Chief Medical Officer for Wales
Annual Report 2013-14
Healthier, Happier, Fairer
Acknowledgements

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Letter to the First Minister

In my second Annual Report I look back at significant events, newly available information, progress in the last year and set out areas for further action.

Last year’s report looked at Wales in terms of health, happiness and fairness. I made recommendations that would help to improve our achievements in these three areas. In the final chapter of this report I describe where progress has been made in some areas more rapidly than others.

Turning to this year, I highlight specific areas in relation to prevention and quality care. It is important that we focus on ‘preventing the preventable’; improving the safety of our services; and on clarifying the collective expectations of individuals and the health system.

I welcome the increased interest this year in primary and community services. These services are the foundation of an effective and efficient health system and I describe the major role they play in meeting the needs of our population. I also emphasise that these services will need to be further developed in order to respond to the opportunities and challenges ahead. There is a role for e-health to be expanded and also a need to ensure we make progress in reducing health inequalities, all set in the context of a system that supports a personal and trusting relationship between clinicians and their patients, something which is at the heart of what is described as a prudent health care system.

This year saw a consultation on the Public Health White Paper. It aims to take practical steps on specific public health risks. It sits alongside the Wellbeing and Future Generations Bill which provides a mechanism to influence decisions across all policy areas in support of better health and wellbeing. It is vital that we tackle the root causes of poor health and these pioneering legislative developments will help do that.

Specific areas of concern remain, particularly the continued harm from tobacco. Despite encouraging signs of smoking rates decreasing to 21 per cent, the pattern of smoking remains strongly skewed towards the more disadvantaged communities.

The rapid rise in use of e-cigarettes has been debated and I welcome the Faculty of Public Health statement on the issue which advises a cautionary approach to their promotion. Alcohol harm continues to feature as an area for action and I fully endorse minimum unit pricing.

Another aspect of our lifestyle that has drawn more attention of late is the strongly positive benefit of physical activity on our mental and physical health. Increasingly, it is clear that we should promote increased physical activity in all aspects of our lives.

Finally, obesity and poor nutrition have featured in the press in relation to affordability of food and growth in food banks, as well as the Standing Advisory Committee on Nutrition’s draft recommendations on sugar consumption. We must consider how to create the conditions where healthy diets are affordable and available. This may require action on policies outside current Welsh Government powers including taxation and food policy – this is an urgent area for action.

Last year I ended the report with three main conclusions – on the need to focus relentlessly on prevention, quality of health care and to bring closer together our efforts to reduce poor health and poverty. Those aims remain at the forefront of my advice this year.

Dr Ruth Hussey OBE,
Chief Medical Officer, Wales
List of Figures

**Figure 1:** Adults who reported being treated for selected illnesses, or having certain conditions 7

**Figure 2:** Life expectancy at birth in Wales, 1991-93 to 2010-12 8

**Figure 3:** Life expectancy gap between most and least deprived fifth of areas in Wales 8

**Figure 4:** Healthy life expectancy at birth, with inequality gap, Wales, 2005-09 and 2008-12 10

**Figure 5:** Hierarchy of needs for wellbeing 11

**Figure 6:** Mortality rates by cause in Wales — all ages 13

**Figure 7:** Mortality rates by cause in Wales — under 75 years 13

**Figure 8:** Avoidable, amenable & preventable mortality in Wales, 2001-2012 16

**Figure 9:** All avoidable deaths, North East, North West England and Wales, 2001-12 16

**Figure 10:** Avoidable mortality, European age-standardised rate per 100,000, by deprivation fifth (WIMD 2011), Wales, 2008-10 17

**Figure 11:** Avoidable deaths (number), by leading detailed causes, 2001-2012, Wales 17

**Figure 12:** Cardiovascular disease: secondary prevention (CHD08) 22

**Figure 13:** The health literacy umbrella 23

**Figure 14:** Multiple factors influencing primary care supply and demand 27

**Figure 15:** Recorded and adjusted recorded burden of disease in Amman/Gwendraeth GP cluster showing other GP clusters in Hywel Dda HB and Wales for comparison, 2012 29

**Figure 16:** Preventable mortality, European age-standardised rate per 100,000, by deprivation fifth (WIMD 2011), Wales, 2008-10 32

**Figure 17:** UK Immunisation Coverage Rates 35

**Figure 18:** Proportion of resident children who are up to date with immunisations 36

**Figure 19:** Influenza immunisation uptake coverage per season 37

**Figure 20:** NHS Staff in Wales, Seasonal Influenza – Immunisation Coverage Rates 38

**Figure 21:** Number of Cases and Rate of TB per 100,000 population in Wales, 2003-12 39

**Figure 22:** Number of healthy behaviours reported by adults, 2009 and 2010 43

**Figure 23:** Mean D3MFT and prevalence of decay experience for twelve-year-olds in Wales 1988/89 to 2012-13 48

**Figure 24:** Adult Smoking in Wales, 2003/04 to 2013 49

**Figure 25:** Amenable mortality, European age-standardised rate per 100,000, by deprivation fifth (WIMD 2011), Wales, 2008-10 53

**Figure 26:** My Local Health Service 54
# Contents

## Chapter 1: Health, happiness and fairness 6

- The basics 6
- Healthy life expectancy: the inequality gap 9
- Patterns of wellbeing 10
- Patterns of mortality 12
- Mortality 12
- Avoidable mortality 12
- Avoidable, preventable and amenable mortality in Wales 16
- Recommendations 18

## Chapter 2: Primary and community services 19

- The essential foundation for health care 19
- The challenge of everyday activity 20
- Ensuring high quality and improvement in standards 21
- Working better with the public 22
- Maintaining and improving access 23
- Managing complexity through coordination 25
- Ensuring workforce sufficiency and sustainability Future 26
- Shared responsibility 28
- Improved team work 28
- Recommendations 29

## Chapter 3: Avoiding harm through preventing the preventable 32

- Socioeconomic conditions 32
- Environmental Interventions Health 33
- Air quality in Wales 33
- Carbon monoxide (CO) in Wales 33
- Noise Exposure 34
- Climate Change 34
- Preventing Communicable Diseases 35
- Vaccination in Wales 2013 35
- The 2012-13 Measles Outbreak 36
- Whooping cough 37
- Seasonal influenza immunisation 37
- Antimicrobial Resistance 38
- Tuberculosis (TB) 38
- HPV and Oropharyngeal Cancer 39
- Meningitis 40
- Meningococcal B vaccine 41
- Recommendations 41

## Chapter 4: Promoting healthy behaviours to prevent the preventable 43

- Physical activity 45
- Nutrition 46
- Improving child dental health behaviour 47
- Smoking 49
- Alcohol 51
- Recommendations 52

## Chapter 5: Avoiding harm through high quality and safer health care 53

- Improving quality 53
- Transparency 54
- Deaths in hospital – is it useful to count them? 55
- Action on avoidable deaths 55
- Cancer 56
- Heart disease 57
- Improving access to care 57
- Prudent health care 58
- Recommendations 59

## Appendix: Looking back and looking forward 62

- Making Wales healthier, happier and fairer 62
- Protecting the nation’s health 62
- Achieving health and happiness through prevention 63
- Creating safe and resilient 21st century health care services 63
- Acting on the relationship between health and wealth 63
In terms of fairness, the health gap between the most and least advantaged groups is still a cause for concern, though progress has been made. There remain important challenges as an analysis of the pattern of deaths in Wales shows.

**The basics**

In last year’s report I provided an overview of three interlinked elements of people’s wellbeing – health, happiness and fairness. There have been further developments in the overall picture:

- the population of Wales continues to grow and live longer – in 2013, there were around 3.1 million people in Wales¹, and this is projected to increase to around 3.3 million by 2037².
- the population is ageing – there are now more older people than children in Wales (with 18 per cent of the population aged under 16 and 19 per cent aged 65 and over³) and this will continue, with the number of people aged 65 and over projected to increase by 50 per cent between 2012 and 2037 and the number aged 85 and projected to more than double⁴.
- overall, life expectancy continues to rise, to 78.2 for men in 2010-12 and 82.2 for females, representing a reduction in the gap between men and women (Figure 2)⁵.
- most adults report good general health (80 per cent in 2013)⁶. A third of adults also reported that their daily activities were limited by a long-lasting health problem or disability⁷, suggesting that though people may be limited in some way, they may nevertheless still regard themselves as being in good health.
• harmful health behaviours remain common (see Table 1 on page 9), though smoking is reducing, with a decrease in adult smoking to 21 per cent\textsuperscript{8}.

