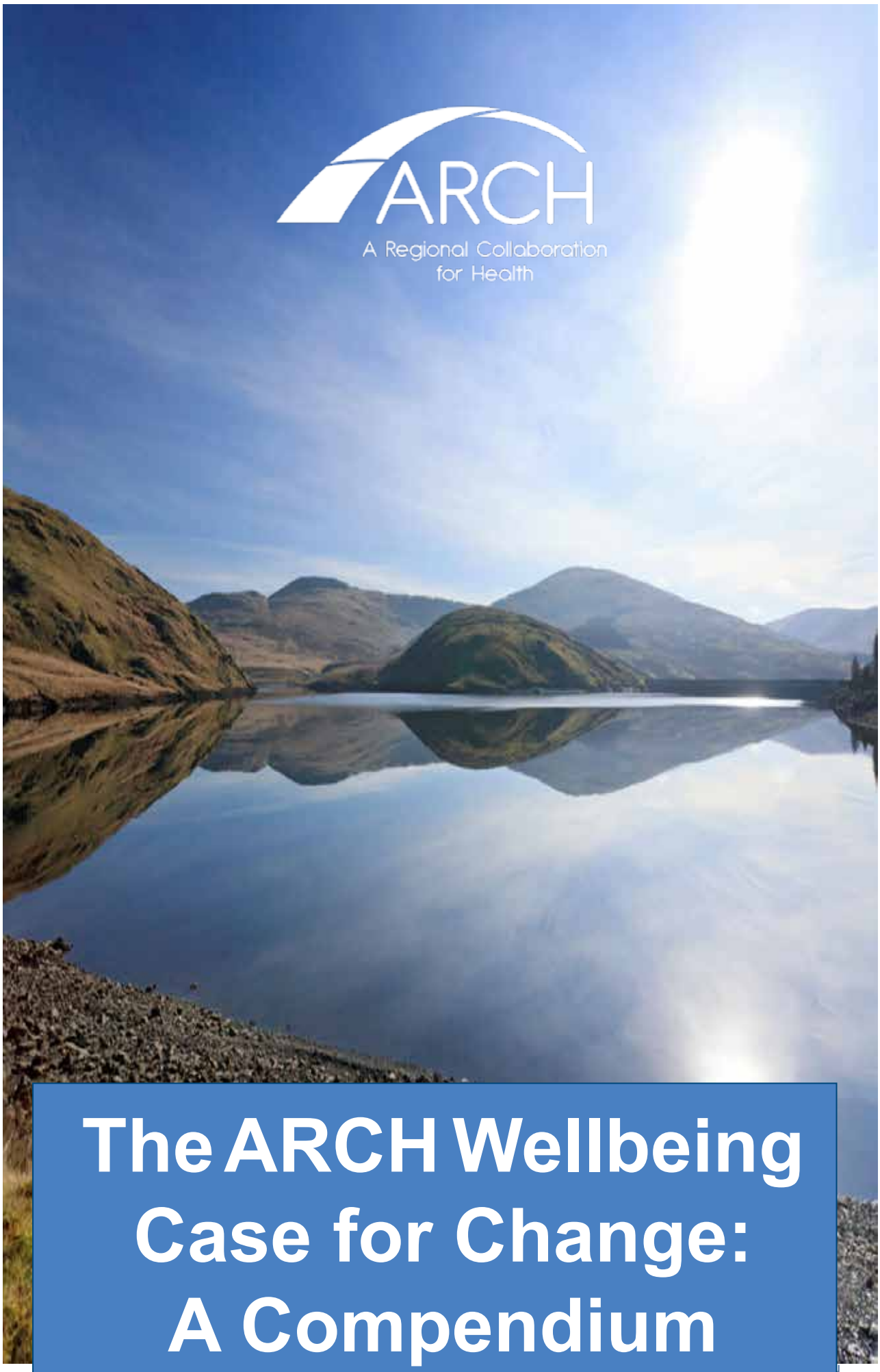


# The ARCH Wellbeing Case for Change: A Compendium

# contents





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# foreword

**Meryl Gravell, OBE**

**Professor Keith Lloyd**

We would like to start with a question: How many of us know something is good for us, or for our families, but we do it insufficiently? Perhaps it is eating our five a day, taking an opportunity to walk to the office or a meeting when it is a mile or so away, or popping in for a cup of tea and a conversation with a lonely neighbour; much like how our parents and grandparents lived, no processed food and plenty of walking. We know we should be doing these things. We know they will do wonders for our health and wellbeing. Yet we can always find a reason not to: I'm too busy; I don't have enough time; I am low on energy and need that sugar boost…

We do not expect, or indeed want, the NHS and other services to resolve these issues for us. Yet, there are several steps that those designing, managing, and delivering our services could do to help us live long, happy, and well lives. It is these steps that we are seeking to address through the regional wellbeing programme that we are leading on behalf of the ARCH partnership.

Let us start by emphasising that ARCH stands for 'A Regional Collaboration for HEALTH'. HEALTH including, but not limited to, HEALTHCARE. Making a marked improvement to the health of the population of this region requires action by a number of organisations in addition to our NHS.

We all know that there are a number of social factors that determine our health and wellbeing: the sense of community in our neighbourhoods; our access to amenities and green spaces; whether we can secure high quality employment; our access to high quality and warm homes. A number of organisations have a powerful influence on these social determinants.

There is undoubtedly a lot going on to address these social determinants. But the ARCH Wellbeing Programme provides all of us working within the region to consider what more we might do. Just as we might stray from healthy behaviours in our personal lives, we suspect that under the strain of operational pressures, organisations occasionally miss an opportunity to put the promotion of health and wellbeing at the heart of all they do.

It is for this reason that we are delighted to share with you this compendium of the work undertaken for the ARCH 'case for change'. It looks to gain better understanding of the wellness of people living in the ARCH region, using a wider set of indicators than are often used by public services, and demonstrates quite clearly the importance of the relationship between health and wellbeing, and where action should be taken to secure better wellbeing (and, by extension, better health) for our population. In presenting this work, we reaffirm our commitment via the Wellbeing Programme to keep us true to the overall aim of ARCH to transform the health, wealth and wellbeing of the region.

# context

**ARCH (A Regional Collaboration for Health) is a strategic partnership between two University Health Boards - Abertawe Bro Morgannwg (ABM) and Hywel Dda – and Swansea University. Its vision is to transform health, wealth and wellbeing across South West Wales (hereinafter referred to as the 'ARCH region' or 'the region').**

## The ARCH partners are working to *"improve the health, wealth & wellbeing of South West Wales"*

*3 partners*

Swansea University
Prifysgol Abertawe

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Abertawe Bro Morgannwg University Health Board

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

*3 aims*

- ***Creating an NHS fit for the 21st Century***
- ***Encouraging investment & creating new jobs***
- ***Creating the NHS workforce of the future***

## *The ARCH Portfolio brings together four powerful programmes of work*

- **Wellbeing**
- **Service Transformation**
- **Research, Enterprise & Innovation**
- **Skills & Education**

ARCH includes a dedicated Wellbeing Programme, which is focused on place-based approaches to health and wellbeing across the region. Interest in wellbeing is growing and is becoming an increasing focus in health and social policy. But what is wellbeing, and how does it interact with health?

These questions are answered in this abridged compendium of the reports developed as part of the 'Case for Change' exercise commissioned by ARCH to the Public Health Wales Observatory and the Farr Institute of Health Informatics Research (Swansea University's Medical School).

The purpose of the case for change was to establish the relationship between health and wellbeing and how it plays out across the ARCH region. It adopts a uniquely regional view of health and wellbeing in order to identify common issues that would benefit from a regional approach to planning.

The case for change exploits the power of two unique national and regional assets - the Public Health Wales Observatory and the SAIL databank, respectively - the latter to link datasets in a way that can shed new light on the relationships between health and wellbeing. As such, the case for change is clearly differentiated from, yet complementary to, the wellbeing assessments being undertaken by Public Service Boards.
This compendium of its outputs is a strategic landmark in establishing a baseline for action directed at wellbeing through ARCH, and demonstrates the value and productivity of partnership working.


## Who is this report for?

This compendium will be of interest to partners from the health, social care, local government, voluntary and community service sectors; to the Public Services Boards within and outwith the constituent local authorities of the ARCH region; and to members of the public.

