. Linked datasets are used to segment, stratify and model the local 'at risk' and 'rising risk' cohorts that in turn are used to design, target and personalise interventions to deliver proactive care which reduces health inequalities. This included the development of data-driven CTM segments based on health care utilisation and comorbidities. Quarterly data is available for all GP practices signed up to the programme.

To test practical application of this data two PHM feasibility projects have been implemented. The first is a winter pressures project in the Taff Ely Cluster that aims to improve outcomes for patients at highest risk of adverse effects of fuel poverty. It uses a combination of clinical records data and PSRS data and identifies those who live in areas of high deprivation in the cluster, in combination with relevant long term conditions, age and frailty. Following a proactive 'what matters most' conversation, individuals are referred into appropriate services, either the Frailty Service or social prescribing.

The second project is in the Bridgend East Cluster and seeks to proactively identify and support vulnerable individuals who may be at risk of exacerbation of their chronic condition that may result in an emergency admission. The work is funded by and supports the aims of Goal 1 of the Welsh Government 'Six Goals for Urgent and Emergency Care' 2021-2026 strategy. Evaluation of both the projects and the contribution of PSRS data will be undertaken through summer 2023.

Equity is often a misunderstood concept. A frequently cited illustration by Angus Maguire Illustrating Equality VS Equity - Interaction Institute for Social Change (Figure 35) shows the important difference between equality and equity using three individuals of different heights who are attempting to peer over a fence. In order to treat them equally, they would all be given the same size box to stand on to improve their lines of sight. However, doing so would not necessarily help the shortest person see as well as the tallest. In order to give equitable treatment, each person would need to be given a suitable box to stand on that would enable an equally clear view over the fence.

Figure 35 Equality versus Equity



Credit: Angus Maguire (Interaction Institute for Social Change)

Correspondingly, when considering the health of CTM population, the experiences and status of an individual or community mean they might need additional support, improved access or different approaches to delivery or engagement with care to reach the same outcomes.

As the UHB develops its population health approach, its new operating model of population life-course Strategy Groups and operational delivery via Clinical Care Groups will enable more efficient use of resource and appropriate prioritisation by ensuring:

- Effective use of data, incorporating utilisation of different needs assessment methodology and local intelligence, including staff/public contributions to identify need and priorities. This will include new approaches such as the population segmentation and risk stratification tool to proactively identify patients at greater risk of illness and/or deterioration
- An evidence based but innovative approach to care planning with opportunity for further research and development locally.

- Better use of time between diagnosis and treatment to prepare patients for surgery in order to improve their healthcare experience (including

quality outcomes and satisfaction), improve population health and healthcare value,

- Maximising learning and understanding around behavioural insights and using this to influence practice and delivery approaches. The use of 'Making every contact count (MECC)' in this context is summarised in Figure 36.
- Enabling people to have the knowledge, skills and confidence to look after their health. The Wellbeing Improvement Service (WISE) exemplifies this approach Figure 37.

- Continued partnership work to achieve a whole system approach and maximise community assets.

Figure 36 Good Practice Example – MECC

Making Every Contact Count (MECC) is a brief intervention based approach that uses the day-to-day interactions that individuals have with others, to support positive healthy lifestyle behaviour change.

Within Cwm Taf Morgannwg (CTM), a cornerstone of our Population Health Strategy requires our workforce to be our champions, and utilise their contact with the public and patients to encourage healthy lifestyle behaviours. Our approach to MECC in CTM aims to:

Develop the knowledge, skills and confidence of staff to empower them to have healthy conversations
Enable staff to have healthy conversations through considering and adapting organisational systems and processes to facilitate embedding the MECC approach
Encourage staff to consider their own health and wellbeing and through conversations, influence that of their families, friends and colleagues

The CTM MECC offer includes Level 1 e-learning and Level 2 face to face training; the latter of which is delivered by the Local Public Health team, and is best suited to those engaging regularly with the public, and with whom the opportunity to raise healthy lifestyle behaviours is a regular occurrence. As part of the Level 2 offer, an integral component is working with staff groups to explore opportunities to embed MECC into everyday working practice, and this is currently being undertaken alongside the University Health Board's Strategy Groups.

Key pieces of work in 2022-23 have included the revision of topic based MECC videos, which will be used to supplement training, and best practice for brief intervention based conversations, the development of a MECC signposting Padlet, and the expansion of our MECC offer to include an accredited Agored Cymru qualification.

Figure 37 Good Practice Example - WISE

The Wellness Improvement Service (WISE), which forms part of the NHS Wales Planned Care Programme for CTM UHB aims to enable a wide range of patients to take control of their health conditions.

WISE follows an evidence-based, lifestyle medicine approach where patient empowerment forms the basis of the service and supports behaviour change through person centred techniques to improve mental and physical wellbeing.

Service delivery is led by a number of wellbeing coaches who invite patients after an initial individual assessment to join group sessions as part of a structured programme focusing on areas such as nutrition, physical movement, stress reduction, sleep improvement and helping to reduce any symptoms that may impact on day-to-day quality of life.

More info can be found at WISE CTM - Cwm Taf Morgannwg University Health Board (nhs.wales) with participant stories accessed at https://youtu.be/OGw2OhZ30sM

7.3 Strategic Direction

In the recovery from Covid-19, the Health Board engaged with staff, the population served and partners to develop *Our Health, Our Future* CTM 2030, organisational strategy with the mission of "building healthier communities together".

The strategy identifies four strategic goals (creating health, improving care, inspiring people, sustaining our future) implemented via a 'life course' approach from 'starting well' through to 'dying well'. An overview is given in Figure 38

Figure 38 Our Health Our Future, Cwm Taf Morgannwg University Health Board 2022

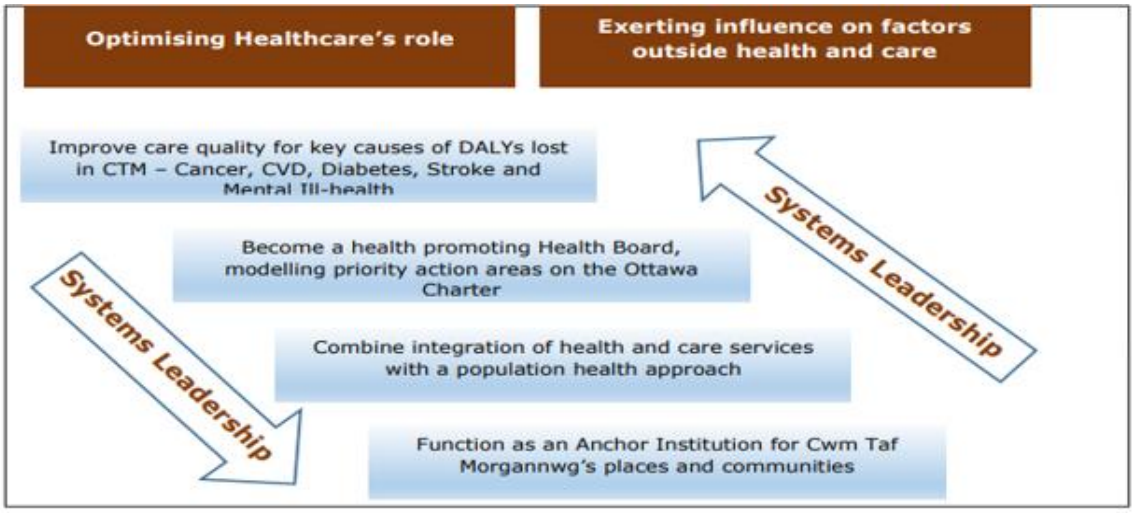
Whilst much of the population health agenda falls naturally within the creating health pillar, a commitment to population health runs as a golden thread throughout the strategy and its four pillars.

Population Health Framework and Goals

The commitment to being a population health organisation was formally endorsed by the Board in May 2021 with adoption of a population health framework (Figure 39). It describes the optimisation of healthcare through a system leadership approach to improving care quality, health promotion, integration of health and social care and the UHB's role as an anchor organisation in the CTM region.

The framework was implemented through a programme of 37 projects under the leadership of the Executive Directors. Many of these projects have since been completed. On-going projects are being progressed under the oversight of the CTM Creating Health Board of the CTM 2030 Unified Transformation Programme.

Figure 39 Population Health Framework CTM, 2021



Alongside the framework, the Board agreed a set of clear population health goals to monitor progress within our population (Figure 40). The original 2021 goals have been revised in line with CTM 2030 timeframes and the availability of measurable outcome data.