• chronic conditions are becoming increasingly more common, partly linked to ageing, with about half of adults reported currently being treated for a condition such as high blood pressure (20 per cent), respiratory illness (14 per cent), arthritis (12 per cent), mental illness (12 per cent), heart condition (8 per cent), or diabetes (7 per cent) (Figure 1), with about a quarter being treated for more than one illness\textsuperscript{9}.

• deaths remain at a similar level though the gap between men and women is closing as male rates have dropped more quickly. There were 31,502 deaths in 2012, with about two thirds of these in people aged 75 and over\textsuperscript{10}.

However, inequalities remain:

• life expectancy for those living in the most deprived areas is lower than for those in the least deprived areas; although the gap between the most and least deprived fifth of areas was higher in 2010-12 than in 2001-03, there are positive signs that it has been stabilising recently: the gap has been stable or decreasing for males since around 2005-07, and for females since around 2007-09 (Figure 3).

• adults living in more disadvantaged areas were less likely to report good health and more likely to report being limited in their activities.

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* With the exception of limitation in daily activities, the figures show the percentage of adults who report currently being treated


Source: Welsh Government

Figure 1: Adults who reported being treated for selected illnesses, or having certain conditions*

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Figure 2: Life expectancy at birth in Wales, 1991-93 to 2010-12

Source: Uses revised pop ests, and estimated allocation to WIMD quintiles following change to LSOA boundaries based on data extracted 11/12/2013

Figure 3: Life expectancy gap between most and least deprived fifth of areas* in Wales

Source: Welsh Government using data from ONS

*based on WIMD scores
Table 1: Adults’ health risk behaviours, 2013

<table>
<thead>
<tr>
<th>%</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>21%</td>
<td>Smoked</td>
</tr>
<tr>
<td>42%</td>
<td>Drank above daily guidelines the previous week</td>
</tr>
<tr>
<td>26%</td>
<td>Binge drank (twice daily guidelines) the previous week</td>
</tr>
<tr>
<td>67%</td>
<td>Ate fewer than five portions fruit and vegetables the previous day</td>
</tr>
<tr>
<td>71%</td>
<td>Physically active fewer than five days the previous week</td>
</tr>
<tr>
<td>34%</td>
<td>Not physically active any day the previous week</td>
</tr>
<tr>
<td>58%</td>
<td>Overweight or obese</td>
</tr>
<tr>
<td>22%</td>
<td>Obese</td>
</tr>
</tbody>
</table>

Some new information has become available on healthy life expectancy and on wellbeing.

Healthy life expectancy: the inequality gap

While longer life may be welcome, it is important that it is spent in good health.

Healthy life expectancy (HLE) at birth represents the number of years a person can expect to live in good health. If the population is grouped into fifths (or quintiles) in terms of increasing levels of deprivation, there are significant gaps in HLE between each fifth, with the less deprived areas doing much better.

The figure 4 indicates the change in the inequality gap between the periods 2005-09 and 2008-12. It measures the inequality gap in HLE using the Slope Index of Inequality (SII), which is a measure of the difference in HLE (in years) between the most and least deprived whilst taking into account the distribution across all deprivation fifths. The chart shows that for males and females HLE has increased by 1.1 years and 0.8 years respectively. The inequality gap as measured by the SII has remained largely unchanged, and is 18.6 years for males and 17.9 years for females.

Source: © Crown copyright (2014) Visit Wales
Patterns of wellbeing

Wellbeing is not quite the same as happiness, but it influences many aspects of our life. It is a complex concept, with many components covering both physical and mental wellbeing and the interplay between them.

The National Survey for Wales\textsuperscript{11} includes questions on overall subjective wellbeing, and asks adults to rate how satisfied they are with their lives on a scale of zero (not at all satisfied) to ten (completely satisfied). In 2013/14, the average score was 7.7. Younger and older adults (aged 16-24 and 65 and over) were most satisfied with their lives, and those in good health were more satisfied than those in poor health. The Welsh Health Survey shows a decline in physical wellbeing with age, a dip in mental wellbeing in the middle years, which is consistent with the life satisfaction findings from the National Survey for Wales, poorer physical and mental wellbeing among women than men, and poorer physical and mental wellbeing in more deprived areas.
A more in-depth analysis of information on wellbeing from the National Survey for Wales\textsuperscript{12} explored the nature and distribution of wellbeing in Wales. It identified four main ‘types’ of wellbeing in the Welsh population:

- ‘typical’ (43 per cent),
- ‘flourishing’ (30 per cent),
- ‘struggling’ (14 per cent), and
- ‘worthwhile-anxious’ – that is people with a mixed pattern of wellbeing (13 per cent).

It suggested that rather different policies might be needed to increase the proportion of the population with high wellbeing or to reduce the proportion with low wellbeing. It suggested that neighbourhood initiatives, especially where they support community assets, and focusing on dignity, respect and engagement in service delivery, are central to people being in the flourishing category, while tackling the basic individual needs of sufficiency – in terms of having a job, a partner and fully functioning health – are at the core to improve the lowest levels of wellbeing. This chimes with the views of Maslow that we need first to satisfy our basic needs before we can achieve self-actualisation (Figure 5).

![Figure 5: Hierarchy of needs for wellbeing](source: Welsh Government)
Patterns of mortality

My previous report\(^{13}\) identified the fact that many deaths in Wales can be classified as avoidable. This year I want to say more about that, but first I want to note the significant point raised earlier in 2014 about how unprepared many people are for the sad but unavoidable fact that we all must die at some point. Some disquieting data from the Dying Matters Coalition should give us all cause to reflect. A survey of a small number of Welsh residents shows\(^{14}\):

- 85 per cent of people believe that people are uncomfortable discussing dying and death;
- 46 per cent say they are unaware of their partner’s end-of-life wishes;
- 29 per cent say they have written a will;
- 30 per cent have registered as an organ donor or have a donor card;
- 28 per cent have let someone know their funeral wishes;
- Just two per cent in Wales – the lowest proportion in Britain – have written down their wishes or preferences about their future care, should they be unable to make decisions for themselves;
- 32 per cent say they have experienced a family argument following a death, with money or property the main cause.

It has been well said that we make plans for life’s biggest events, births, graduations, weddings, yet the event that may have the biggest impact on those around us, who go on living, we hide away from. It is vital to talk, plan and make arrangements for the end of life before it’s too late. It is only through open and honest conversation that wishes can be known and plans made. Our limited openness has affected the quality of care and our ability to access a range of support and care services available to patients and families. Planning for end of life is more likely to achieve the care and ultimately, the death an individual would wish for. There are five simple steps we all need to consider –

1. Write your Will
2. Record your funeral wishes
3. Plan your future care and support
4. Make your organ decision known
5. Tell your loved ones your wishes

Mortality

Circulatory diseases and cancer remain the leading causes of death overall, together accounting for almost six out of ten deaths, followed by respiratory deaths. Among younger people (aged under 45), the leading cause of death was external factors (including suicide and accidents); among those aged under 75 (whose death could be classed as premature in statistical terms), the leading cause was cancer; and among those aged 75 and over (the age group in which most deaths occur), the leading cause was circulatory diseases. We know we can prevent deaths in many cases (Figures 6 and 7) – death rates from circulatory disease have declined rapidly since 2001 (by 44 per cent), those from cancer have declined more slowly (by 13 per cent). We need to look to see where we can do more.

Avoidable Mortality

In my report last year I noted that about a quarter of deaths are ‘avoidable’. These are deaths from causes for which effective public health or health care interventions are available. In 2012, there were 7,486 such deaths in Wales.
The concept of avoidable deaths was first described in the 1970s by a group from Harvard Medical School. They introduced a list of medical conditions from which death should not occur in the presence of timely, effective medical care. Over 90 conditions were selected that were considered to be preventable and/or treatable.