## What is the scope of this report?

This compendium is divided into four main sections, as follows:

**Section one answers the questions 'what is wellbeing?' and 'how should wellbeing be measured?', and provides evidence of what works to improve wellbeing;**

**Section two summarises the feasibility of developing a regional understanding of wellbeing, set within an understanding of the availability and quality of current data sources;**

**Section three provides a systematic regional wellbeing and health needs assessment and discusses the implications for ARCH of its key findings;**

**Section four discusses potential future directions for the measurement of regional wellbeing and presents a plan to enhance local data availability and quality.**

## Who has contributed to this report?

Contributors to this compendium are:

The Public Health Wales Observatory, which provides information support to Public Health Wales and other public bodies both within and beyond the NHS;
The Farr Institute of Health Informatics Research at Swansea University's Medical School, which houses the Secure Anonymised Information Linkage (SAIL) databank; and
The ARCH Wellbeing Programme Board, which oversees the work packages of the Wellbeing Programme.

A full list of contributors is found at Appendix 1.

## What does this report aim to achieve?

This compendium summarises the outputs developed for the ARCH case for change which was included in the ARCH Portfolio Delivery Plan (PDP) that was submitted to Welsh Government in February 2017. It aims to achieve a broader dialogue on wellbeing, and to disseminate the findings around health and wellbeing in the ARCH region.

This compendium also provides a useful digest of information to inform ARCH planning processes and the meaningful engagement of partners, patients and the public. The anticipated outcome is that ARCH takes a public-informed and evidence-based approach to project implementation across all of its programmes.

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# defining and measuring wellbeing

We consider wellbeing to be a state of both 'feeling good' (emotional wellbeing) and 'functioning well' (social and psychological wellbeing); also, that wellbeing is both objective and subjective.

Objective indicators of wellbeing include, for example, health status and levels of educational achievement, employment, or income. Indicators like these can be objectively measured over time.

On the other hand, subjective wellbeing concerns people's evaluations, or impressions, of their own lives. This can be measured through self-reporting. Of particular note is the approach adopted by the Office for National Statistics (ONS), which has sought to measure 'personal wellbeing' (a form of subjective wellbeing) with four validated questions that ask people to evaluate the extent to which they:

**1. are satisfied with their life;**
**2. feel that things in their life are worthwhile;**
**3. are happy; and**
**4. are anxious.**

A combination of objective and subjective measures is preferred in order to build a comprehensive understanding of wellbeing, as people may be highly satisfied with a life that appears poor by objective measures (e.g. income).

Wellbeing is complex because it is composed of a range of indicators. The evidence on what works to improve wellbeing suggests that the following indicators are important:

**•Health status and lifestyle behaviours;**
**•Opportunities for life-long learning;**
**•Good quality employment and working conditions;**
**•Neighbourhood and housing conditions;**
**•State of society and the economy;**
**•Social relationships;**
**•Community participation;**
**•Quality parenting;**
**•School-based activities;**
**•Physical activity.**

Linking such a broad range of indicators with more objective measures of health could provide an especially rich picture of the interaction of health and wellbeing. Objective health measures would include:

**•Access to services;**
**•Common morbidities;**
**•Long term conditions;**
**•Mental health;**
**•Patterns of GP and hospital visits;**
**•Uptake of vaccinations, screening and preventive services;**
**•Emergency admissions;**
**•Measures of frailty (weakness, fatigue, weight loss, low physical activity, poor balance, visual impairment, cognitive impairment, etc.).**

* The full report was written by the Farr Institute's National Centre for Population Health and Wellbeing Research (NCPHWR) with input from subject-specific experts, and is available at arch.wales/wellbeing-programme.

## Measuring wellbeing in the ARCH region

Measuring the state of wellbeing and the interaction between health and wellbeing in the region is a key priority for identifying areas of purposeful action under ARCH. The ARCH case for change sought to achieve this using two unique data sources: the Public Health Wales Observatory and the Secure Anonymised Information Linkage (SAIL) databank.

The Public Health Wales Observatory provides demographic, lifestyle and health intelligence to Public Health Wales, the NHS and other public bodies, using information from a variety of clinical and survey sources.

The Secure Anonymised Information Linkage (SAIL) databank links together a wide range of routinely-available, anonymised person-based data. It contains a number of core clinical and survey datasets, which capture many of the health measures and wellbeing indicators listed above.

The power of SAIL lies in its ability to link datasets. As such, it provides a unique oppurtunity to understand how complex factors interact and serve to either enhance or diminish health and wellbeing among people in the ARCH region.

*The full report was written by the Farr Institute's National Centre for Populatiom Health and Wellbeing Centre for Population Health and Wellbeing Research (NCPHWR) with input from subject specific experts, and is available at arch.wales/wellbeing-programme.

# health & wellbeing in ARCH region

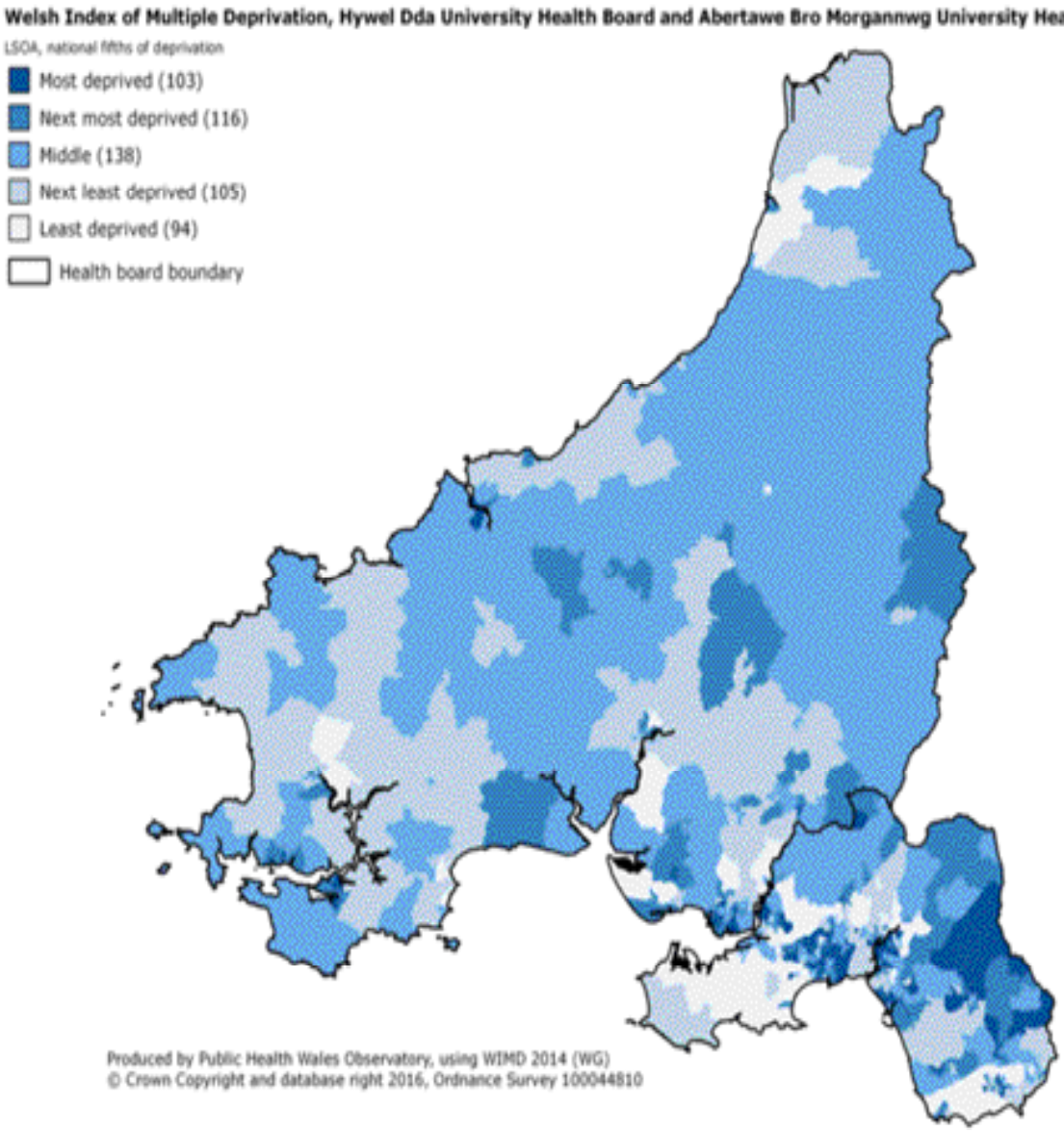
An understanding of health and wellbeing in the region will enable ARCH to respond to what is important to individuals and communities.