Figure 40 Population Health Goals in CTM, Revised 2023

Goal	Target
1a	By 2030, the Life Expectancy at birth for men and women in CTM, matches the Wales average
1b	By 2030, the Healthy Life Expectancy at birth for men and women in CTM, matches the Wales average
2a	By 2030, the absolute difference in Life Expectancy at birth between the most and least deprived population quintiles in CTM has been reduced by 20%
2b	By 2030, the absolute difference in Healthy Life Expectancy between the most and least deprived population quintiles in CTM has been reduced by 20%
3	By 2030 Avoidable Mortality in CTM matches the Wales average
4a	By 2030, cardiovascular mortality in CTM matches the Wales average
4b	By 2030, cancer mortality in CTM matches the Wales average
5a	By 2030, Infant Mortality Rate (IMR) in CTM is lower than 2 per 1000 live births
5b	By 2030, percentage of Low Birth Weight (LBW) is lower than Wales average (6.1% in 2020)

6a **6b**	By 2030, the smoking prevalence in CTM is reduced to 5% By 2030, the current inequality in smoking prevalence between groups at extremes of deprivation in CTM has been eliminated
7a **7b**	By 2030, the prevalence of 4-5 year olds starting school at a healthy weight will increase from baseline By 2030, the prevalence of adults who are obese will decrease from baseline

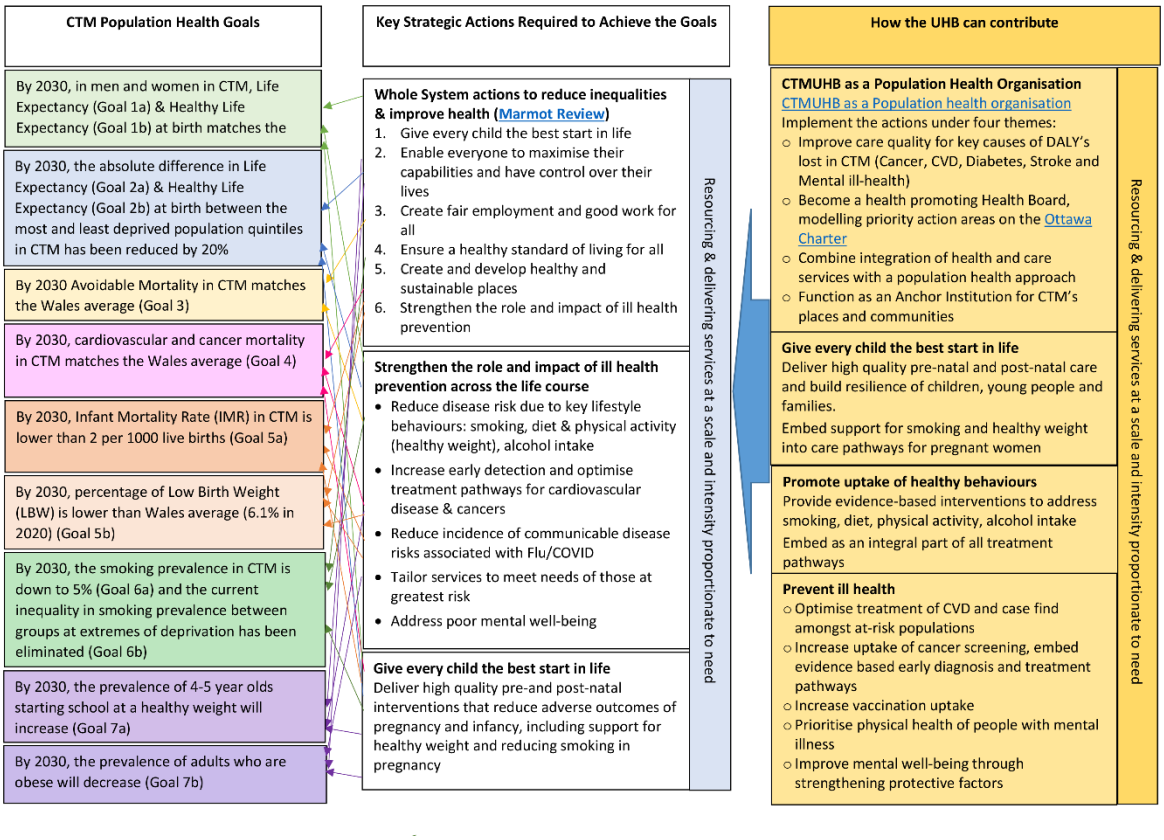
Progress against these high level, long term population outcome measures will be reported annually. Baseline measures and early trends are reported in Appendix 2.

The population health goals describe what the Health Board, alongside partners, is trying to achieve in relation to improving population health. The influences on people's health and well-being and subsequently high-level population health outcomes, such as healthy life expectancy, are complex and wide ranging. A person's job, home, community environment, education and access to services can all influence their health and future outcomes.

We know that whole system action by multiple partners is needed if we are to influence population outcomes, and the Health Board has an important individual contribution to make. Further work has been progressed with the Strategy Groups to identify the strategic actions and supporting evidence to sit behind these goals. In turn this will be translated into meaningful delivery actions for Care Groups with associated process and outcome measures.

Figure 41 outlines the actions the Health Board can take and provides a starting point for ensuring action is taking place across the organisation.

Figure 41 CTM contribution to Population Health Goals



- Column 1 summarises the high-level measurable population health goals that we can use to monitor our progress.
- Column 2 is a summary of the evidence-based actions that contribute to improving population health and reducing inequalities, with the smaller arrows indicating which population goals they relate to. This reflects the system-wide actions that involve multiple partners.
- Column 3 provides a summary of the specific contribution the Health Board can make, as part of becoming a population health organisation. Although it is difficult to discern the precise impact of each individual Health Board level action on the wider population health goals, by following the best available evidence and acting systematically there will be a collective impact.

Progress in achieving the identified priority actions and monitoring of population health gains will sit with the *Creating Health* Board within the unified Transformation Programme. There are a number of identified actions and interventions that will deliver across more than one of the four CTM 2030 strategic pillars. There is frequent alignment between *Creating Health* and *Improving Care*.

7.4 Current Areas of Action

There are already many examples that reflect the Health Board's contribution towards achieving the population health goals.

Promoting Uptake of Healthy Behaviours

Reducing Smoking rates	Reducing Obesity
Implementation of All Wales Tobacco Control Plan 2022-24, including:- • Increasing provision and uptake of 'Help me Quit' (HMQ) service including a service for pregnant women, introduction of a systematic hospital based service, optimisation of level 3 pharmacy services and increased referral rates and signposting within primary care • Targeting priority groups to reduce inequalities in smoking prevalence. • Monitoring of Smoke free places policy	Continued implementation of our local 'Healthy Weight Healthy Wales' strategy, including:- • Development of a "Healthy Weight Alliance", with key partners across CTM. • Roll out of Level 2 and Level 3 of the adult obesity pathway and weight management service • Continuing the Whole System Approach to Childhood Obesity, including development of a business case for a children/ families weight management service, a social marketing campaign and the HENRY and PIPYN programmes

Preventing Ill Health

Vaccination and Immunisation	Cancer Screening
• Providing a continued COVID-19 vaccination programme, aimed at priority groups and a timetable informed by the JVCI (Joint Committee on Vaccination and Immunisation) • Implementation of the Welsh Government National Immunisation Framework and Vaccine Equity Strategy across CTM.	The CTM Reducing Cancer Inequalities Group has overseen numerous projects in Primary Care and community to improve cancer survival by increasing the uptake of cancer screening. A recent project with Taf Ely secondary schools funded by the Moondance Foundation has demonstrated the impact of teaching Year 7 pupils on uptake of bowel screening. This Health and Education Partnership provides a template for other topics such as Health Literacy.

	You Tube : Schools : Investing in the next generation (https://www.youtube.com/watch?v=P7NP-yIfUrI)

Health Protection System
Development of a multiagency health protection system to protect the population of CTM from infectious disease hazards including Covid-19. The agile system will respond to seasonal fluctuations and provide capacity to deal with extant threats from TB and Hepatitis B as well as new or emerging threats such as Avian Flu and new variants of Covid-19. The system will encompass vaccination, testing and tracing and will be hosted by the Primary Care and Community Care group

Early Detection and Initiation and Optimisation of Treatment

Stroke Pathway	Pre diabetes Programmes
Establishment of a Stroke Strategy Group to implement the recommendations of the Welsh Government Quality Statement for Stroke and the CTM Stroke Equity Audit. The two key workstreams are:- **Stroke Prevention / Early Intervention** • Implementation of the Value Based Health Care Atrial Fibrillation and Hypertension programme looking at the detection and optimism of treatment for these risk factors. • Review reasons for delay in accessing stroke services and potential options for revisiting FAST campaign with PHW and Stroke Association.	Following on from the earlier South Cynon Pilot, two Pre diabetes programmes are currently being rolled out across the UHB area. The national WG funded, All Wales Diabetes Prevention Programme (AWDPP) led locally by the dietetic department is delivering in the Merthyr Tydfil and Bridgend West cluster areas while the remaining cluster areas are being targeted by an additionally funded arm of the Cardiovascular Health Check Programme. Both programmes aim to identify patients from practice databases who have blood test readings within the pre diabetic range. An appointment is then offered to assess and explain current risk and education and follow up support provided to encourage appropriate changes in behaviours to reverse pre diabetic status and reduce risks of developing diabetes

Acute Stroke / Stroke Rehabilitation Care • Continue to support the development of a robust and resiliant stroke pathway within the acute hospital setting and effective rehab provision through the 6 Goals for Urgent and Emergency Care Programme. More information on progress throughout stroke pathway can be found in Appendix 3	

Promoting the best start in Life

Reducing unplanned pregnancy	**Healthy Schools/Preschools Schemes**
Delivery of a trauma informed prevention focussed service, 'CHOICE' provides tailored support, education and fast track access to specialist sexual health nurses. The aim is to support this cohort to reduce the numbers of STIs and unplanned pregnancies. This is one of a number of programmes overseen by the Sexual Health Advisory Board (SHAB) including the Condom Card Scheme and access to Long Acting Reversible Contraception	The Welsh Network of Healthy School Schemes (WNHSS) is a Welsh Government grant funded Scheme delivered in all local authority areas across Wales. The CTM Healthy School Scheme consists of three local authority schemes, Merthyr Tydfil, Bridgend, and Rhondda Cynon Taf under the CTMUHB umbrella. All local authority schools in CTM are enrolled on the scheme, which aims to promote, protect and embed the physical, mental, and social health and well-being of its school and pre-school community.