This was intended to highlight areas of health care quality that could benefit from improvements. Subsequent researchers have now introduced the concepts of ‘amenable’ and ‘preventable’ to further classify the reasons for mortality (Table 3). It can be seen from the table that some categories are preventable, some amenable and some can be considered as both.
### Table 3: Description of preventable, avoidable and amenable mortality

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventable mortality (public health)</td>
<td>“All or most deaths avoided by public health interventions in the broadest sense”</td>
</tr>
<tr>
<td></td>
<td>A death is preventable if, in the light of understanding of the determinants of health at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided by public health interventions in the broadest sense</td>
</tr>
<tr>
<td>Amenable mortality (treatable)</td>
<td>“Could be avoided through good quality health care”</td>
</tr>
<tr>
<td></td>
<td>A death is amenable if, in the light of medical knowledge and technology at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided through good quality health care</td>
</tr>
<tr>
<td>Avoidable mortality (health care quality)</td>
<td>“Defined as preventable, amenable or both, where each death is counted only once”</td>
</tr>
<tr>
<td></td>
<td>Where a cause of death falls within both the preventable and amenable definition, all deaths from that cause are counted in both categories when they are presented separately</td>
</tr>
</tbody>
</table>

### Table 4: List of conditions currently included in amenable and preventable mortality measures

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age</th>
<th>Amenable</th>
<th>Preventable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INFECTIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB</td>
<td>0-74</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Selected infections</td>
<td>0-74</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>0-74</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>HIV / AIDS</td>
<td>ALL</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>NEOPLASMS / CANCERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malignant cancer of the lip /oral cavity / pharynx</td>
<td>0-74</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the oesophagus</td>
<td>0-74</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the stomach</td>
<td>0-74</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the colon and rectum</td>
<td>0-74</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Source: Welsh Government
<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malignant cancer of the liver</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the trachea, bronchus, lung</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the skin</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the breast</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the cervix, uterus</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the bladder</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Malignant cancer of the thyroid</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Hodgkin’s disease</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Leukaemia</td>
<td>0-44</td>
<td>+</td>
</tr>
<tr>
<td>Benign neoplasms</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Mesothelioma</td>
<td>0-74</td>
<td>+</td>
</tr>
</tbody>
</table>

**NUTRITIONAL, ENDOCRINE AND METABOLIC**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus</td>
<td>0-49</td>
<td>+</td>
</tr>
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</table>

**DRUG USE DISORDER**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol related disease</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Illicit drug use disorders</td>
<td>0-74</td>
<td>+</td>
</tr>
</tbody>
</table>

**NEUROLOGICAL DISORDERS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy and status epilepticus</td>
<td>0-74</td>
<td>+</td>
</tr>
</tbody>
</table>

**CARDIOVASCULAR DISEASE**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatic and other heart valve disease</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Hypertensive disease</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Ischaemic heart disease</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>DVT with pulmonary embolism</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Cerebral vascular disease</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Aortic aneurysm and dissection</td>
<td>0-74</td>
<td>+</td>
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</table>

**RESPIRATORY DISEASE**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary Disorder</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Asthma</td>
<td>0-74</td>
<td>+</td>
</tr>
</tbody>
</table>

**DIGESTIVE DISORDERS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastric and duodenal ulcers</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Acute abdomen, appendicitis, intestinal obstruction, cholecystitis/lithiasis, pancreatitis, hernia</td>
<td>0-74</td>
<td>+</td>
</tr>
</tbody>
</table>

**GENITOURINARY DISORDERS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nephritis and nephrosis</td>
<td>0-74</td>
<td>+</td>
</tr>
<tr>
<td>Obstructive uropathy and prostatic hyperplasia</td>
<td>0-74</td>
<td>+</td>
</tr>
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</table>

**MATERNAL AND INFANT**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complications of perinatal period</td>
<td>ALL</td>
<td>+</td>
</tr>
<tr>
<td>Congenital malformation</td>
<td>0-74</td>
<td>+</td>
</tr>
</tbody>
</table>

**UNINTENTIONAL INJURY**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport accidents</td>
<td>ALL</td>
<td>+</td>
</tr>
<tr>
<td>Accidental injury</td>
<td>ALL</td>
<td>+</td>
</tr>
</tbody>
</table>

**INTENTIONAL INJURIES**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Age Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide and self inflicted injuries</td>
<td>ALL</td>
<td>+</td>
</tr>
<tr>
<td>Homicide / assault</td>
<td>ALL</td>
<td>+</td>
</tr>
<tr>
<td>Misadventure to patients during surgical and medical care</td>
<td>ALL</td>
<td>+</td>
</tr>
</tbody>
</table>
Avoidable, preventable and amenable mortality in Wales

It is encouraging to note that avoidable, preventable and amenable mortality have all fallen year-by-year in Wales since 2001 (Figure 8). When comparing these data on a national basis, avoidable mortality rates were higher in Wales than in England between 2001 and 2011. This is largely due to the contribution of cardiovascular disease and certain cancers in Wales which remain comparably high. However, when comparing Wales with the north of England which have rather similar population socioeconomic characteristics, the level and trend are similar (Figure 9).
In Wales, there is a significant difference in rates of avoidable mortality between the least and most deprived socioeconomic groups (Figure 10), with mortality over twice as high in the most deprived groups compared to the least.

There are many underlying causes of avoidable deaths. The leading causes in Wales are ischaemic heart disease and lung cancer (Figure 11). Opportunities to tackle these will be emphasised in later chapters.
Death is not the only result of these illnesses. For many people, they will first have a period of disease, pain and discomfort. Tackling the cause of death will also reduce that harm and requires action on two fronts:

- focussing on preventable deaths and harm by actions across society starting with actions that can be taken by individuals; and
- reducing amenable deaths and harm by ensuring health care is as effective as possible.

Later chapters address both of these. We also need to consider carefully the implications of the fact that death and harm are not equally distributed. We need to ensure that we address the complex pattern of poor health and try to tackle its roots.

This action will not just require the involvement of experts, but individuals, families and communities. This means encouraging and helping people to adopt the habits, skills and knowledge that will serve them through their life. The emphasis must be on helping people become more able to look after their own health and wellbeing.

In Wales, we are working hard to address each of the elements of avoidable mortality discussed in subsequent chapters of this report. Before introducing this work, it is useful to consider the progress being made in primary care which is the foundation of our health system and of our efforts to involve the broader community in improving health and wellbeing.

**Recommendation**

1. LHBs should use avoidable mortality as a way of measuring effectiveness of prevention and health care, and especially, to design actions to address the inequalities gap between most and least disadvantaged populations.

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**References**


7. Ibid.

8. Ibid.

9. Ibid.


Chapter 2
Primary and Community Health Care Services

This chapter illustrates the enormous range and volume of care delivered by primary care services, including nurses, health visitors, GPs, dentists, pharmacists, optometrists and mental health teams.

The importance of a personal approach is recognised and patient factors such as levels of ‘activation’ and ‘health literacy’ are highlighted. These issues can be addressed by ensuring a proportionate level of support, reducing the risk of health inequity and improving outcomes overall.

The activity in and quality of primary care services must be reported with greater clarity, to inform service improvement priorities.

The essential foundation for health care

The year 2014-15 has been described by the Minister for Health and Social Services as the Year of Primary Care, which offers an opportunity to build on the strong foundations already in place and address some of the emerging concerns. Primary care services provide the essential, first point of contact care to people who need help and support, managing a wide range of symptoms and acting as an entry point to more specialist services. Services include GPs and their staff, pharmacists, dentists and optometrists and a range of other professionals such as health visitors and district nurses. Teams often have strong links with social services and other local agencies and make a critical contribution both to people’s lives and to helping the NHS work well overall.

Health care systems with strong primary care tend to be linked to better population health and slower growth in health care costs. They are also well placed to identify who needs health care and to ensure fair access to prevention and services. These services have developed greatly since they were first set up and this chapter aims to set out:

- the scale and scope of primary and community care;
- some recent developments;
- how to respond to the challenges they face; and
- future plans for these services.
The challenge of everyday activity

Primary and community care is big and complex. It is estimated that over 90 per cent of NHS contacts are delivered in this way. Primary care deals with a huge volume of care that continues to grow and increase in complexity. The figures in the box below give a sense of that.

Structure

- There are 470 General Medical Services practices delivering care through 663 sites.
- Approximately 68 per cent of the GP premises are owned by GPs.
- There were 2,026 individual GPs (as at 30 September 2013), or 6.6 GPs for every 10,000 people.
- An increasing proportion of GPs are women – now 47 per cent.
- There were 712 community pharmacies (as at 31 March 2013).
- 1,392 dentists carried out NHS treatment in 2012-13, or 4.5 dentists for every 10,000 people.
- 773 optometrists and eight ophthalmic medical practitioners (as at 31 December 2013), or 2.5 ophthalmic practitioners for every 10,000 people.

Information, advice, treatment and referral

- 300,000 calls were made to NHS Direct Wales’ 0845 number in 2013-14 and more than three million visits were made to the NHS Direct Wales website during 2013-14.
- There are approximately 17 million GP consultations per year.
- 17 per cent of adults reported in the Welsh Health Survey they had talked to a GP about their own health in the past two weeks (2012).
- 71 per cent of adults reported in the Welsh Health Survey they had used a dentist in the past 12 months (2012) and 48 per cent used an optician.
- General Dental Practitioners completed 2.35 million individual courses of treatment in 2012-13. This included 1.86 million examinations.
- Over 46,000 courses of dental treatment provided included fluoride varnish or fissure sealants which help in the prevention of dental caries.
- Nearly 759,000 NHS General Ophthalmic Service sight tests were carried out in 2013-14, amounting to 247 for every 1,000 people.
- There were around 785,400 GP referrals for first outpatient appointments in 2013-14, which is an increase of 19.9 per cent compared with 2005-06. This is equivalent to approximately one in four people in Wales.