## The region is a patchwork of deprivation

Levels of deprivation vary geographically across the ARCH region, as shown in the map (Figure 1).[1]

The highest concentrations of several different types of deprivation (shaded darkest blue) are seen across areas in and around the South Wales valleys, north east Bridgend, and central Swansea, with smaller pockets visible at areas in and around Port Talbot and Llanelli. There are also examples of areas of highest deprivation bordering those of lowest deprivation, as seen, for example, at the borders of central Swansea and Gower.

**Figure 1: Welsh Index of Multiple Deprivation, ARCH region, 2014**




[1] The map is based on the Welsh Index of Multiple Deprivation (WIMD). The WIMD presents levels of relative deprivation at a small area level (or Lower Super Output Area [LSOA] level) and groups them into deprivation fifths (or 'quintiles'), namely: most deprived; next most deprived; middle; next least deprived; and least deprived. Areas are shaded blue, with darker shades corresponding to higher levels of deprivation.

## The population is ageing and will continue to age

Almost 910,000 people live in the ARCH region (Figure 2) – the majority in ABM (57.8%) compared with the more sparsely populated Hywel Dda (42.2%).

Nearly a fifth (19.2%) of the population is aged 75 years and over. Population ageing is more pronounced in Hywel Dda, where life expectancy for both males and females is longer than it is in ABM and Wales.
The age composition of the ARCH population is projected to change markedly over the next 20+ years in both University Health Boards (Figures 3 and 4). Of particular note is continued population ageing across the region, with the largest increase in our oldest population group (aged 75 years and over) which is projected to increase by approximately 65,000 people over the years 2014-2039.

No other age group is projected to increase in count at such an accelerated rate.

The projections show that as the population of ARCH becomes increasingly older, our younger population groups will decrease in number. In particular, there is likely to be:

**•A relative flat-lining of the projected count of our youngest population in the 0-4 and 5-14 year-old age groups, and of 25-44 year-olds;**

**•A steady but gradual decline in the number of 15-24 year-olds; and**

**•A marked decrease – to the count of approximately 30,000 – of our 45-64 year-old population, which will be most stark in Hywel Dda.**