Influencing the wider well-being system

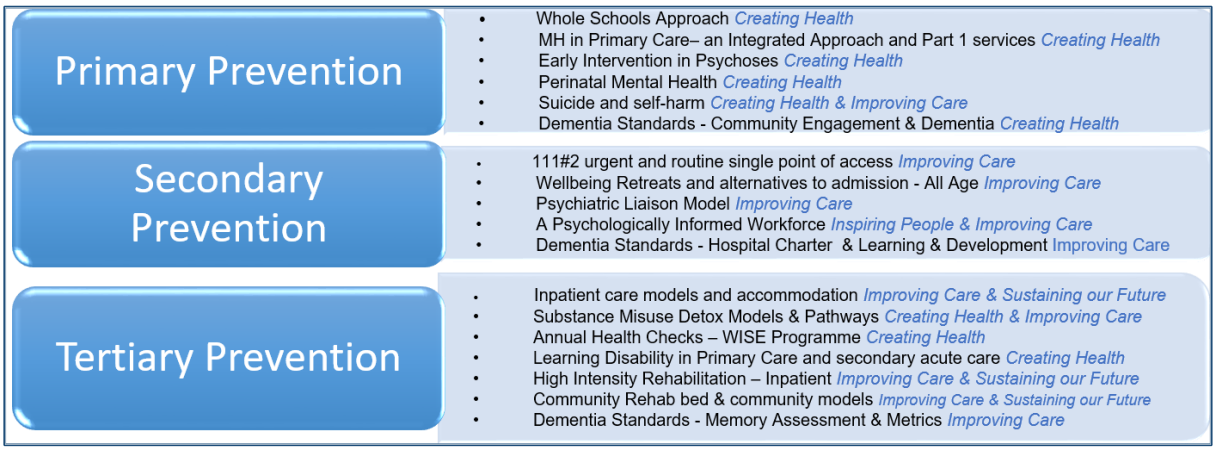
Housing and Health	**Anchor Institute Status**
Establishment of a Healthy Housing Alliance, which includes Registered Social Landlords, Local Authority housing professionals and the voluntary/ community sector	Identification as an 'anchor organisation', defined as large, non-profit organisations, unlikely to relocate, whose long-term

representatives resulting in a number of successes:- • A jointly funded housing health programme manager to coordinate housing health activities across CTM. • The award of the Communities for Change pilot award to bring together housing and health data. • Development of a Housing Health Best Practice Guide as part of the national Bevan Exemplar programme	sustainability is tied to the well-being of the populations they serve. CTMUHB employs over 12,000 staff with 80-90% resident within the health board boundaries. With an annual spend of over £1 billion and considerable geographic reach in estates and services, there are considerable opportunities to use such resources to maximal social value.

Mental Health and Wellbeing

Mental Health and welling is a thread that runs through all action areas. The Health Board is currently reviewing its delivery of services through a prevention lens from improving well-being and resilience generally in our population to improving services and support for those with a mental health diagnosis. Figure 43 indicates the breadth of action being tackled to address this area.

Figure 43 Prevention Approaches to Mental Health in CTM



Source: CTM IMTP 2023

In addition, the Health Board has committed to protecting the physical and mental wellbeing of its staff with the continuing development of a comprehensive Employee Wellbeing Service.

8. Conclusions

- Incidence of Covid-19 infection and related mortality were the highest in Wales. This was driven largely, by our local levels of deprivation, patterns of health behaviours and profile of ill health.

- In addition to the mortality directly related to Covid-19 our levels of all-cause mortality increased over the pandemic period and service disruption over the pandemic has left a legacy of increased waiting times, lower uptake of screening, late presentation of symptoms and reduced monitoring and management of chronic conditions. There is also the somewhat not yet fully understood challenge of Long-Covid. While striving to adopt a more proactive, preventative approach the treatment delay and late diagnoses consequences of the pandemic will need to be addressed.

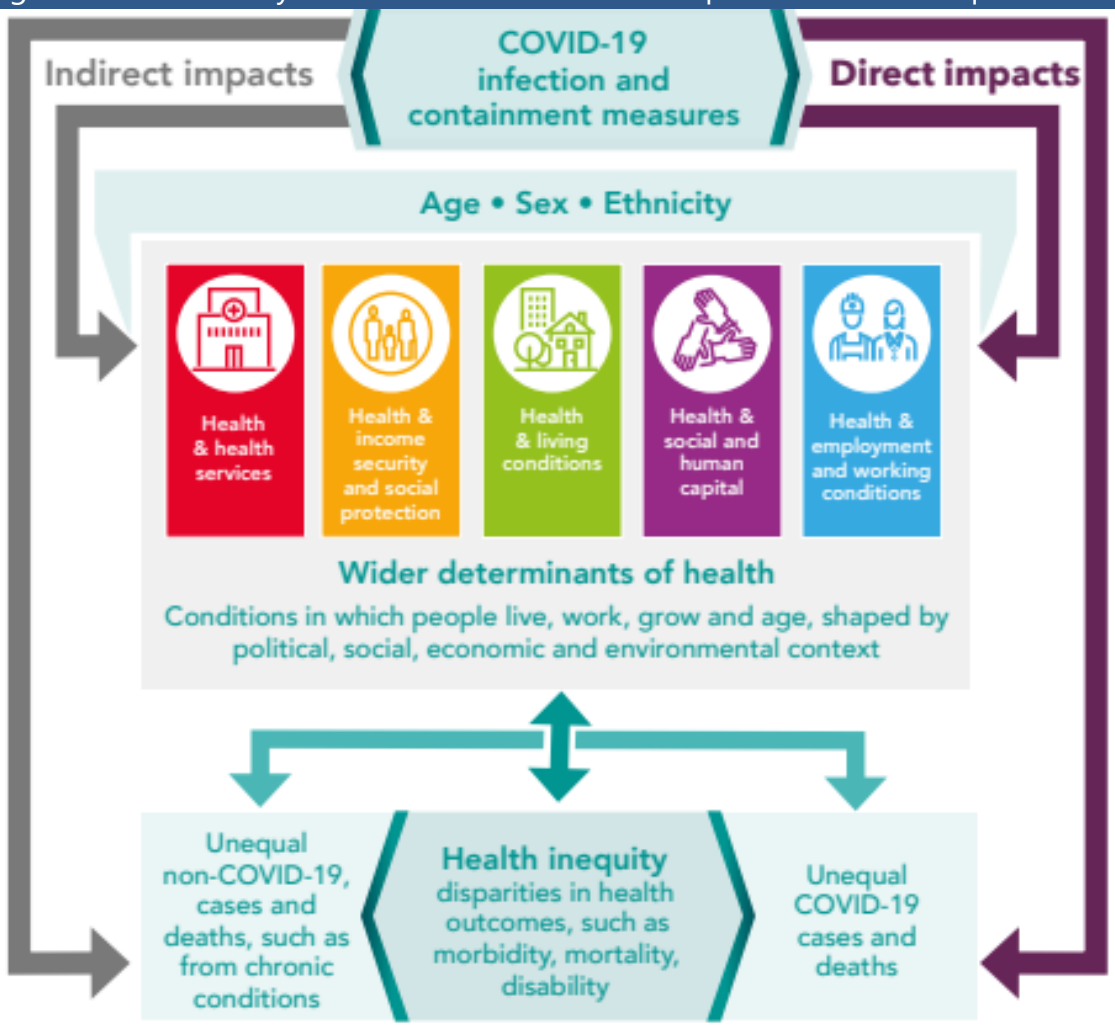
- The pandemic had wide reaching impacts on the mental health and wellbeing of many of our population. Even with huge progress towards a return to 'normality' the causative factors for many such as economic difficulties, health worries and the unique effects of bereavement during a pandemic climate remain, warrant the need to continue to provide additional support services. The scale of impact and needs arising from Long-Covid need to be better understood and included in our plan

- The pandemic response however did produce some positives - strengthened cross sector partnership working, a greater appreciation of community assets, innovation in working practices, protection through mass vaccination and exploration of digital technology with a commitment to improving digital inclusion

- It is anticipated that the pandemic will have worsened inequalities in health within CTM, further exacerbated by the additional challenges of the cost of living crisis, Brexit and climate change.