Immunisation and screening

- Every year around 35,000 children in Wales are given primary immunisations, with a similar number receiving boosters every year.
- More than 400,000 people aged 65 or over were immunised against flu in 2012-13.
- More than 115,000 patients were screened by the Diabetic Retinopathy Screening Service in 2013-14.

Managing chronic conditions

- Prevalence of diabetes has increased from five to seven per cent in the adult population, in the last decade, with over 170,000 patients on the diabetes register in 2012/13.
Hypertension – a significant risk factor for stroke and cardiovascular diseases has increased by 11.1 per cent between 2006-07 and 2012-13 – an additional 49,000 new cases.

Dispensing medicines

Welsh community pharmacies dispensed 76.2 million prescription items in 2013.

There is currently limited information available about activity in community nursing and therapy services. A new Community Information System is being procured to address this gap and inform a proper profile of community based services. New services and approaches are continually under development, aiming to support people and help to change their lives for the better.

Between 2002-03 and 2012-13 the number of prescriptions prescribed by GPs increased by over 52 per cent.

Half of all prescription items prescribed in Wales in 2012-13 were for treatment of the cardiovascular and central nervous systems.

676 community pharmacies provided Medicine Use Reviews (MURs), each on average carrying out 256 MURs during 2012-13.

Challenges

The wide range of services and providers that make up primary and community health services face many challenges, including –

- ensuring high quality and improvement in standards;
- working better with the public;
- maintaining and improving access whilst also ensuring continuity of care;
- managing complexity through coordination; and
- ensuring workforce sufficiency and sustainability.

Improving services to those with poor sight

Currently 200 premises throughout Wales are accredited as part of the Low Vision Service Wales (LVSW), a Welsh Government-funded primary care rehabilitation service for people with a visual impairment. The service is for people of any age, although the average age of patients is 82 years. Since 2004, over 48,000 low vision assessments have been carried out, with over 120,000 individual low vision aids being prescribed on free long-term loan to patients who require them, items such as handheld magnifiers, lamps and special televisions. The service also allows for extended one-to-one time with patients to discuss their eye care condition and allows for onward referrals to other health care professionals, services, support and education as needed.

![Source: Welsh Government](image-url)
Local Health Boards (LHBs) review the quality of care provided, share examples of good practice and manage concerns and complaints.

In many aspects, such as management of the risks for cardiovascular disease, there are consistently high levels of performance at LHB level, though there remains variation between individual practices. Overall, eight out of ten patients with coronary heart disease in Wales have cholesterol managed to the advised target level and nearly 90 per cent of patients who have experienced a stroke or transient ischaemic attack have blood pressure at or below the target level. However, to reverse health inequalities we must ensure all patients have access to these services.

While the QOF scheme is judged to have been effective for improving the quality of care for chronic conditions and to some extent reducing inequalities, there is concern it has promoted a ‘tick box’ culture and may detract from a comprehensive understanding of individual patients’ concerns.

My previous report referred to excellent work being undertaken to promote ‘shared decision making’ – helping professionals and patients to talk more openly about options and preferences for different treatments. In April 2014 the QOF was simplified and refocused to encourage a greater emphasis on professional judgement.

Working better with the public

Shared decision-making is also a part of ‘prudent healthcare’ in Wales which aims to ensure that care better meets individual patient needs.

This approach (covered more under Chapter 5), especially the focus on ‘coproduction’ is well suited to primary care, as primary care relationships play a significant role as people use their local services. Patients often refer to ‘my GP’, ‘my dentist’, ‘my nurse’ or ‘my practice’. For long-term conditions in particular, the ability to see a familiar clinician is often a high priority for patients and their families. Measures of continuity of care and patient satisfaction are important to inform an assessment of the quality of primary care services.
Prudent healthcare engages people in better understanding and managing of their own health and health problems, and to do this there is a need to help them get clear information and appropriate support. Each individual has different needs and care must be tailored appropriately.

The process of encouraging and supporting people to develop knowledge, skills and confidence to manage their own health and health care and to be able to make best use of the services available has been described as ‘activation’. ‘Highly activated’ individuals are more likely to adopt healthy behaviours, to stay out of hospital and respond better to treatment. They are better able to participate in shared decision-making and work well with professionals. Such changes benefit patients and clinical teams and will be important for ensuring that the NHS uses its resources effectively.

‘Health literacy’, is a term used to describe the ability to read and understand health information and act on it. The health literacy ‘umbrella’ illustrates the importance of relationships, understanding and partnerships to facilitate this sharing of information to ensure better health.

Figure 13: The health literacy umbrella

Voluntary sector agencies working closely with service users are well placed to identify where those using services need extra explanations and support. Research by the Royal College of GPs highlights that 43 per cent of UK adults “fail to fully understand information that contains text, such as signs in hospital, leaflets and health guides, while one in three adults fails to understand numerical information presented to them”. The Health Literacy Report also recognised that “health professionals sometimes overestimate the health literacy of their patients, and patients can feel too embarrassed to ask questions. In addition, doctors often supplement verbal information with a leaflet, presuming that it can be read. This can lead to distress and a lack of understanding for patients.”

There is a need to look more systematically at how to improve information for patients. Simplistic talk of ‘signposting to available sources of information’ will not be sufficient for patients to be fully engaged. Action is also needed to develop shared decision making skills for both professionals and patients to ensure that individuals are empowered to achieve the goals that matter most to them.

Maintaining and improving access

Equity of access to health services was a founding principle of the NHS. Improving access to primary care services remains a challenge as need for health care rises and resources are constrained by the current economic climate.

In the 2013-14 National Survey for Wales, 62 per cent of people who had seen their GP in the last 12 months said that it was easy to get a convenient appointment, but 38 per cent had found it difficult. The latter is higher than in 2012-13 (33 per cent) despite initiatives in many practices to improve access and changes in opening times and appointment systems:

- in 2013, 95 per cent (445 practices) of GP practices offered appointments at any time between 17:00 and 18:30 at least two week days, a slight increase from 94 per cent in 2012.
- in 2013, 76 per cent (356 practices) were open for daily core hours, (08:00 to 18:30) or within one hour of the daily core hours, Monday to Friday, an increase from 68 per cent in 2012.
In addition to rapid access to appointments, patients also value the opportunity to plan follow up appointments and to maintain continuity of care by seeing a familiar professional. This ‘relational continuity’ is particularly valued where the care required is complex or supports a chronic condition. An example of transformational change to improve access can be seen in low vision services by moving services into community optometry practices. There were 200 accredited premises at the end of March 2014. Journey time to the nearest service provider has been cut for 80 per cent of people and disability scores have fallen significantly, with 9 per cent of patients saying they found the new service arrangements helpful.

In 2013-14, 95 per cent of NHS dental patients were satisfied with the dentistry they received; and 90 per cent were satisfied with the time they had to wait for an appointment.

Every LHB in Wales has published a Local Oral Health Plan which includes actions to further develop dental and oral care services across primary, intermediate and secondary care services including access to services. The latest data published (December 2013) show the number of people regularly accessing NHS dental services has increased by 36,000 when compared to December 2010.

Primary care providers need to review processes to eliminate inefficiencies. They should work with patients and partner organisations to address appointment delays and cancellations, late and incomplete discharge information, and difficulty in accessing specialist opinion.

Services must be modernised to ensure that:
- models of care are sustainable;
- multidisciplinary working is the norm;
- telephone, email and Skype is in routine use; and
- all available resources are better matched to needs.

LHBs must ensure that primary and community care services are properly resourced to enable them to contribute effectively to meeting the needs of their population and to contribute to the efficiency of the overall system.

Availability of services in the patients preferred language is also a key measure of high quality access. In a recent inquiry by the Welsh Language Commissioner.

- 90 per cent of those surveyed agreed that Welsh-speakers should have the right to express themselves in Welsh when dealing with the health service wherever they live in Wales;
• 82 per cent agreed that Welsh-speakers should be offered a Welsh-language service as a matter of right; and

• 83 per cent agreed that if workers such as doctors, nurses, dentists and pharmacists who speak Welsh are available, Welsh language appointments should be offered to Welsh speakers every time.

Services must recognise the importance of all aspects of effective communication and the impact on the quality of care received. Language and communication is fundamental to good quality care.