**Figure 2: Percentage of population by age and sex, ARCH and Wales, 2015**

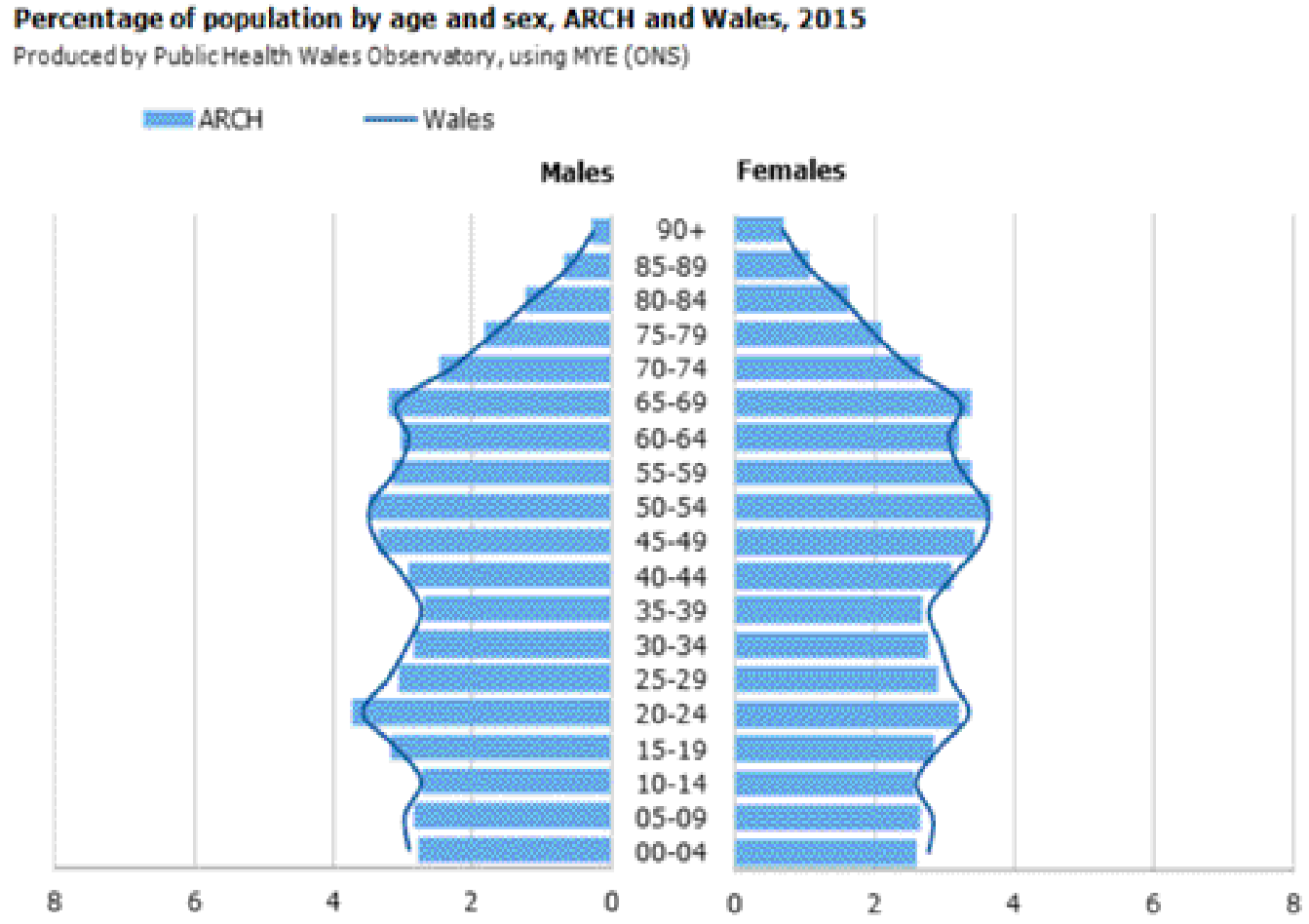


**Figure 3: Projected population, counts by age group, Hywel Dda UHB, 2014-2039**

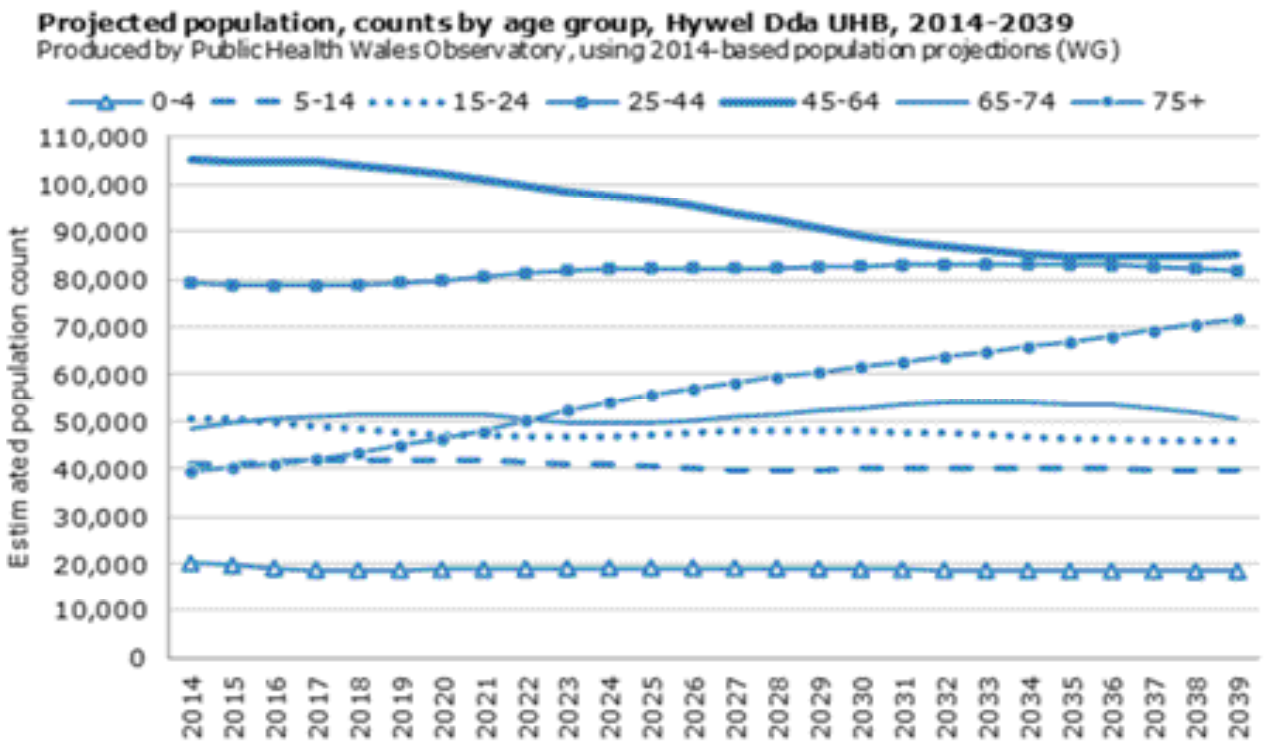
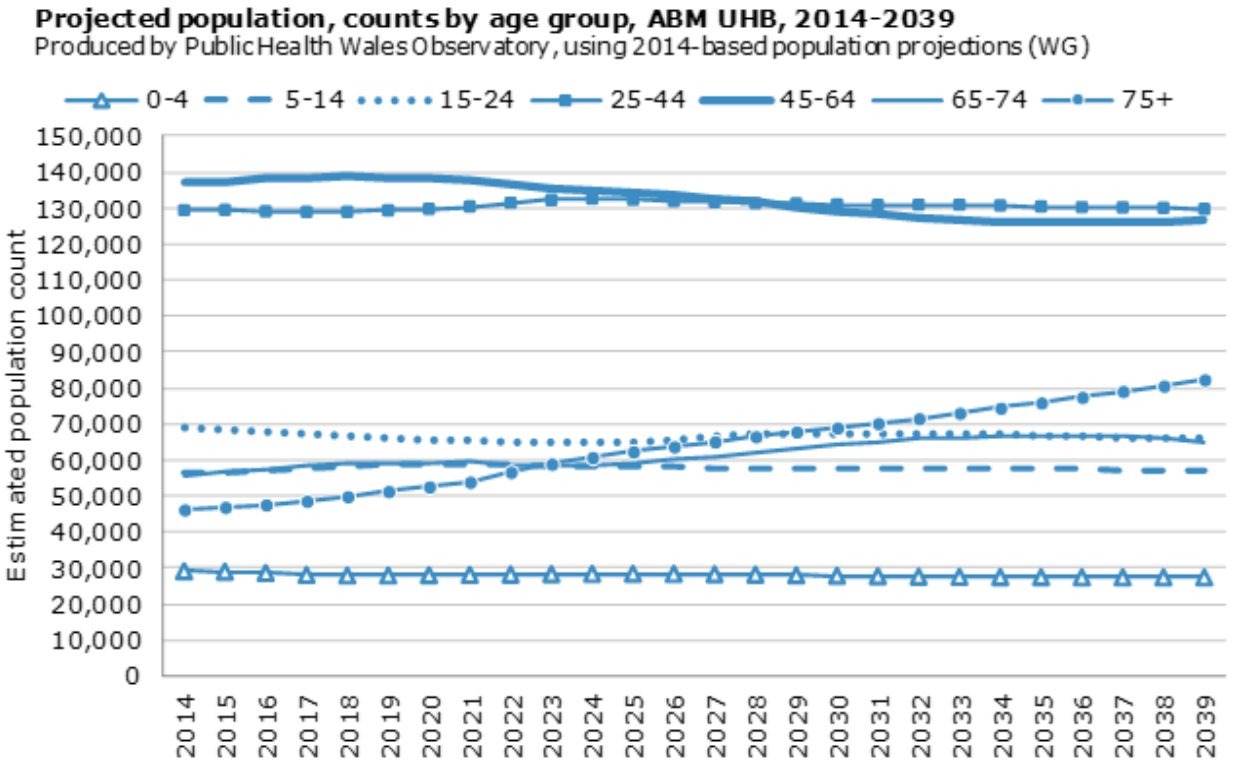



**Figure 4: Projected population, counts by age group, ABM UHB, 2014-2039**



## The population is marked by multi-morbidity

Long-term medical conditions are more likely to occur in older people. Multi-morbidity – or having two or more long-term conditions at any one time – shows a clear age trend in the ARCH region[2]

In the early years of life (0-4 years), the likelihood of being multi-morbid decreases markedly, and then plateaus until mid-adolescence (up to age 14 years). Thereafter, the likelihood of multi-morbidity increases rapidly in line with increasing age (as does the chance of having one medical condition). This increase in multi-morbidity coincides with a decrease of patients without any long-term conditions.

The extent of multi-morbidity (i.e. the growing number of co-existing long-term conditions) also increases alongside age, such that the oldest people in the region (aged 85 years and older) are more likely to have eight or more long-term medical conditions at any one time than they are to have one or two.

These findings are important, because having a limiting long-term illness has a negative impact on wellbeing for people in the ARCH region (Appendix 2).

## Common health and wellbeing challenges operate across the region

Key statistics reveal how ABM and Hywel Dda compare between themselves, and with Wales, on a number of health indicators (Figure 6).

A comparison with national and ABM figures shows that Hywel Dda has marginally higher rates of overweight and obesity in adults, a lower uptake of the MMR vaccine, and a lower rate of emergency hospital admissions. Life expectancy and the percentage of people aged over 75 years in the population is also higher in Hywel Dda than it is in ABM and nationally.

ABM has a slightly higher rate of adults who drink alcohol above guidelines, compared with Wales and Hywel Dda. Both UHBs compare favourably (though only marginally) with national rates with respect to smoking in adults.