- The COVID-19 pandemic has been described as a 'syndemic' pandemic, (Figure 44) interacting with and exacerbating existing inequities in chronic diseases, as well as inequities in the conditions in which people live, work, grow and age (28). Risk factors interact and multiple aspects of disadvantage come together, meaning the risks are cumulative and increase with each additional risk factor. The long-term direct and indirect impact on health and other inequities will take several years to become fully apparent

Figure 44 Covid-19 syndemic direct and indirect impact on health inequities



Source: Public Health Wales[1]

- Tackling of these inequalities and the wider determinants that drive them needs a whole system approach and a clear, collective set of population goals to monitor progress.

- As part of its own service delivery, the health board has the challenge of moving towards prioritising prevention and early intervention while balancing the current backlog of service need. Greater use of data and intelligence will be vital in understanding our population and prioritising care effectively and proportionately.

- Widespread cultural and operational changes are required to achieve more effective partnerships with patients, building on the concepts of shared decision making and co-production and promoting the importance of supporting self-care to improve outcomes. This extends to preparing patients

on waiting lists to optimise their wellbeing, reduce complications and improve outcomes of care

- There are numerous examples of effectively embedding prevention in practice within CTM but these need to be scaled up, evident across all specialities and settings and where appropriate adequately and sustainably resourced.

- Learning from the pandemic and utilising strengthened multiagency working relationships will enable development of an agile health protection system and workforce capable of protecting the CTM population from Covid -19 variants and other communicable disease hazards going forward

- CTMUHB has a key role as an anchor organisation in CTM. Good progress has been made in building a strong foundation for further development.

- The Health Board has acknowledged the huge commitment and contribution of its staff and began to strengthen structure and policy within the organisation to provide ongoing support. These will need to continue to develop at scale to increase resilience and support wellbeing through the challenging post Covid-19 recovery times ahead.

9. Recommendations

- Acknowledge the impact of Covid-19 on our population and the tremendous sacrifices made. In so doing ensure that we **embrace the lessons learned, building on the strong partnerships developed** to deliver our collective commitment to improving the health and wellbeing of our CTM population, reducing health inequalities and providing resilience and protection from future hazards. **Defining our relationship with Public Health Wales as part of a Public Health System Memorandum of Understanding will be central to effective achievement of our population health ambitions for CTM**

- Celebrate the progress made in developing CTMUHB as a population health organisation and the solid foundations of a whole system approach, prioritising prevention and early detection and intervention in all pathways. The UHB should:

- **continue to develop and effectively deploy population health intelligence, technology, research and innovation to deliver timely, quality and equitable care**
- **maximise the learning from behavioural insights as a means to effect change**
- **support the Care Groups to develop a value based public health approach in contribution to achieving our organisation's population health vision and goals.**
- **explore how "prehabilitation" could be supported as part of care pathways to prevent delays, change lifestyles, create better patient and population health outcomes and improve healthcare value**
- **monitor the CTM wide implementation of evidence-based policy for Interventions Not Normally Undertaken (INNUs)**

- Recognise our staff as our greatest asset and fundamental to our future population health ambitions; colleagues have worked with sustained commitment during times of unprecedented challenge during the COVID-19 pandemic and subsequent recovery period. As an employer, **continue to support and develop our staff to achieve their own wellbeing and be champions for health in the workplace and in their communities**.

- Develop and **maximise the Health Boards role as an anchor organisation** in the region, making the most effective use of all its resources and opportunities from estates, health promoting hospitals, employment and skills to actively promote good health and wellbeing to staff and residents enabling people to have the knowledge skills and confidence to look after their health.

- Work with Public Service Board and Regional Partnership Board partner organisations to **achieve a "More equal CTM", building healthy communities, strengthening, resilience and maximising community assets.**

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Appendix 1 Research in Population Health

CTM is committed to the development of a broad portfolio of population health and well-being research. This agenda is supported by a dedicated Principal Researcher (Public Health) post (1.0WTE) within CTM Research & Development, funded by Health and Care Research Wales, and a team of consultants, analysts and practitioners working on Population Health Management and Public Health topic areas.

CTM has partnered with academic institutions including Cardiff University, University of South Wales, Swansea University and Sheffield Hallam University to secure external grant funding to undertake research projects covering a range of topics. Capacity building activities have included support for PhD studentships, delivering lectures and training, and supporting NHS staff to submit their first funding applications and become authors of peer-reviewed publications.

Examples of research activity within the CTM Public Health Team

Population health research within CTM has covered a range of topics including; social prescribing, cancer and screening, pre-diabetes, vaccinations and frailty. Some examples of externally funded research in CTM include:

- The Burdett Trust funded the PARCHED study (Prompting and encouraging community hydration through education). This study was led by CTM UHB, with support from University of South Wales.
- Cancer Research UK funded the TIC TOC feasibility study (Targeted Intensive Community-based campaign To Optimise Cancer awareness: feasibility of a symptom awareness campaign to support the Multidisciplinary/Rapid Diagnostic Centre). The study was led by Cardiff University and undertaken with residents in CTM.
- KESS2 funded PhD studentship exploring the role of the social prescribing link worker in Wales. This study was led by University of South Wales, with support from CTM.
- The Burdett Trust and CTM UHB R&D department funded the Best Start Study – Weight management during pregnancy. Partners included Public Health Wales, Swansea University SAIL, Cwm Taf UHB, Cardiff University and University of South Wales.

Examples of research publications co-authored by CTM staff

- Harris, C., Cottrell, S., Perry, M., **Meaden, R.**, **Davey, R.**, **Elliott, M.**, **Cushen, R.**, Jones, G., Youlden, H., Meredith, N., Jones, R., **Thomas, S.**, Akbari, A., Lyons, R. and Johnson, C. 2023. A pilot intervention to improve uptake and

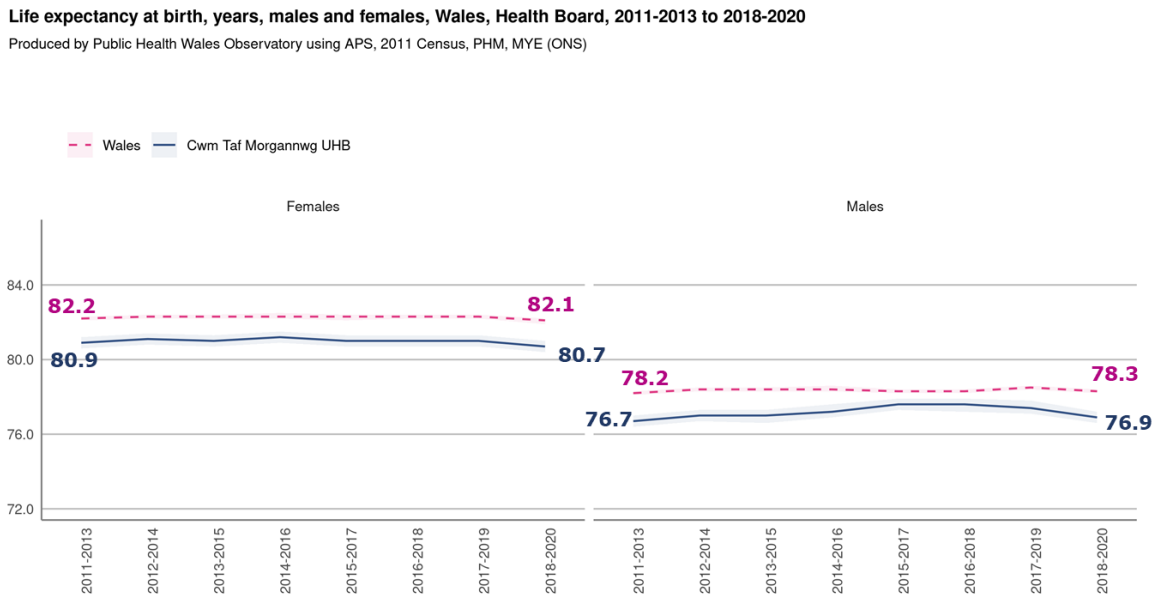
equality of childhood influenza vaccination in an area of Wales, through the introduction of a mixed delivery model including nursery school immunisation sessions. *Vaccine*.