Managing complexity through coordination

As care becomes more complex, effective coordination is vital to achieve best outcomes. This includes action at a number of levels:

• for individual care;

• between primary care services to maximise the local availability of services; and

• between a wide range of community and specialist hospital services to ensure seamless care.

Proactive, planned care is routine in primary care with practice nurses and health care assistants playing an increasing role in care delivery and coordination.

To improve liaison with specialist care, alternative approaches, including the use of telemedicine can be used to provide rapid access to specialist advice via telephone, email and Skype and support more complex care provided in the community. With an increasing older population these developments will be required at much greater scale. Such methods can allow problems to be addressed quickly and effectively at an early stage, reducing unnecessary hospital admission and making prudent use of resources. Cardiology and dermatology specialist services, to which referrals have been rising, are areas where joint professional educational events and agreed care pathways might have greatest impact.

Information Technology (IT) developments are increasingly important to ensure that relevant information is accessible in different health care settings to support the delivery of safe and effective care. GPs hold the patient clinical record where all aspects of care are brought together in one place. A summary record can be generated to support care in other settings, whilst ensuring that confidential information is protected.

Funding for improved IT and connectivity in optometry, dentistry and pharmacy agreed in 2014 will enable professionals to share information securely and to work more closely with hospital-based staff. This will reduce unnecessary hospital consultations, improve patient-relevant information at the point of care and reduce waiting times for patients at greatest risk.

The development of community based services can make a significant improvement in the management of common health problems such as depression and anxiety.

Patients who appear to have physical or social problems may have an underlying mental health problem and the introduction of Primary Mental Health Care Teams has been an extremely important development to help ensure that patients receive the highest quality advice and access to appropriate services. Local services allow clinicians to communicate easily and ensure care is coordinated.
Workforce sustainability and health inequalities

Primary care services face a particular challenge in regard to workforce development. Of the workforce of just over 2,000 GPs:

- GPs aged 55 or over make up nearly a quarter (23 per cent) of the workforce and that proportion is increasing (five percentage points increase in the last decade).
- There are increasing reports of vacancies in practice and poor response to recruitment initiatives.
- 10 per cent of practices in Wales (48) are single handed practices and will be particularly vulnerable if recruitment difficulties persist.

The distribution of the workforce should reflect population needs but as my previous report noted in reality the ‘Inverse Care Law’ persists, with many areas with greatest need having fewer, less accessible services. Action is in hand to address this through the Welsh Government’s Inverse Care Law (ICL) Programme testing new models of care. All LHBs should, through their planning systems, prioritise action to allocate resources to those areas most in need of health care.

The ICL Programme builds upon the success of the Academic Fellows (AF) Programme, an initiative that has attracted GPs to work in some of our most disadvantaged communities.

The AF Scheme develops quality improvement and research expertise and provides support to allow practices to implement local service development ideas. The AF Scheme has attracted GPs at an early stage in their careers and this positive experience has ensured that many continue to work in the same areas. Opportunities to engage all primary and community care professionals in service improvement must be developed.

To manage the increasing demand for health care it will be important to make best use of all the clinical expertise in a local area. Increasing the availability of consultant services in the community, improving access to specialist advice for primary care clinicians and developing new staffing models around patient-centred-care pathways are priorities to ensure the sustainability of local services. Workforce plans must be further developed and strengthened to maximise the potential of multidisciplinary working, reflecting examples of good practice from elsewhere.

Team working is well embedded in dental practice and recent changes by the General Dental Council will further enhance this by allowing patients direct access to both dentists and specified dental care professionals. Two LHB Community Dental Services (Hywel Dda and Betsi Cadwaladr) are piloting direct access services to dental therapists. This allows patients to be seen without first seeing a dentist, and helps to ensure the dental team skills are used to the maximum.

Future

As chronic diseases increase and other needs and opportunities emerge, new models of care will be required to develop an integrated approach that supports prevention, self-care and planned management, to make care safer and more effective. This will include a larger role for specialist expertise in the community to strengthen current arrangements.

In a recent report, the Nuffield Trust identified the multiple factors that influence the workload of primary and community care services:
It is essential that the way services are planned and delivered in Wales in the future addresses these challenges and draws on emerging international evidence and examples of good practice. Models of primary care that may better face the challenges are suggested to include:

- units significantly larger than the traditional GP practices offering a range of health and other services including diagnostics, chronic conditions management, and social care;
- specialists working alongside primary care clinicians;
- an approach that prioritises holistic care to address all the patient’s needs;
- a public health approach – looking beyond individual patients to the needs of the community as a whole; and
- a more professional approach to management.

NUKA Programme

One example that shows the potential of a strong, multidisciplinary primary care team to produce dramatic improvements in patient access and satisfaction is Alaska’s NUKA programme, which has achieved significant service improvement by ‘focusing on individuals not diseases’. The introduction of same day appointments for primary care and specialist advice actually reduced demand whilst expansion of the skills and capacity of the primary care team reduced referrals to specialist services. This approach has achieved significant decreases in hospital admissions and outpatient visits.

The Nuka system of care: Lessons for healthcare redesign in Wales was an event held in Cardiff and St Asaph in February, organised by 1000 Lives Improvement, Welsh Government and the Patient Safety & Healthcare Quality Registered Research Group at Cardiff University.
However, context is vital; one size does not fit all. Large multidisciplinary teams can provide a wide range of services but in rural and remote areas, smaller units are needed to ensure appropriate distribution of services and equitable access to care. Faced with growing recruitment difficulties, we can learn from models such as NUKA that have actively involved their staff in developing services that are good places to work and where staff retention and satisfaction levels are consistently high.

Examples of good practice demonstrate that services that are accessible and personal, and prioritise continuity of care, relieve pressure on the practice team and reduce demand on other services such as accident and emergency departments.

The 21st century primary care team must include a range of skills to quickly and effectively meet patients’ needs. Community nursing, mental health, prescribing advice and physiotherapy are examples of the expertise required to provide rapid local solutions for patients.

Shared Responsibility

Individuals have a big role to play. They value professional advice but also make choices about a range of issues, including medicines, diet and physical activity; influenced by friends, family and the media. There is increasing recognition of the value of the knowledge and skills that patients bring to help co-produce solutions. Patients with long-term conditions in particular can become very expert in their own care. Primary care teams must work with patients to inform, advise and help them to achieve their priorities. Such an approach is best supported by small teams providing personalised care.

Equally, to properly understand outcomes we must understand how patients benefit and what matters to them. Counting what services have been delivered is not a measure of success. Evaluation must include better systems of feedback that enable patients and carers to contribute their views to inform continuous service improvement.

The planned, integrated Welsh system is a strong base on which to further develop sustainable, accessible, comprehensive and person-centred, high quality care. Professional engagement with local service development is essential to ensure that the local context is considered.

Improved Team Work

The development in Wales of GP clusters – groups of GP practices, working together to review and improve local service delivery – reflects a growing consensus of opinion that primary care services should be planned and delivered at the level of local communities – of approximately 50,000 people.

Practice teams review a range of information to understand the needs of the population they serve. The information is discussed within the practice and at Cluster meetings. GP cluster profiles have been published, including:

- the structure of the population (age and gender);
- socioeconomic factors;
- geographical spread; and
- level of chronic disease.

The table shown over the page is an example of the information provided. Clinicians review different patterns of need and the provision of services, working in collaboration with local specialists and relevant voluntary sector agencies, to ensure that patients are fully supported.

There must be a strong emphasis on active redesign of primary and community care services as patient needs are identified.

Every opportunity must be taken to ensure that services work as effective teams with shared focus on the needs of individuals and local communities, delivering improved population health through strengthened primary and community care in partnership with the role the public must also play in their own health and wellbeing.
The support of Public Health Wales through its Primary Care Medical Advisory Team, Primary Care Quality and Information Service and the Public Health Observatory is vital for this work, including action to mitigate the effects of poverty and in particular to reverse the ‘Inverse Care Law’.

Figure 15: Recorded and adjusted recorded burden of disease in Amman/Gwendraeth GP cluster, showing other GP clusters in Hywel Dda HB and Wales for comparison, 2012

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Recorded burden of disease</th>
<th>Adjusted recorded burden of disease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Your Cluster:</td>
<td>Other Cluster in your Health Board</td>
</tr>
<tr>
<td></td>
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<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>9,510</td>
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<td>Asthma</td>
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<td>Epilepsy</td>
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</tr>
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<td>Heart Failure</td>
<td>590</td>
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</tr>
</tbody>
</table>

Produced by Public Health Wales Observatory, using Audit+ (NWIS)

Recommendations

1. LHBs should work with all relevant statutory and voluntary organisations, and with their communities, to ensure the resources are used to meet the differing needs of their population.