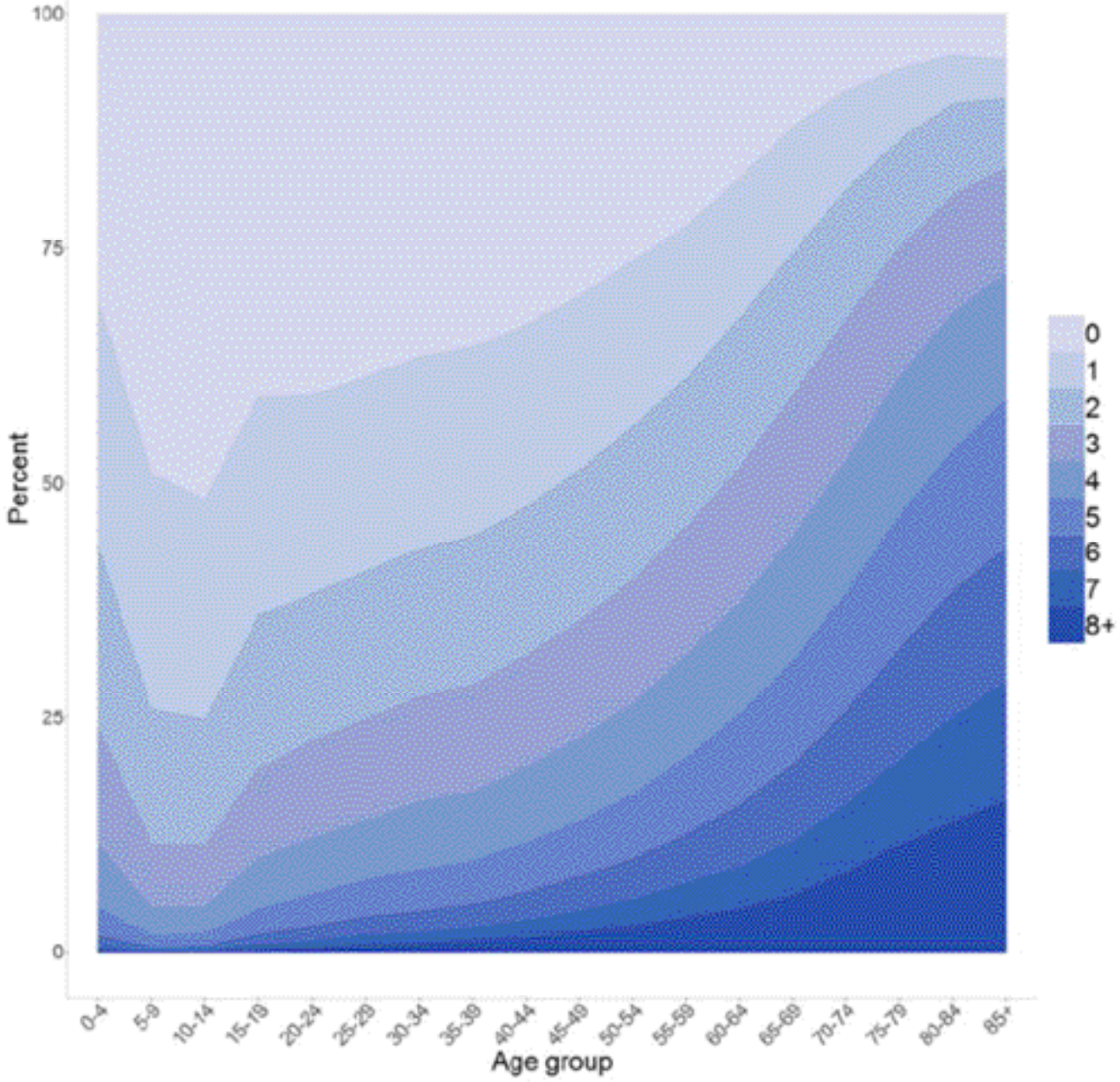
However, given that the percentage differences in many of these key health indicators are only marginal between ABM and Hywel Dda, and are roughly in line with the picture nationally, suggests strongly that there are common health and wellbeing challenges operating across the ARCH region.

***"In the ARCH region, the oldest people (aged 85 years and older) are more likely to have eight or more long-term medical conditions at any one time than they are to have one or two."***



[2] Not all long-term conditions were included in this analysis, so the findings may be underestimated.

**Figure 5: Number of GP-recorded morbidities by age group for ARCH residents, 2015.Produced by the Prudent Healthcare Intelligence Hub (Farr Institute, Swansea University), GP Read code data, 2015**




## Social, health and lifestyle factors are linked with wellbeing

A variety of social, health and lifestyle factors can have a major impact on a person's wellbeing. In the ARCH region, a number of factors have been linked with wellbeing (Appendix 2). Those factors that diminish wellbeing include:

**•Having a limiting long-term illness (LLTI);**
**•Being unable to work due to sickness;**
**•Alcohol consumption; and**
**•Smoking.**

**Those factors that serve to enhance wellbeing include:**
**•Being retired;**
**•Viewing yourself as being healthy or in good health; and**
**•Eating fruits and vegetables.**

There is also a positive impact on wellbeing of quitting smoking.

**Figure 6: Key statistics – Wales, Hywel Dda UHB, ABM UHB**

| Key statistics | Wales | Hywel Dda | ABM |
|---|---|---|---|
| Total population[1] | 3,099,100 | 383,200 | 525,500 |
| Population aged 75 and over (%)[1] | 9.0 | 10.4 | 8.8 |
| Life expectancy at birth - males (years)[2] | 78.3 years | 79.2 years | 77.4 years |
| Life expectancy at birth - females (years)[2] | 82.3 years | 82.9 years | 81.7 years |
| Adults who are overwight or obese (%)[3] | 58.6 | 59.8 | 58.0 |
| Adults who smoke (%)[3] | 20.0 | 18.0 | 18.7 |
| Adults who drink above guidelines (%)[3] | 40.1 | 38.1 | 41.3 |
| MMR uptake (%)[3] | 95.3 | 93.6 | 95.1 |
| Live births per 1,000 women aged 15-44[1] | 59.1 | 56.8 | 56.9 |
| Emergency hospital admissions[4] (European age standardised rate per 1,000 population) | 112.4 | 105.3 | 112.8 |

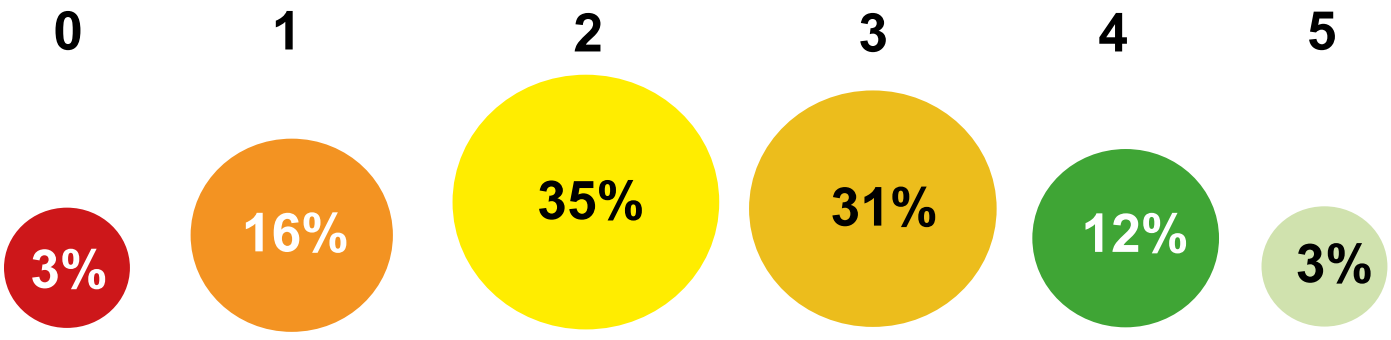
Produced by Public Health Wales Observatory, using MYE, PHM & PHB (ONS), WHS (WG), COVER annual report (PHW) & PEDW (NWIS)
[1]2014,[2]2010-2014,[3]2014-2015,[4]Financial year 2014-2015

## Full adherence to healthy lifestyles is rare

A look at the health-related lifestyle behaviours of a given population can provide an informative lens on its state of health and wellbeing. The role of five particular health-related indicators are well-documented, namely: cigarette smoking; alcohol consumption; diet; physical activity; and overweight or obesity.

Across the ARCH region, most people (35%) report having only two (of five) healthy lifestyle behaviours (Figure 7). Only a very small proportion (3%)[3] report having all five behaviours, matched by the same proportion which reports having none of the healthy lifestyle behaviours at all (3%). These figures compare unfavourably with those for Wales overall, which show that the largest proportion (32%) report having three (not two) healthy behaviours, and that a marginally higher proportion report having all five (5%) (Dixon, J. 2016).

**Figure 7: Healthy lifestyle behaviours*, percentages, persons aged 16 and over, Hywel Dda UHB and ABM UHB combined, 2014-15**