- Smith, P., Moody, G., Clarke, E., Hiscock, J., Cannings-John, R., Townson, J., Edwards, A., Quinn-Scoggins, H.D., Sewell, B., Jones, D., **Lloydwin, C**. and **Thomas, S**., 2022. Protocol for a feasibility study of a cancer symptom awareness campaign to support the rapid diagnostic centre referral pathway in a socioeconomically deprived area: Targeted Intensive Community-based campaign To Optimise Cancer awareness (TIC-TOC). *BMJ open*, *12*(10), p.e063280.
- Roberts, T., **Lloydwin, C.**, Pontin, D., Williams, M. and Wallace, C., 2022. The role of social prescribers in Wales: a consensus methods study. *Perspectives in Public Health*, *142*(5), pp.297-304.
- Akbari, A., Griffiths, R., **Puchades, A**. and **Thomas, S**. (2020) "Wales Inverse Care Law Programme - Design and Implementation of Routine Data Evaluation and Lessons Learned", International Journal of Population Data Science, 5(5).
- **Puchades, A**., Daniel, R., Geen, J., Peden, J., Lewis, H. and **Nnoaham, K**., 2022. SARS-CoV-2 sero-prevalence in the workforces of three large workplaces in South Wales: a sero-epidemiological study. *BMC Public Health*, *22*(1), p.162.
- **Nnoaham, K.E.** and **Cann, K.F.**, 2020. Can cluster analyses of linked healthcare data identify unique population segments in a general practice-registered population? *BMC Public Health*, *20*(1), pp.1-10.
- Wallace, C., **Elliott, M.**, **Thomas, S.**, Davies McIntosh, E., Beese, S., Roberts, G., Ruddle, N., Groves, K., Rees, S., Pontin, D., (2020) Using consensus methods to develop a Social Prescribing Learning Needs Framework for practitioners in Wales. Perspectives in Public Health. RSH190186.R1
- McCutchan G, Hiscock J, Hood K, Murchie P, Neal R, Newton G, **Thomas S**, Thomas A-M & Brain K. (2019) Engaging high risk groups in early lung cancer detection: a qualitative study of symptom presentation and intervention preferences amongst the UK's most deprived communities. BMJ Open 2019;9:e025902.

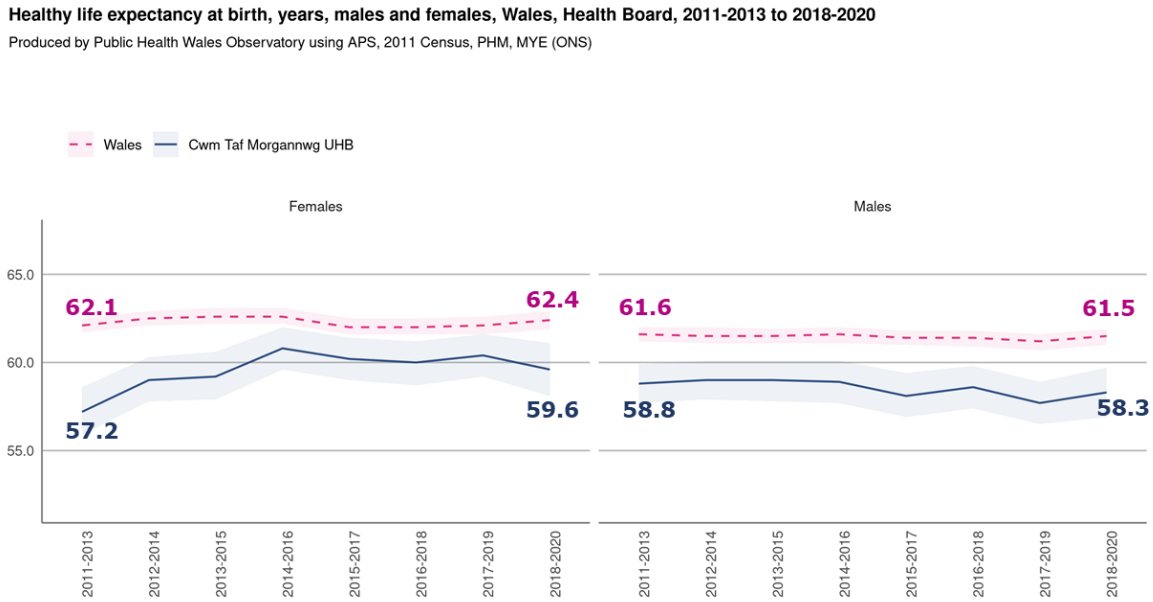
Appendix 2 Population Health Goals- Baseline Data

1a: By 2030, in men and women in CTM, Life Expectancy at birth matches the Wales average

Description: Life expectancy and healthy life expectancy are good summary measures of the overall health of the population. The inequality gap should be measured in comparison to Wales as well as between deprivation groups within CTM



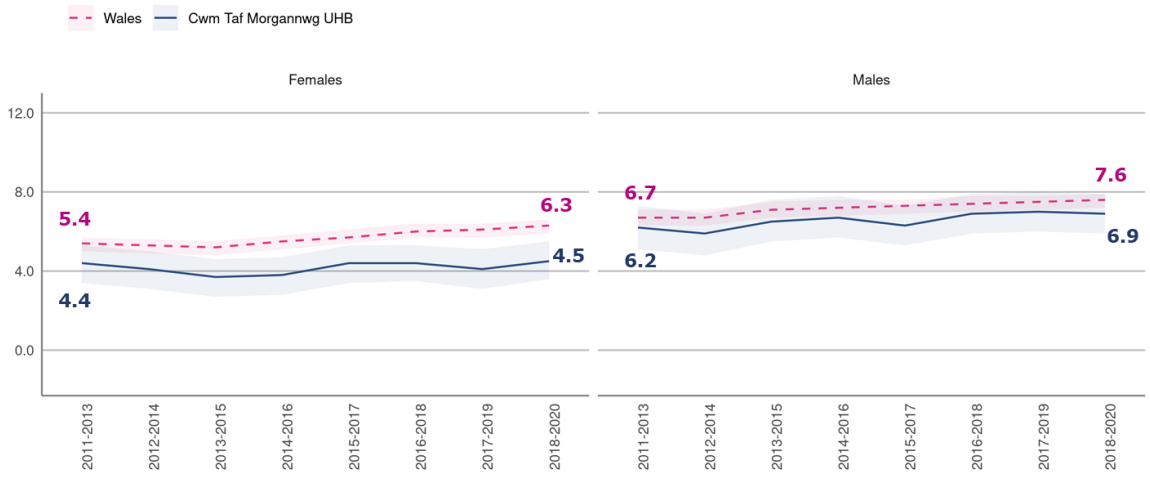
1b**:** Goal: By 2030, in men and women in CTM, Healthy Life Expectancy at birth matches the Wales average



2a: Goal: By 2030, the absolute difference in Life Expectancy at birth between the most and least deprived population quintiles in CTM has been reduced by 20%

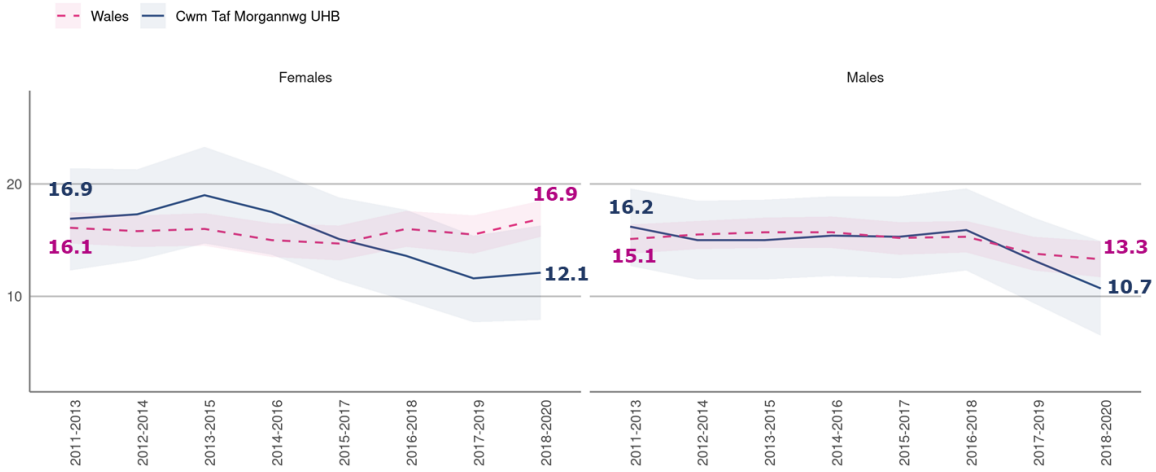
Description: Health inequalities are avoidable, unfair and systematic differences in health between different groups of people and the difference in life expectancy is a good measure of population level health inequalities

The gap in life expectancy at birth between the most and least deprived, years, males and females, Wales, Health Board, 2011-2013 to 2018-2020
Produced by Public Health Wales Observatory using APS, 2011 Census, PHM, MYE (ONS)