2. LHBs separately and together should develop ways of helping to ‘activate’ people to take interest in and responsibility for their health, reviewing options such as working with patient support organisations, developing shared decision-making and improving health information.
References


2. Ibid.

3. Ibid.


8. Ibid.

9. Ibid.


11. Ibid.


17. Ibid.


20. Ibid.


23. Management Information from Low Vision Service Wales.


34. Management Information provided by Dental Services


42. Ibid.


Chapter 3
Avoiding harm through ‘preventing the preventable’

In the light of earlier chapters, it is perhaps not surprising that there is a clear social-economic gradient in relation to preventable deaths, which reflects the socioeconomic and behavioural aspects of different groups in society.

Prevention will necessarily involve a large range of interventions and safeguards including addressing the underlying socioeconomic conditions. This chapter will focus on:

- socioeconomic conditions;
- environmental health interventions; and
- efforts to prevent communicable diseases.

and the next chapter will consider lifestyle issues.

**Socioeconomic conditions**

It is well evidenced that much poor health and most of the disproportionate burden of ill health that falls on more disadvantaged communities derives from the circumstances of people’s daily lives. Environmental issues, greater risk of exposure to communicable diseases and lifestyle choices all play a part but underlying much of this is the matter of material disadvantage and low esteem.

We must not lose sight of the broader context through looking at specific narrower areas where we might take action. For that reason, I strongly support action to reduce and mitigate the impact of poverty and improve people’s life chances. Without these approaches we are unlikely to make the radical shift that will improve people’s life chances more generally. The approach taken in the Welsh
Government’s *Tackling Poverty Action Plan*\(^1\) and associated programmes are an important element in supporting such an approach in Wales. It is clear from research evidence that our policies must consider how to reduce the socioeconomic gaps at all levels through society rather than focus only on a particular group. Primary and community services and public health legislation have an important role to play in reducing the inequality gap.

**Environmental Health Interventions**

**Air quality in Wales**

Last year’s report concluded that there needed to be better understanding of the health impact of air pollution and joint action by local and national bodies to address that.

A report published in 2014 estimated that, in Wales in 2010, around 1,320 deaths could be attributed to long-term exposure to fine particles that can be inhaled deep into the lungs\(^2\). Across Wales, for the same year, the proportion of deaths estimated to be due to long-term exposure to anthropogenic PM2.5 (particles caused or produced by human activity) ranged from 3.1 per cent to 5.4 per cent with the highest estimates in urban areas such as Cardiff and Newport and lowest in more rural areas such as Gwynedd and Ceredigion. In Wales as a whole, 13,549 years of life were lost to the population due to the increased risk of dying early from exposure to air pollution in 2010.

This and other work carried out by the Welsh Air Quality Forum and other technical groups has made the case to raise air pollution as a local population health priority, to involve Local Authority, Environmental Health, Transport and Planning departments, public health agencies and others.

Effective action requires local, regional and national action and at its best targets air pollution and health improvement at the same time. For example, reducing motor vehicle use and encouraging people to walk and cycle does both. Trees absorb air pollutants, and therefore creating more green space improves the environment and cuts pollution as well as being good for our health. Further action is required to tackle more localised air pollution and health problems. Welsh Government, in cooperation with national agencies, is considering the effectiveness of Local Air Quality Monitoring (LAQM) in achieving legislative limits and reducing the public health impacts of poor air quality and how it may be improved.

**Carbon monoxide (CO) in Wales**

Between 40 and 50 deaths are reported each year in England and Wales as a result of CO poisoning with a further 200 people admitted to hospital across the UK and 4,000 attending the Emergency Department. Many other CO incidents probably go unreported. Risks and impacts appear to be most common in older people, during winter months when heating devices are more commonly used, and among the most deprived, with one study indicating that around one fifth of lower-income families could be regularly exposed to levels of CO that exceed World Health Organization (WHO) guidelines. Public Health Wales has observed an increase in CO-related incidents.

In response, a Carbon Monoxide in Wales Working Group has been established (February 2014) with links to UK-wide carbon monoxide work\(^3\). The Group plans to coordinate action to prevent exposures, improve the response to incidents and improve information sharing and incident/impact surveillance. It will also undertake CO safety campaigns – such as the campaign delivered over the summer of 2014 highlighting the CO dangers associated with BBQs, and the student safety campaign in the autumn of 2014 providing safety information for students and landlords. The Group is also in the process of raising awareness of CO incidents with health professionals and producing information packs for local authorities and others.
Noise Exposure

Environmental noise has been ranked by the WHO as the second biggest environmental contributor to the burden of disease in Europe after ambient air pollution\(^4\). Its 2011 report estimated that at least one million healthy life-years are lost in Western Europe each year as a result of long-term exposure to environmental noise, primarily through sleep disturbance and annoyance, but also through an increased risk of heart disease and the cognitive impairment of children.

In 2013 the Welsh Government published maps showing estimated noise levels outside people’s homes in our largest towns and cities and in the vicinity of our busiest roads and railways\(^5\). These suggest that hundreds of thousands of people across Wales are likely to be exposed to road traffic noise levels that exceed WHO guidelines.

The Noise Action Plan for Wales 2013-2018\(^6\) covers all forms of noise, including occupational and neighbourhood noise. It includes commitments to focus on those who experience the highest noise levels (people who live in noise action planning priority areas), protect and enhance tranquil urban green spaces (including designated quiet areas) and review and update noise guidance where necessary to ensure that regulators have the tools they need to do their job.

Climate Change

Over the last year the Intergovernmental Panel on Climate Change (IPCC) has released three reports looking at the physical science basis of climate change; the impacts, adaptation and vulnerability; and mitigation. Collectively, the reports emphasise that climate change is happening now, that human activities are the dominant cause, and that there is a need for urgent and concerted global action if we are to avoid dangerous levels of climate change and adapt to the climate change that is predicted to occur.

Whilst the IPCC reports highlight the risks and action needed at a global and European level, we already have information on health and wellbeing impacts for Wales, through the Welsh report of the UK Climate Change Risk Assessment. The findings of the IPCC have been accepted by Welsh Government which believes that the focus should be on how we can best drive forward delivery.
Extreme weather conditions, such as the coastal flooding this winter are a reminder of the dangers and risks of failing to take action to mitigate climate threats.

Earlier this year as part of Climate Week, the Welsh Government launched a number of tools and resources to support sectors (including the health sector) and organisations to plan and prepare for the consequences of climate change. These tools look to support sectors and organisations in understanding how they are vulnerable to the current weather and climate and also look at how their service delivery may be affected future climate risks.

Alongside these tools and resources, the Welsh Government have been holding a number of events focussed on the latest findings from the IPCC to highlight future threats and opportunities to sectors across Wales.

Preventing Communicable Diseases

Vaccination in Wales 2013

Wales’ vaccination rates in childhood are the highest ever recorded, though the recent outbreaks of measles and whooping cough are a reminder that continued vigilance is important.

Although improving, uptake of booster immunisations scheduled for older children are lower than is desirable. Almost one in five children who turned four years of age during 2012-13 had not received all of their routine immunisations. Improving this was set as a priority for the NHS. By the end of 2013, the proportion of children fully up to date with routine vaccinations increased from 83 per cent to 88 per cent\(^7\), with further increases anticipated.

During 2013, the routine schedule of childhood immunisations in Wales was expanded to include vaccines for rotavirus and influenza; and now offers protection against 13 potentially serious infectious diseases. Comparisons with coverage rates in other UK countries\(^8\),\(^9\)\(^,\)\(^10\) are favourable, in particular for uptake of one dose of MMR in two year olds in Wales, which is currently the highest in the UK\(^11\) and two doses of MMR in five year olds which is the second highest.

**Figure 17: UK Immunisation Coverage Rates**

<table>
<thead>
<tr>
<th>UK Immunisation Coverage rates</th>
<th>Five in one immunisation in one year old*</th>
<th>One MMR dose in two year olds*</th>
<th>Two doses of MMR in five year olds*</th>
<th>Three doses of HPV in School Year eight girls **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales</td>
<td>96.5%</td>
<td>96.6%</td>
<td>92.6%</td>
<td>85.4%</td>
</tr>
<tr>
<td>N Ireland</td>
<td>97.2%</td>
<td>96.3%</td>
<td>92.5%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Scotland</td>
<td>97.7%</td>
<td>95.6%</td>
<td>93.2%</td>
<td>82.0%</td>
</tr>
<tr>
<td>England</td>
<td>94.4%</td>
<td>92.9%</td>
<td>88.4%</td>
<td>86.1%</td>
</tr>
<tr>
<td>UK</td>
<td>94.8%</td>
<td>93.3%</td>
<td>89.1%</td>
<td>–</td>
</tr>
</tbody>
</table>

* UK COVER statistics, Oct – Dec 2013
** Coverage in 2012-13 School Year eight girls in Wales, Scotland and England; and 2010-11 equivalent in Northern Ireland (latest published data).
Despite recent improvements for all childhood immunisations, there are still inequalities in coverage of immunisation against preventable disease. In 2013, the first ever report on uptake by level of socio economic deprivation showed the proportion of four year olds who were up to date with their immunisation living in the most deprived areas of Wales (78 per cent) was nine per cent below that for those living in the least deprived areas (87 per cent) (Figure 18).