*Produced by Public Health Wales Observatory, using WHS (WG)*

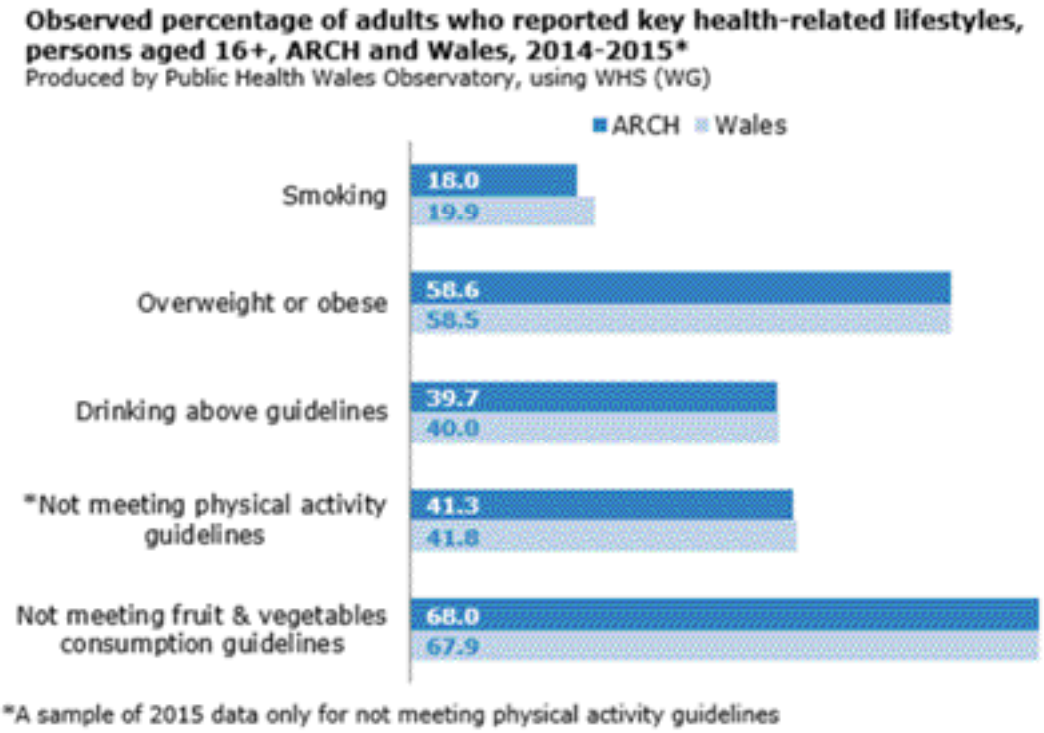
*Not smoking, not drinking above guidelines, eating 5 or more portions of fruit and vegetables a day, healthy weight, physically active on 5+days (undertaking at least 30 minutes of moderate or vigorous intensity physical activity on 5 or more days per week)



[3] The Welsh Health Survey was analysed to build a picture of adherence to public health guidance, namely: not smoking; not drinking above guidelines; eating 5 or more portions of fruits and vegetables per day; minimum 30 minutes on at least 5 days per week of moderate or vigorous intensity physical activity; and being a healthy weight. Readers are cautioned to consider the limitations of self-report surveys.

The most commonly achieved guideline by ARCH residents is abstinence from smoking (fewer than 2 out of 10 people self-report smoking); the least commonly achieved guideline is consumption of the recommended five fruits and vegetables per day (nearly 7 out of 10 people self-report not eating their five-a-day) (Figure 8). The percentages of the ARCH population who self-report key health-related lifestyles are largely similar to the figures for Wales, and underscore that national public health challenges also operate regionally.

**Figure 8: Observed percentage of adults who reported key health-related lifestyles, persons aged 16 and over, ARCH and Wales, 2014-15***




***"Across the ARCH region, most people (35%) report having only two (of five) healthy lifestyle behaviours."***

## Adherence to healthy lifestyles differs geographically

Adherence to public health guidelines differs between ABM and Hywel Dda and at a Local Authority level (Figure 9).

ABM lags behind both Hywel Dda and Wales in terms of daily consumption of five fruits and vegetables, physical activity that meets current guidelines (more than 150 minutes/day), drinking alcohol above guidelines, and binge drinking.

Important differences are also discernible at a Local Authority level. So, for example, looking at alcohol consumption in ABM

in further detail, highest rates of drinking above guidelines and of binge drinking are reported in Swansea. Also, while Hywel Dda performs better than the Wales average for physical activity, people in Carmarthenshire are less likely than their Hywel Dda counterparts in Ceredigion and Pembrokeshire - and in Hywel Dda overall - to be physically active.

## Area deprivation impacts health and health-related lifestyles

Data at a cluster network level[4] demonstrate clearly the link between deprivation and health status operating at a smaller area level; for example, the most deprived cluster networks (Afan, Bridgend North, City Health and Penderri) have the highest rates of smoking and the lowest rates of fruit and vegetable consumption (Appendix 3).

A number of ARCH cluster networks appear consistently in the bottom fifth (20%) of clusters in Wales, across a number of social, lifestyle and chronic condition indicators. The Afan and the Bridgend North cluster networks are two which appear most frequently in the bottom fifth; for example, for smoking and for overweight or obesity. Perhaps not unsurprisingly, both clusters are the only two within the region that also feature in the bottom fifth of clusters in Wales for deprivation.

**Figure 9: Observed percentage of adults who reported key health-related lifestyles, persons aged 16 and over, Hywel Dda UHB and ABM UHB and local authorities, 2014-15**

**Observed percentage of adults who reported key health-related lifestyles, persons aged 16+, Hywel Dda UHB and Abertawe Bro Morgannwg UHB and local authorities, 2014 - 2015**

| | | Hywel Dda | | | | | | Neath Port | |
|---|---|---|---|---|---|---|---|---|---|
| | Wales | UHB | Ceredigion | Pembrokeshire | Carmarthenshire | ABM UHB | Swansea | Talbot | Bridgend |
| Smoker | 19.9 | 17.1 | 15.2 | 15.5 | 18.9 | 18.7 | 17.7 | 20.7 | 18.2 |
| Drinking above guidelines | 40.0 | 37.5 | 37.5 | 36.2 | 38.3 | 41.3 | 45.8 | 36.3 | 38.6 |
| Binge drinking | 24.2 | 20.5 | 21.0 | 18.7 | 21.5 | 26.7 | 30.1 | 22.9 | 24.9 |
| Consumption of fruit and vegetables meets guidelines | 32.1 | 35.8 | 38.2 | 35.9 | 34.8 | 29.1 | 29.7 | 27.0 | 30.2 |
| Active for more than 150 minutes | 58.2 | 60.5 | 64.7 | 63.4 | 56.7 | 57.3 | 61.3 | 55.5 | 52.5 |
| Active for less than 30 minutes | 30.2 | 28.8 | 21.0 | 28.0 | 32.8 | 32.1 | 28.9 | 35.3 | 34.1 |
| Overweight or obese | 58.5 | 60.1 | 53.8 | 62.6 | 61.1 | 57.4 | 54.3 | 61.6 | 58.8 |
| Obese | 22.8 | 22.2 | 18.1 | 23.5 | 23.1 | 23.1 | 21.5 | 25.9 | 22.9 |

Produced by Public Health Wales Observatory, using WHS (WG)

However, deprivation does not always impact health and health-related lifestyles in expected directions. For example, levels of drinking above guidelines are highest in the least deprived ARCH cluster network (North Ceredigion), placing the cluster among the worst fifth of clusters in Wales for alcohol consumption.

Also, levels of adverse mental health[5] do not map directly to deprivation. While highest rates of adverse mental health are found in the most deprived ARCH cluster network (Afan), we also see that rates in the second most deprived cluster (Bridgend North) position it in line with some of the least deprived cluster networks (including ARCH's second least deprived cluster, Bay Health).

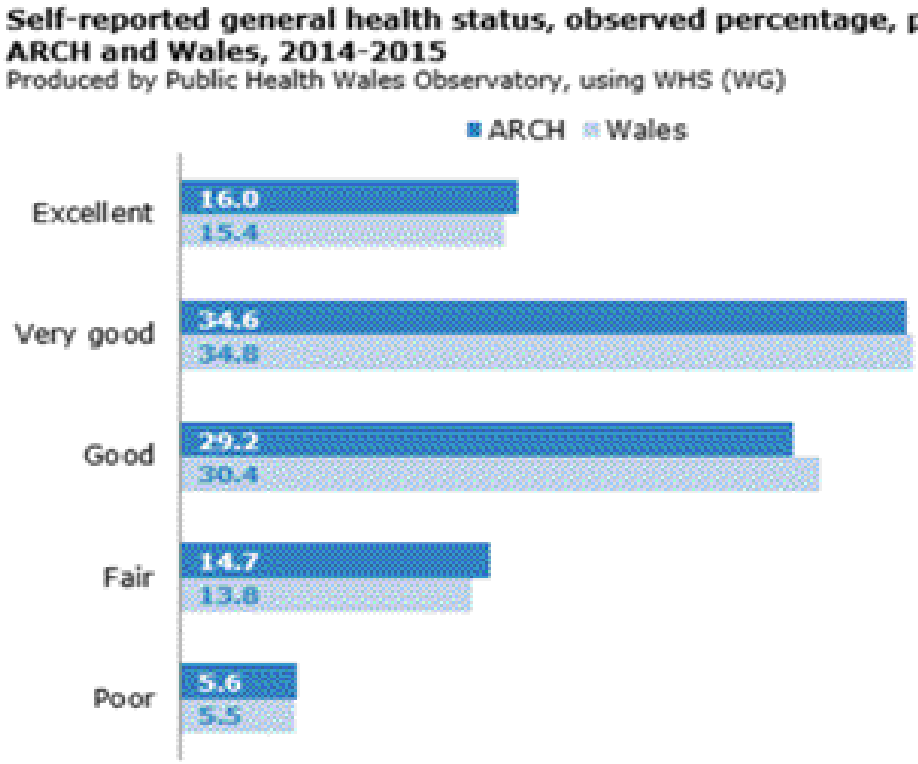
## A fifth of the population rates their health as 'poor' or only 'fair'

Self-reported health is an important predictor of mortality and wellbeing. For ARCH residents, the indicator that has the largest positive impact on wellbeing is having a positive perception of one's own health (Appendix 2).