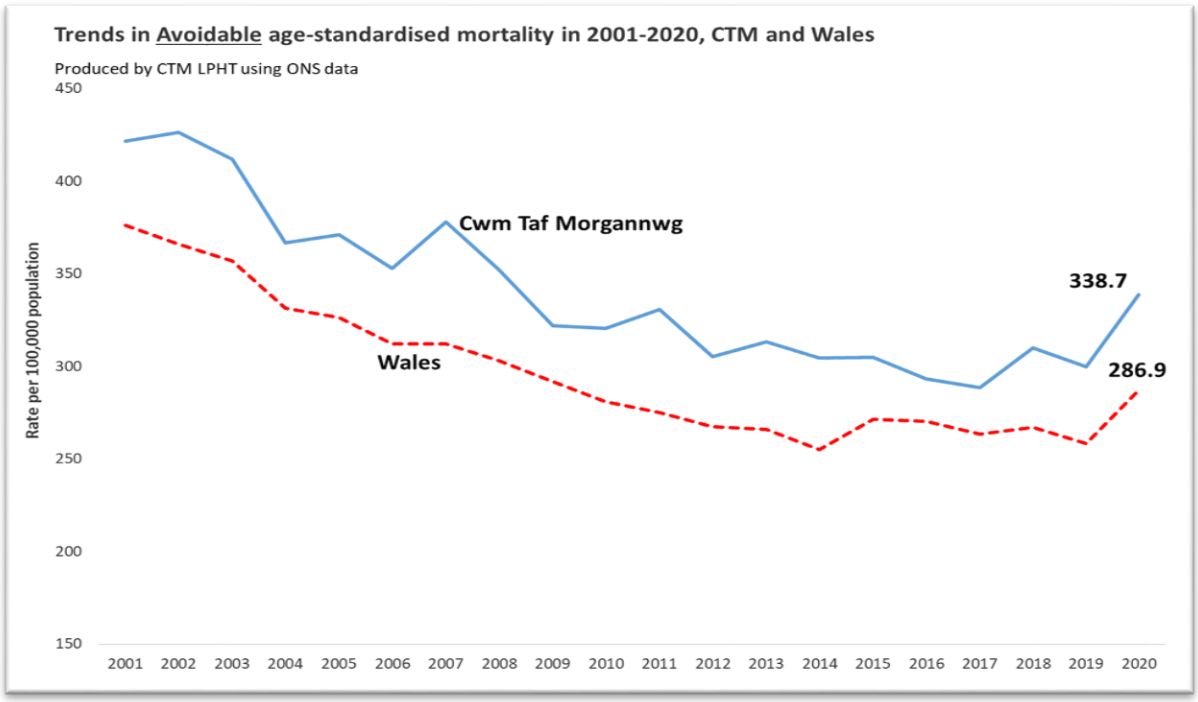
2b: Goal: By 2030, the absolute difference in Healthy Life Expectancy between the most and least deprived population quintiles in CTM has been reduced by 20%

(NI) The gap in healthy life expectancy at birth between the most and least deprived, years, males and females, Wales, Health Board, 2011-2013 to 2018-2020
Produced by Public Health Wales Observatory using APS, 2011 Census, PHM, MYE (ONS)



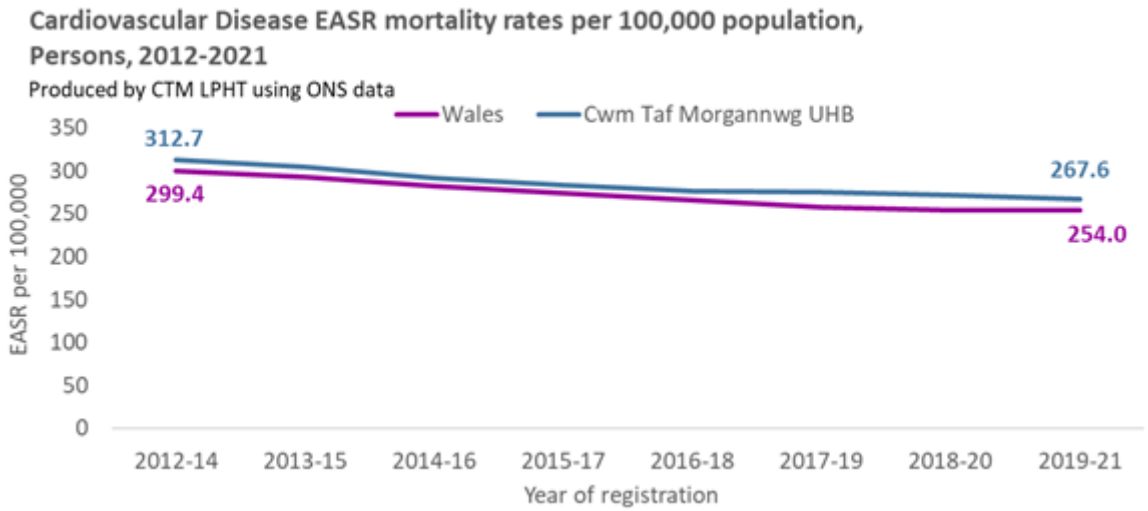
3. Goal: By 2030 Avoidable Mortality in CTM matches the Wales average

Description: Avoidable mortality is a good summary measure of the performance of wider public health (preventable) and health & care (amenable) systems

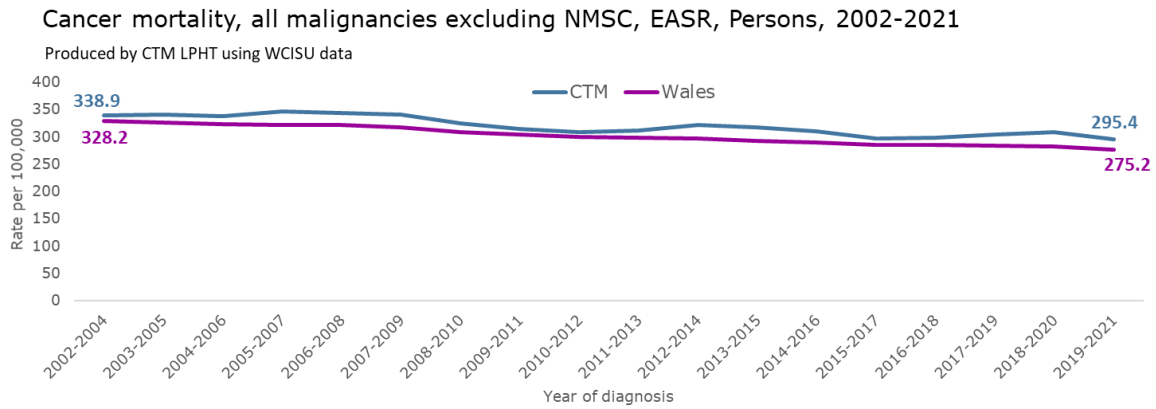


4a. Goal: By 2030, cardiovascular mortality in CTM matches the Wales average

Description: Cancer and cardiovascular deaths are two of the most common causes of mortality and are often preventable