These inequalities are now being targeted through a number of interventions including the Flying Start programme.

The 2012-13 Measles Outbreak

In 2012-2013, Wales saw its largest outbreak of measles since the two dose course of Measles Mumps Rubella (MMR) vaccine was introduced in 1988, and one of the largest measles outbreak in Europe. There were 1,211 cases of measles diagnosed and reported to Public Health Wales, and 437 of these cases confirmed on laboratory testing. 64 hospital admissions with measles occurred during the period, and one death was due to measles.

The outbreak was caused by the introduction of measles virus into communities with large pockets of children who had not received their routine MMR vaccinations during the late 1990s and early 2000s. During the catch-up campaigns more than 77,000 non-routine MMR doses were given. Coverage levels of one MMR dose are currently the highest ever in Wales, and are the highest in the UK. Even so, one in ten 16-year-olds in 2013 was still not fully immunised. It is likely that we will continue to experience sporadic cases of measles virus imported in to Wales with limited localised spread for years to come.

The Public Health Wales laboratory service in Cardiff played an important role in the management of the measles outbreak. The Molecular Diagnostic Unit (MDU) provides an all-Wales diagnostic and reference service to LHBs. The World Health Organization advises confirmation of measles infection by laboratory diagnostics. The MDU developed a real-time Polymerase Chain Reaction (PCR) test for the detection of measles virus enabling those responsible rapidly to provide appropriate measures of intervention.
**Whooping cough**

During 2012 all areas of the UK saw an increase in the incidence of whooping cough (pertussis). Peaks occur approximately every four years. Those most at risk are babies in the first few months of life who are too young to be vaccinated. Immunising pregnant mothers-to-be provides protection for their new born babies until they are old enough to receive immunisation. In a survey of women giving birth in January 2013, Public Health Wales found that coverage in new mothers was 69 per cent. While the number of laboratory confirmed cases of pertussis in Wales has fallen from the peak of 343 cases during 2012, it remains high (211 during 2013) compared to previous years. The number of confirmed cases in babies most at risk, younger than three months of age, fell in Wales from 22 in 2012 to six in 2013, highlighting the importance and effectiveness of this vaccination campaign.

**Seasonal influenza immunisation**

Uptake of annual seasonal influenza vaccine has also risen in recent years. Although the target uptake of 75 per cent uptake has not been met for patients aged 65 years and older, or those aged six months to 64 years who are at risk, since 2008 there have been increases of eight per cent and ten per cent in these groups, respectively. In a survey in 2011-12, coverage of seasonal influenza immunisation in Wales in patients aged 65 years and older was fifth highest in Europe.

In order to assess the actual uptake of vaccines offered during pregnancy, a survey was conducted in January 2014. The main findings were that 70.5 per cent of pregnant women reported that they received influenza vaccination, 61.9 per cent of pregnant women reported that they received both pertussis and influenza vaccination, and four in five women recalled being offered the vaccines during pregnancy.

Over the last five years, annual coverage of influenza vaccine in frontline NHS staff has increased year on year, with uptake increasing by more than a factor of three since 2009-10.
Our aim is to continue to press for increased uptake amongst staff year on year with the aim of all staff incorporating vaccination into their routine professional obligations.

During 2013, the seasonal influenza programme was for the first time extended to include children at the age of school year seven and all children aged two and three years of age, using a nasal spray vaccine. Uptake of influenza vaccine was 68 per cent for school year children and 38 per cent for infant age group\(^\text{16}\). This is the first year of a programme planned eventually to offer all children aged two to 16 years vaccination against influenza every autumn.

**Antimicrobial Resistance**

Although there have only been very sporadic cases in Wales over the last year of the extremely antibiotic-resistant microbes that are causing problems in some other parts of the UK, antibiotic resistance continues to increase. High rates of resistance are particularly seen in infections in the elderly leading to some difficulties in selecting antibiotic treatments.

In November 2013 a five-year UK strategy for Antimicrobial Resistance was published. Public Health Wales, the All-Wales Medicines Strategy Group and Welsh Government are working together to develop an action plan for Wales. One of the key ways to tackle resistance is through improving the use of antibiotics when they are required. The new All-Wales Antimicrobial Guidance Group will in future provide guidance across NHS Wales.

**Tuberculosis (TB)**

Effective control of TB in Wales requires early diagnosis and prompt, adequate treatment, particularly for the infectious form (pulmonary TB). The identification of contacts of cases and TB screening of new entrants from high incidence countries are also vital to controlling the disease. LHBs are required to provide quality assured services, to promote and support best clinical practice, and to achieve high treatment completion rates. A Framework Document for Action on Tuberculosis in Wales was developed with LHBs in 2012\(^\text{17}\) and is currently being evaluated\(^\text{18,19}\).

The numbers of cases of TB in Wales have declined in recent years\(^\text{20}\). In 2012, there were 136 notifications. TB rates are lower in Wales than in England – 4.4 versus 15.2 / 100,000 in 2012.
The importance of a systems approach to TB is illustrated by one outbreak in late 2013. Between May and September three cases of TB in Llanelli were reported to Public Health Wales. Extensive contact tracing was undertaken to identify those who should be offered treatment and try to identify the source of the infection. An additional four cases of TB from the same area were diagnosed between September 2013 and May 2014.

One of the cases reported worked in a school. Screening of children and staff involved considerable effort from staff at the LHB, Public Health Wales and the school resulting in 1,184 children and staff being screened in total. Altogether 15 were found to be infected with the TB bacterium. Although none presented any risk to others, the screening allowed them to be treated to reduce any risk of them developing the disease in the future. Following on from the screening, 849 pupils have been vaccinated against TB to date.

**HPV and Oropharyngeal Cancer**

Although most infections by the Human papillomavirus (HPV) do not cause symptoms, self-limiting, persistent infection by high-risk HPV types is detectable in more than 99 per cent of cervical cancers\(^1\). Cervical cancer is the second most common cancer of women worldwide\(^2\).

The introduction of a national cervical screening programme in the UK has made a major contribution to the fall in the incidence and death rate from cervical cancer. Mortality rates fell approximately 60 per cent between 1974 and 2004\(^3\).

The national HPV immunisation programme was introduced in September 2008 with all girls in school year eight (aged 12 to 13 years) offered vaccine against HPV infection of various viral strains including HPV 6,11,16 and 18). Since then uptake of HPV vaccine in Wales has remained consistently strong. Coverage of HPV vaccination in 2012-13 school year eight group was 89.6 per cent, 88.6 per cent and 85.4 per cent for one, two and three doses respectively. In addition to cervical cancer, HPV is causally associated with other less common cancers\(^24,25\).

Recent work has been undertaken in Wales looking specifically at oral and throat cancers in Wales. Oral and throat cancers are the 20th most commonly diagnosed cancer group in Wales. Nowadays around 700 residents of Wales are diagnosed each year. Historically, the main risk factors were smoking tobacco and heavy use of alcohol. The effect of alcohol and smoking interact to increase their risk further.
Although most people who drink and smoke do not develop oral or throat cancers, smoking and alcohol use remain prevalent. UK studies have estimated that more than half of the cases are attributable to smoking and alcohol contributes to over a third. These smoking and alcohol related cancers tend to develop in older people.

HPV oral infection is also recognised as a strong risk factor for some forms of oral and throat cancer. These HPV related cancers appear to be a distinct disease entity. Patients tend to be younger (usually 40-50 years old) and often do not report the usual risk factors of smoking or high alcohol intake. A study in England found that the incidence of cancers at these potentially HPV related anatomical sites has been rising at a higher rate compared to non-HPV related sites over the last two decades, particularly in males. Oral HPV infection can be sexually transmitted. Smoking also increases the risk of HPV16 oral infection. The risk of developing HPV related cancers is increased with a higher number of sexual partners and an increase in oral sexual behaviour.

In Wales the overall incidence in men is over double that in women. The longstanding reduction in incidence in men aged 75+ in Wales, linked to smoking prevalence decline, has halted. Rates in younger male age groups have increased from 2001-11. The largest increase of 124 per cent was noted in the 35-44 group although this change relates to small actual numbers of cases from an annual average of eight cases to one of 17 cases.