Thee percentage of people in ARCH self-rating their health as either 'Excellent', 'Very good', 'Good', 'Fair', or 'Poor' is broadly similar to the pattern observed nationally (Figure 10). However, approximately a fifth of people (29.2%) in the region report having 'poor' or only 'fair' health, which is marginally higher than the Wales average (19.3%), and suggests that a sizeable proportion of the population might have corresponding lower levels of wellbeing.

*The assessment of regional health and wellbeing was performed jointly by the Public Health Wales Observatory and the Farr Institute's Prudent Healthcare Intelligence Hub, and is available at [link 3]

**Figure 10: Self-reported general health status, observed percentages' persons aged 16, ARCH and Wales, 2014-15**




[4]A cluster network is a grouping of GPs working with other health and care professionals to plan and provide services locally. Cluster network indicators provide data on social, lifestyle and health indicators among Welsh residents registered with GP practices in Wales. There are 64 cluster networks across Wales, serving populations between 30,000-50,000 patients. There are 18 cluster networks in the ARCH region: 11 in ABM UHB and 7 in Hywel Dda UHB. 4 64 cluster networks across Wales, serving populations between 30,000-50,000 patients. There are 18 cluster networks in the ARCH region: 11 in ABM UHB and 7 in Hywel Dda UHB.

[5]Schizophrenia, bipolar affective disorders and other psychoses, as recorded on the general practice mental health register.

# enhancing the measurement of regional wellbeing

The data presented above provide a useful snapshot of the state of wellbeing, and its interaction with health, in the ARCH region. The data can be used as a baseline with which to measure population changes and to assess the impacts of ARCH-related project activities over time.

However, at present there are limitations in the availability and quality of data for this purpose. These include variability in data recording practices in clinical datasets, and the relatively small number of people living in the ARCH region who respond to Wales-wide surveys which limits the power of their findings.

Extended data capture is therefore recommended in order to develop a more comprehensive understanding of

the interaction between health and wellbeing. This might include boosting the number of people living in the region who complete national surveys, or creating a new survey customised to the information requirements of ARCH.

* The full report was written by the Farr Institute's National Centre for Population Health and Wellbeing Research (NCPHWR), and is available at arch.wales/wellbeing-programme.

# key messages and implications

## Key messages

The key messages arising from the case for change are as follows:

- **Wellbeing is about ' feeling good' and 'functioning well'. It is about external (objective) aspects of our lives, such as our health and our work status; it is also about our internal (subjective) views of our lives;**

- **A comprehensive set of factors is needed to build a full picture of the state of wellbeing;**

- **There are pockets of multiple deprivation across the region, some of which neighbour our least deprived areas. The negative impact of deprivation on health and health-related lifestyles is seen across the ARCH region, but it doesn't always exert its influence in expected directions (e.g. as seen with mental health and alcohol consumption in some cluster networks);**

- **The region is ageing and will continue to age over time, and the l ikelihood of having two or more co-existing long-term medical conditions increases with increasing age;**

- **Self-reported adherence to public health guidance is low in the ARCH region, though roughly in line with the pattern observed nationally. Abstinence from smoking is the most commonly-achieved guideline (as it is in Wales);**

- **A fifth of people in the region report having 'poor' or only 'fair' health.**

These key findings underline why ARCH moves away from a 'one-size-fits-all' approach and toward locally-tailored solutions that support local innovation and are compatible with local states of health and wellbeing.

## Implications

The implications arising from the findings of this case for change are as follows:

- **The Wellbeing Programme will target activities at improving how people feel about themselves and their lives, and at enhancing their abilities to function well in society. Health improvement will play a key part;**

- **The Wellbeing Programme, and ARCH more broadly, will continue to nurture productive partnership working with key stakeholders to build a robust method of measuring regional health and wellbeing over time;**

- **The Wellbeing Programme will implement place-based approaches to health and wellbeing in ways that address area-based deprivation. An understanding of community resilience should be a crucial element of this work;**

- **The Wellbeing Programme will address the impact on healthcare demand from an ageing and multi-morbid population, by implementing project activity aligned with prevention and early intervention. An understanding of the factors that underline adherence to public health guidelines and perceptions of health and wellbeing should form a key part of this work.**

# references

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## Further information

Public Health Wales Observatory: http://www.publichealthwalesobservatory.wales.nhs.uk

SAIL: https://saildatabank.com/

## Appendix 1: Contributors to the ARCH case for change

Contributors to the ARCH case for change are as follows, in alphabetical order and with the authors of this compendium in bold print:

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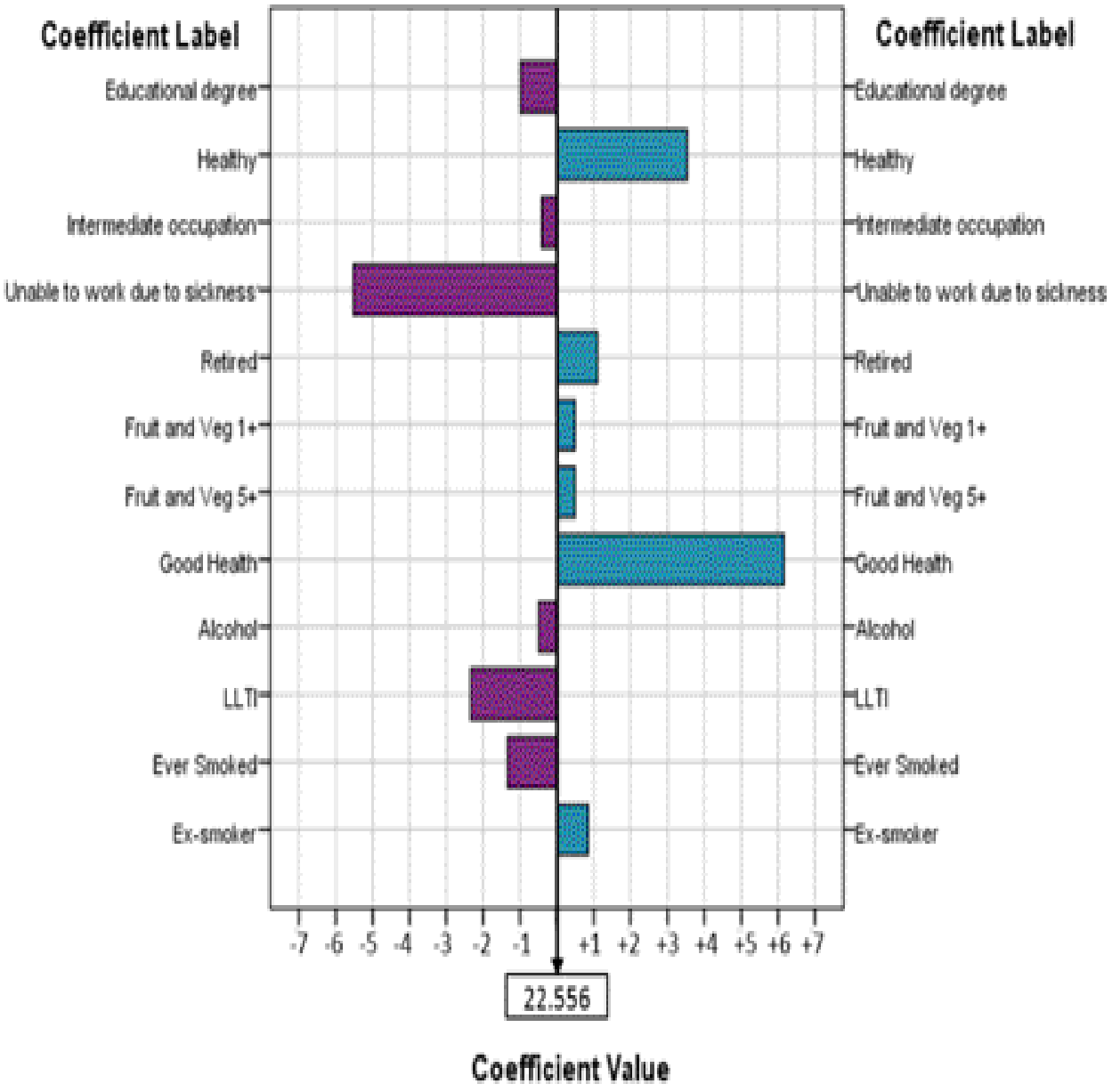
## Appendix 2: Factors associated with wellbeing