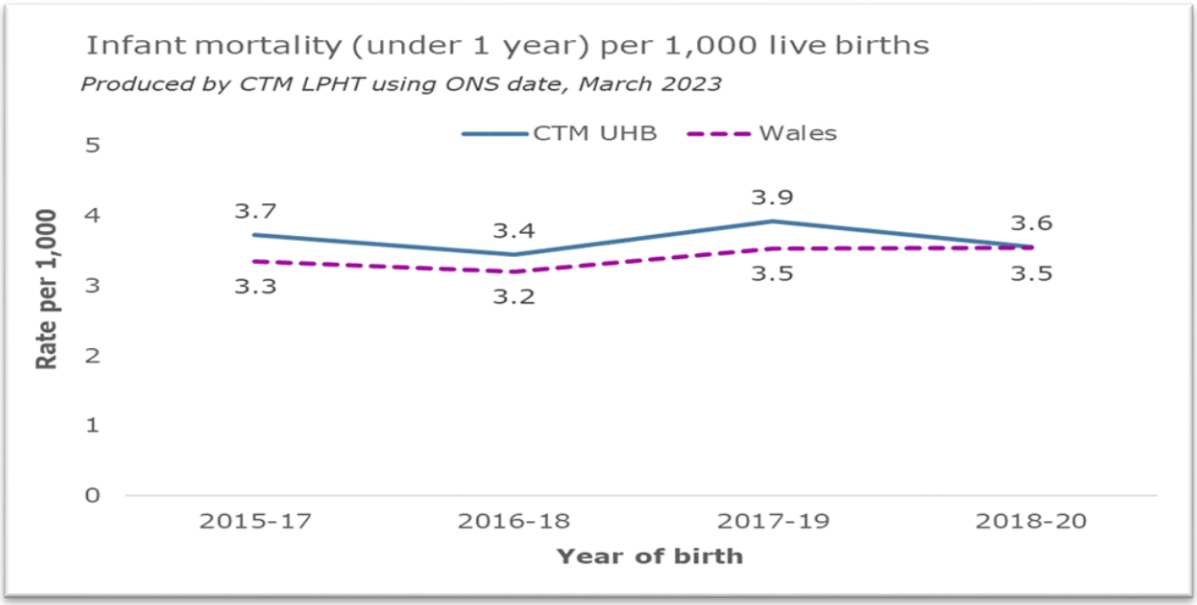


4b. Goal: By 2030, cancer mortality in CTM matches the Wales average

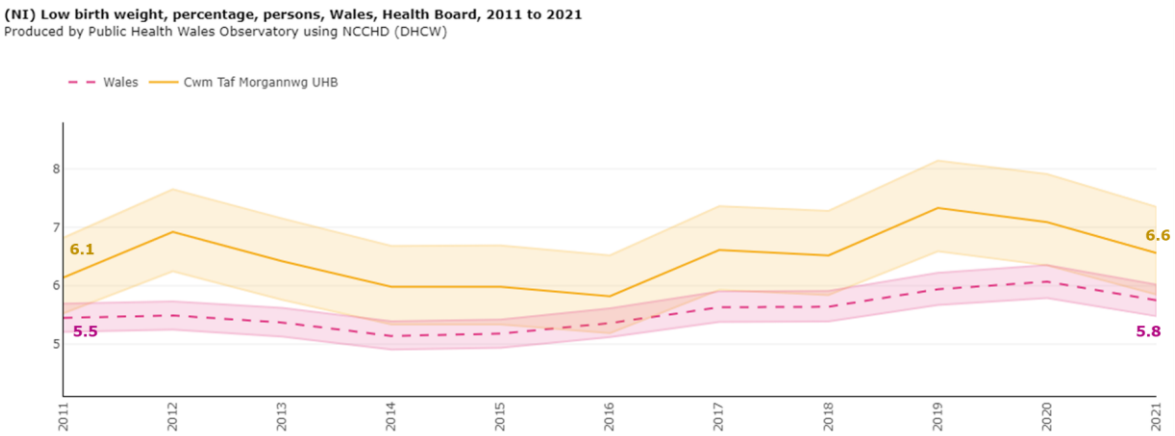


5a. Goal: By 2030, Infant Mortality Rate (IMR) in CTM is lower than 2 per 1000 live births

Description: Early life experience is predictive of future health and wider social outcomes. IMR is an important indicator of population health as it reflects the structural factors affecting population health.

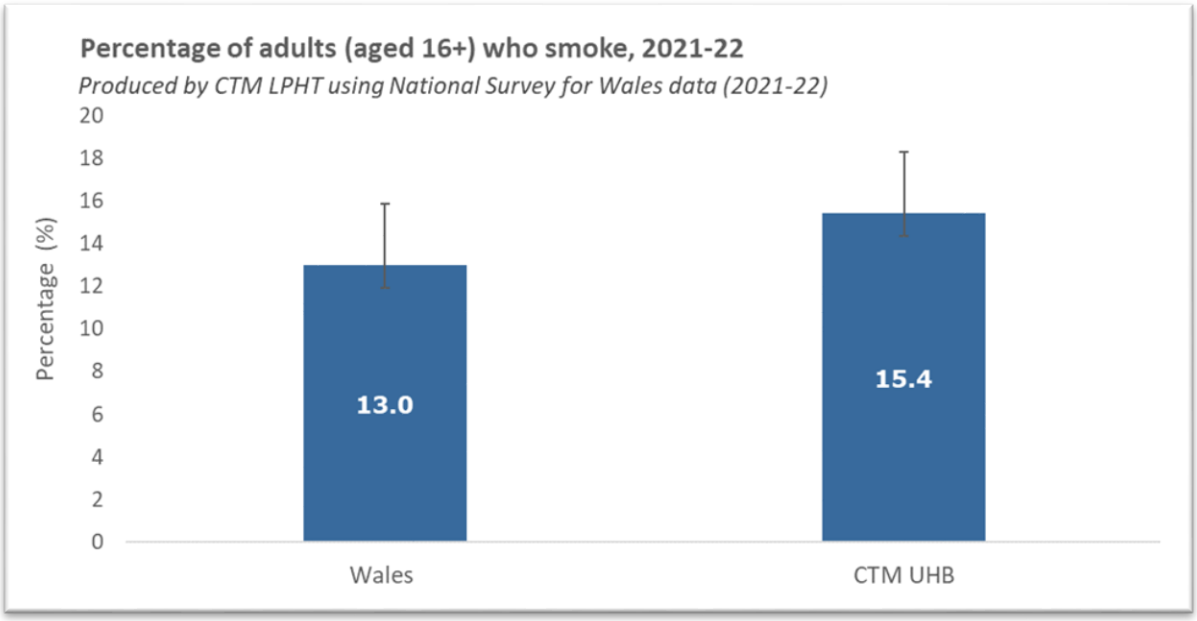


5b. Goal: By 2030, percentage of Low Birth Weight (LBW) is lower than Wales average (6.1% in 2020)

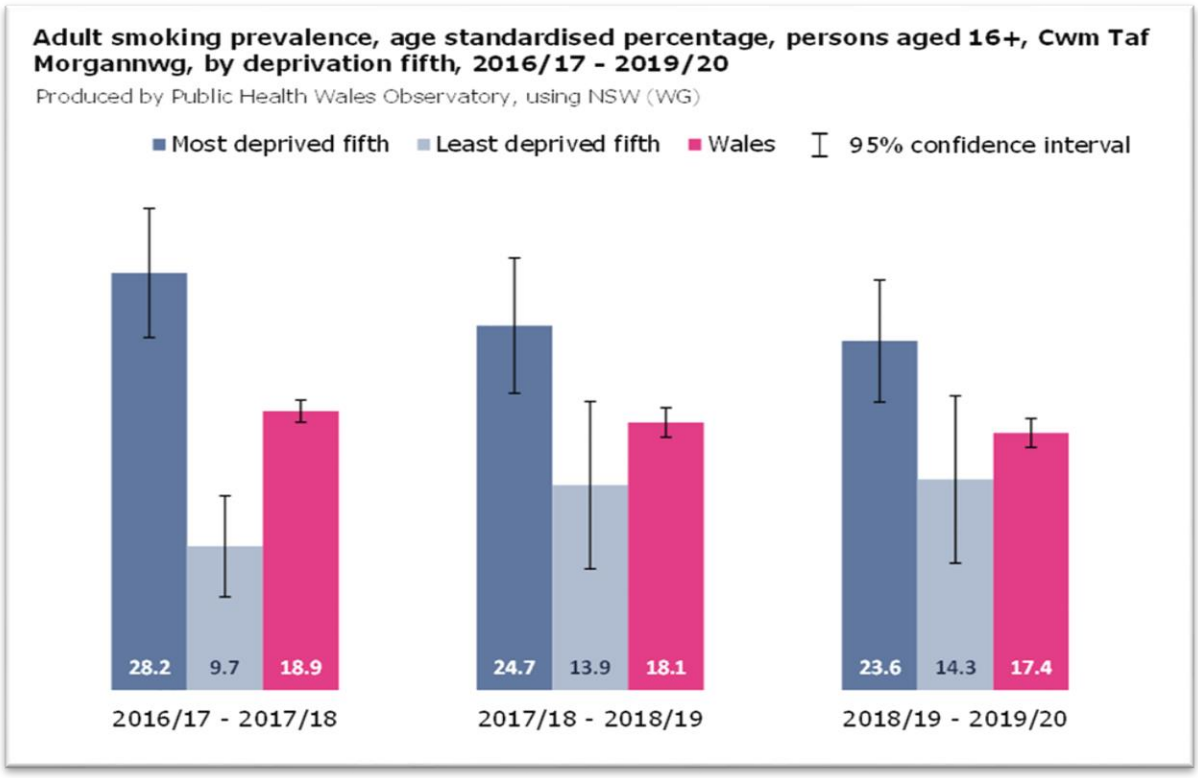


6a. Goal: By 2030, the smoking prevalence in CTM is down to 5% (no trend data available due to changes in the survey method)

Description: Smoking rates are the largest single cause of inequalities in health

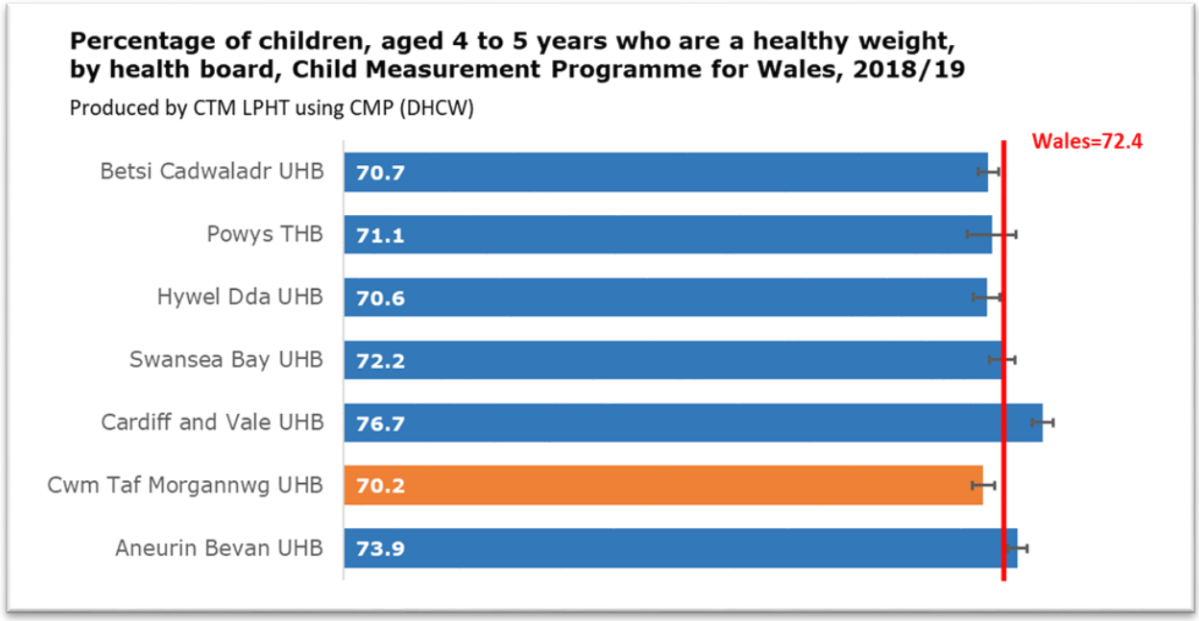


6b. Goal: By 2030, the current inequality in smoking prevalence between groups at extremes of deprivation in CTM has been eliminated

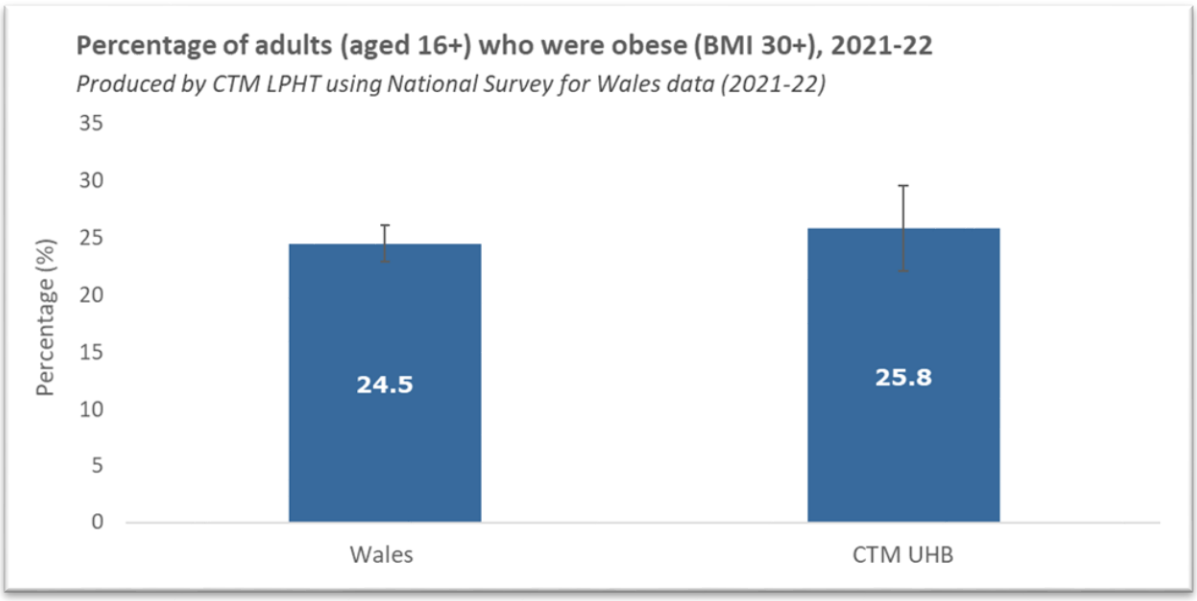


7a. Goal: By 2030, the percentage of 4-5 year olds starting school at a healthy weight will increase from baseline

Description: Obesity influences life expectancy and is an important proximal risk factor for many long term conditions



7b. Goal: By 2030, the percentage of adults who are obese will decrease from baseline (no trend data available due to changes in the survey method)



Appendix 3 Update on Stroke DPH Report 2018

The 2018 Director of Public Health Report focussed on stroke pathways and potential areas for improvement. This section provides an update on progress.

Services have undergone redesign and ongoing review and development in the intervening years and progress has been made despite the obvious impact of Covid-19. However, the burden of this disease remains. Stroke is the 4th leading cause of death in Wales and can have significant long-term effects on survivors. The number of people living with stroke is increasing due to increasing survival after stroke and an ageing population with 2 of every 3 strokes causing disability.

A Stroke Equity Audit carried out by Public Health (2022) reviewed the position in CTM and included data from the Bridgend Local Authority area. It was shown that CTM residents have the highest death rate from stroke of all health boards in Wales for both men and women. Men appear to be at a higher risk of having a stroke at a younger age than women, though in CTM, stroke tends to occur at a younger age in both sexes than the average for Wales. A number of factors contribute to this large disease burden.

As an estimated 70% of all are strokes are preventable, it is vital that efforts are aimed at preventing stroke with early detection and management of clinical risk

factors. It is also important that once a stroke occurs, it is recognised promptly and patients can have access to timely evidence based treatment with specialist services.

The stroke equity audit, focused on identifying areas where stroke prevention and stroke care could be improved. Recommendations were made and actions are in the process of being taken to address these recommendations.

In terms of prevention, work is ongoing to address behavioural risk factors. However, in the short term, recommendations were made to address two of the main modifiable risk factors for stroke - high blood pressure or hypertension and atrial fibrillation (AF) which is an abnormal heart rhythm. In terms of stroke care, recommendations were made to improve the delivery of timely evidence based management of stroke for the population of CTM.

Prevention - High Blood Pressure

In CTM, in 2019-20, there were 79,000 people on GP registers with known high blood pressure. Around 60% of all strokes are associated with known high blood pressure. In addition, for every 10 people diagnosed there are an estimated 7 undiagnosed, translating to potentially 55,000 people undiagnosed with high blood pressure in CTM. Of those on treatment, up to 40% of patients may not be adequately controlled, either due to suboptimal management or due to patients not taking their medication regularly. Treatments for high blood pressure are highly effective and significantly reduce risk of stroke and all-cause deaths. Every drop of 10mmHg in blood pressure reduces risk of stroke by 20% demonstrating that satisfactory control is vital. There are an average of 1,654 residents of CTM admitted with stroke each year with 60% of admissions to PCH and 53% to POW having high blood pressure.

Prevention - Atrial Fibrillation.

AF is an abnormal heart rhythm which is more common in older people and numbers are increasing with an ageing population. Untreated AF carries 5 times the risk of having a stroke and is associated with a doubling of risk of death in females and a 1.5 fold increase in death in males. It accounts for 20 to 30% of all strokes with a growing number of people having “silent” or undiagnosed AF. Strokes associated with AF are usually more complex, with poor outcomes and higher risk of death. Treatment with anticoagulants or blood thinners can decrease the risk of stroke by around 60%. Around 2.5% of the population of CTM are on primary care AF registers but some may not be on the right treatment whilst many more people who have AF but have not yet been detected.

Actions to be Undertaken

In late 2022, the Health Board was successful in securing external funding from the Welsh Government Value Based Health Care fund in a joint bid with Hywel Dda and Swansea University Health Boards to work on prevention of stroke with primary care. CTM will undertake two areas of work with GP practices in our area to aim to prevent strokes occurring, by targeting high blood pressure and AF over the next 2 years.

There will be 2 phases to each of these areas:

Phase 1: With high blood pressure, those patients that have already been identified and on the primary care hypertension register will be reviewed and assessed to ensure that they are on the correct medication at the correct dose and taking the medication appropriately. Patients with known AF and on the primary care AF register will be reviewed and assessed to ensure that they have been prescribed anticoagulants where appropriate and at the correct dose. They will also be reminded of the importance of taking their medication regularly. In addition, patients currently taking Warfarin, an anticoagulant which has to be carefully monitored with regular blood tests, will be "switched" to Direct Oral Anticoagulants (DOAC's). This will ensure improved compliance and potentially better control.

Phase 2: Will aim to find new patients who have high blood pressure or AF, but who have not yet been identified and therefore have not had their condition managed. This should reduce the potential for strokes in this population.