The research underpinning this case for change established that there are a number of factors that can impact people's wellbeing, either in a positive or a negative way. In the graph, the factors with a negative impact on wellbeing are coloured purple (on the left of the graph) and the factors with a positive impact on wellbeing are coloured blue (on the right of the graph). The findings show that perceiving oneself as 'healthy' or in 'good health' has the largest positive impact on wellbeing; being unable to work due to sickness has the largest negative impact on wellbeing.



# Appendix 3: ARCH cluster network data

**GP Clusters indicators, crude percentages, Hywel Dda UHB and Abertawe Bro Morgannwg UHB, 2014-15**

| | Afan | Bay Health | Bridgend East Network | Bridgend North Network | Bridgend West Network | City Health | Cwmtawe | Llwchwr | Neath | Penderi | Upper Valleys | Amman/Gwendraeth | Llanelli | North Ceredigion | North Pembrokeshire | South Ceredigion | South Pembrokeshire | Taf / Teifi / Tywi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alcohol | 25.8 | 27.0 | 27.4 | 26.4 | 25.5 | 27.5 | 26.7 | 26.6 | 26.1 | 26.4 | 25.9 | 25.5 | 25.7 | 27.7 | 25.3 | 24.7 | 25.0 | 25.3 |
| Asthma | 7.7 | 6.5 | 7.2 | 8.1 | 8.0 | 7.2 | 6.7 | 8.0 | 7.8 | 6.8 | 7.3 | 7.5 | 7.4 | 6.1 | 5.9 | 6.6 | 7.1 | 6.6 |
| Care home population | 2.7 | 4.2 | 2.3 | 0.7 | 4.9 | 4.3 | 3.9 | 3.8 | 4.5 | 3.5 | 4.6 | 3.9 | 4.8 | 3.8 | 3.4 | 3.0 | 5.1 | 4.3 |
| Coronary Heart disease | 4.2 | 3.2 | 3.7 | 4.6 | 5.0 | 3.6 | 3.7 | 3.7 | 3.9 | 3.7 | 4.3 | 4.8 | 4.5 | 3.4 | 3.8 | 4.2 | 4.2 | 4.1 |
| Chronic Obstructive Pulmonary Disease | 2.6 | 1.3 | 2.0 | 3.1 | 2.4 | 2.5 | 1.8 | 1.7 | 2.2 | 2.4 | 2.7 | 2.6 | 2.1 | 1.7 | 2.8 | 2.1 | 2.2 | 1.7 |
| Deprivation | 74.3 | 15.1 | 24.7 | 65.8 | 54.5 | 61.2 | 43.7 | 25.1 | 46.2 | 57.5 | 49.0 | 43.1 | 49.5 | 7.1 | 27.7 | 18.7 | 28.5 | 16.5 |
| Diabetes | 8.9 | 5.0 | 7.2 | 8.5 | 7.5 | 7.1 | 7.6 | 6.9 | 7.6 | 7.7 | 8.0 | 8.2 | 8.0 | 5.8 | 7.1 | 7.1 | 7.4 | 7.2 |
| Epilepsy | 1.1 | 0.6 | 0.8 | 1.1 | 0.9 | 0.9 | 1.1 | 0.9 | 1.1 | 1.1 | 0.9 | 1.0 | 1.0 | 0.8 | 0.9 | 0.8 | 0.9 | 0.9 |
| Fruit and Vegetable Consumption | 30.4 | 34.3 | 33.9 | 30.9 | 32.8 | 30.9 | 32.5 | 34.0 | 32.5 | 31.1 | 32.6 | 33.0 | 32.1 | 33.7 | 33.7 | 33.9 | 33.8 | 34.2 |
| Heart Failure | 0.9 | 0.9 | 0.9 | 1.2 | 1.5 | 0.9 | 1.1 | 1.1 | 0.9 | 1.0 | 1.2 | 1.0 | 0.9 | 1.5 | 1.0 | 1.0 | 0.9 | 1.1 |
| Hypertension | 17.1 | 12.0 | 14.9 | 17.5 | 17.3 | 12.9 | 14.2 | 15.1 | 16.0 | 14.0 | 17.6 | 15.9 | 15.4 | 14.6 | 16.7 | 17.9 | 17.3 | 16.2 |
| Mental health | 1.4 | 0.9 | 0.8 | 0.9 | 1.2 | 1.3 | 0.9 | 0.8 | 0.9 | 1.0 | 1.1 | 0.7 | 0.8 | 0.7 | 0.9 | 0.8 | 0.9 | 1.0 |
| Older people living alone | 33.5 | 32.6 | 29.7 | 32.1 | 32.6 | 38.8 | 30.7 | 31.4 | 32.7 | 35.2 | 33.1 | 31.6 | 33.8 | 32.3 | 31.9 | 29.9 | 30.3 | 30.2 |
| Overcrowding | 42.2 | 33.7 | 23.0 | 32.0 | 35.3 | 78.8 | 46.5 | 14.9 | 45.3 | 72.5 | 29.7 | 5.7 | 46.2 | 37.0 | 19.0 | 20.7 | 35.4 | 17.0 |
| Overweight or obese | 60.3 | 53.1 | 56.7 | 60.4 | 58.7 | 59.1 | 58.3 | 57.0 | 58.7 | 59.4 | 59.4 | 59.4 | 59.3 | 52.4 | 58.9 | 59.4 | 59.0 | 58.5 |
| Physical activity | 28.2 | 29.0 | 29.4 | 29.1 | 28.4 | 30.1 | 29.0 | 29.2 | 28.5 | 29.1 | 29.7 | 29.1 | 29.0 | 30.9 | 29.4 | 29.4 | 29.0 | 29.5 |
| Rural isolation | 5.8 | 6.5 | 4.6 | 6.8 | 6.9 | 0.3 | 2.8 | 10.7 | 0.3 | 0.3 | 11.8 | 27.8 | 1.6 | 54.2 | 38.5 | 74.2 | 37.3 | 59.0 |
| Smoking | 23.8 | 13.1 | 18.5 | 24.5 | 21.8 | 28.8 | 19.8 | 16.9 | 20.3 | 25.2 | 21.2 | 19.3 | 20.7 | 16.8 | 20.3 | 18.6 | 19.4 | 16.8 |
| Unemployment | 8.5 | 5.3 | 5.9 | 8.6 | 7.6 | 9.5 | 5.8 | 4.9 | 6.6 | 8.8 | 7.3 | 6.2 | 7.7 | 4.4 | 6.6 | 5.0 | 6.4 | 4.5 |
| Welsh language | 9.2 | 9.6 | 10.4 | 10.1 | 9.1 | 8.4 | 14.6 | 18.7 | 10.8 | 8.3 | 26.6 | 56.5 | 28.8 | 43.8 | 21.5 | 52.4 | 13.6 | 45.3 |

Produced by Public Health Wales Observatory, using Audit + (NWIS), WDS 2014 (NWIS), Census 2011 (ONS), Rural-Urban Classification 2011 (ONS), QOF 2013/14 (WG), WHS (WG) & WIMD 2014 (WG)

ranked in the worst 20% of clusters in Wales

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