Unlike men, smoking and increasingly alcohol related cancers in older women continue to increase in incidence. There have also been recent percentage increases in incidence in younger female age groups, but less so than men. The increases in incidence in younger age groups are likely to be related to the HPV16 and are consistent with clinicians seeing more HPV16 related cases. The potential is for the incidence of HPV related cancers in females to reduce over time as future cohorts are vaccinated with HPV.

The Joint Committee on Vaccination and Immunisation (JCVI) is also looking to provide advice in the near future on the targeted use of HPV vaccine in men who have sex with men (MSM) and on extension of the routine adolescent programme to include adolescent boys. The JCVI HPV sub-committee will meet later in 2014 to further consider these issues, once more data are available.

Meningitis

The burden and severity of meningococcal meningitis and septicaemia in the UK are well known. Since the introduction of the routine meningococcal C conjugate vaccination programme in November 1999, the number of reported and laboratory-confirmed capsular group C cases fell by over 90 per cent in all age groups immunised. Meningococcal group B (MenB) now accounts for over 80 per cent of cases following the MenC vaccine campaign. In the last decade, the incidence of invasive meningococcal disease (IMD) in England and Wales had decreased by about one half to around 25 confirmed cases of IMD per 100,000 children aged less than one year and to less than two confirmed cases per 100,000 people across all ages combined. However, it is possible the incidence could rise again as incidence has fluctuated for reasons not well understood.
Table 5: Number of laboratory reports* of Neisseria meningitidis, Type B and C, in Wales: 1993-2012 data (CSF and blood specimens only)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Neisseria meningitides cases</th>
<th>Type B</th>
<th>Type C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>99</td>
<td>61</td>
<td>17</td>
</tr>
<tr>
<td>1994</td>
<td>72</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>1995</td>
<td>94</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>1996</td>
<td>106</td>
<td>40</td>
<td>28</td>
</tr>
<tr>
<td>1997</td>
<td>125</td>
<td>42</td>
<td>30</td>
</tr>
<tr>
<td>1998</td>
<td>98</td>
<td>41</td>
<td>25</td>
</tr>
<tr>
<td>1999</td>
<td>121</td>
<td>54</td>
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</tr>
<tr>
<td>2000</td>
<td>114</td>
<td>62</td>
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<td>160</td>
<td>121</td>
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<td>2007</td>
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<td>2008</td>
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<td>2009</td>
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<td>2010</td>
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</tr>
<tr>
<td>2011</td>
<td>30</td>
<td>6</td>
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</tr>
<tr>
<td>2012**</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* Data analysed by specimen date
** 2012 data to week 12 (week ending 25/03/2012)
Source: 1993–2012 data from CoSurv Laboratory Module (Public Health Wales CDSC)

Meningococcal B vaccine

In Wales during 2011, there were 30 laboratory confirmed cases of meningococcal disease, of which six were caused by meningococcal B.

In March 2014, the JCVI recommended that a MenB vaccine is introduced into the national immunisation schedule, provided that the vaccine can be obtained at a cost effective price.\(^{29}\)

In order to implement this programme, Ministerial approval will be required.

Some children and young people with meningitis (including meningitis B) will present with mostly non-specific symptoms or signs and the conditions may be difficult to distinguish from other less serious infections presenting in this way. We have a continuing need to recognise the symptoms and signs and manage these cases urgently. This is especially important as the frequency of infection decreases. There are a number of points that health care professionals should be aware of in relation to the clinical presentation of meningitis:

- to be alert to the possibility of bacterial meningitis or meningococcal septicaemia when assessing children or young people with acute febrile illness.
- health care professionals should be aware that classical signs of meningitis are often absent in infants with bacterial meningitis.
- to be aware that children and young people with bacterial meningitis commonly present with non-specific symptoms and signs. Some children with bacterial meningitis present with seizures.

Recommendations:

1. The Welsh Government, in cooperation with local and national agencies, should fully review Local Air Quality Management delivery in Wales in achieving legislative limits and reducing the public health impacts of poor air quality.

2. The Welsh Government and local authorities should view investment in green infrastructure in our towns and cities as a public health investment, for the way in which it provides relief from the air pollution, noise and other stressors associated with modern living, and encourages and enables active travel and relaxation in the presence of nature.

3. Welsh Government should assess the case for possible introduction of meningococcal B vaccine in to Wales.
References


11. Ibid


There is much that people can do to strengthen their health. Life circumstances may make this difficult. We must do whatever we can to support people in living a healthy life and avoiding those activities that may damage them now or in the longer term.

My previous report set out the burden that unhealthy lifestyles impose, in terms of illness, death and economic costs to the health and social care sector. We know that this burden is not shared equally but bears most heavily on the most disadvantaged communities.

The pattern of avoidable mortality points to action on heart disease and lung cancer. We also know that there is a significant level of ill health related to chronic conditions such as diabetes and mental illness.

This reflects what we know more generally, that the principal health risk behaviours remain smoking, harmful use of alcohol, physical inactivity, an unhealthy diet, and not maintaining a healthy weight.

Studies have examined the combined effect of poor health behaviours on mortality (typically considering factors such as smoking, alcohol consumption, diet, physical activity, and sometimes obesity), and suggested that the effect can be substantial, with the risk of mortality rising as the number of poor health behaviours increases. (For instance, Kvaavik et al, 2010; Loef & Walach, 2012).

However, previous analysis of Welsh Health Survey data showed that only a small proportion (six per cent) of adults adopted the four key healthy lifestyles (not smoking, not drinking above guidelines, eating five or more portions of fruit and vegetables a day, and being physically active on at least five days a week).¹

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¹ Source: Welsh Government
Adults living in the most deprived areas were more likely to report having no healthy behaviours. And adults who reported a higher number of healthy behaviours also reported better mental health and wellbeing, and were less likely to report having fair or poor health.\(^2\)

A recent report examined the Caerphilly Cohort study (a study which has followed a group of men from Caerphilly for a period of over 30 years) to summarise evidence on relationships between healthy lifestyles and certain chronic diseases. It concluded that a healthy lifestyle was associated with increased disease-free survival and reduced cognitive impairment but that uptake of truly healthy lifestyles remains low.\(^3\)

Men in Caerphilly, following four or five healthy behaviours, had lower risk of certain chronic illnesses and mortality compared with those following none, including:

- Diabetes – 50 per cent reduction
- Dementia – 60 per cent reduction
- Mortality (all causes) – 60 per cent reduction

The Caerphilly Study followed a cohort of middle-aged men for a period of over 30 years. Healthy behaviours covered smoking, body mass, fruit and vegetable consumption, physical activity, and alcohol consumption.

Therefore, more work is needed to promote healthy lifestyles across Wales as a means of tackling preventable mortality. Joint responsibility exists between public health organisations, the Welsh people and public services to address this issue. In particular, tackling socioeconomic inequalities in health is one of the main challenges that exist across all developed countries. In Wales, we are supporting the ‘Five Ways to Wellbeing’ approach and have recently launched our new ‘Add to Your Life’ initiative.

A good example of building resilience in people of all ages is the ‘Five Ways to Wellbeing’. The ‘Five Ways to Wellbeing’ are a set of evidence-based actions developed by the New Economics Forum (NEF) which promote people’s wellbeing. They are: Connect, Be Active, Take Notice, Keep Learning and Give. These activities are simple things individuals can do in their everyday lives.

Add to Your Life

This is an online health assessment for citizens aged 50 and over, and is a new initiative to support individuals to better understand their own health and the actions they can take to improve their health and wellbeing, providing access to high quality information and advice via a single website.\(^4\)

The introduction of the ‘Add to Your Life’ resource has been supported by Communities First and Age Cymru teams. This approach has ensured that users receive the level of support that they need and that access via a website is facilitated for those less confident with IT skills.
Physical activity

The benefits of physical activity, including regular sporting activity and exercise across the life course are considerable and include lowered risk of cardiovascular disease, some types of cancers and diabetes, improvements in musculoskeletal health and body weight control, as well as positive effects on mental health development and cognitive processes. Physical activity as recommended by the World Health Organization (WHO) is important for all age groups.

The WHO reports that physical inactivity has been identified as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths globally. It has been estimated that the cost of physical inactivity to Wales is around £650 million per year. Regular physical activity such as walking and cycling has significant benefits for health including lowering the risk of cardiovascular diseases, diabetes, colon and breast cancer, and depression.

Data from the 2013 Welsh Health Survey indicates that only 29 per cent of the population undertake sufficient physical activity to benefit their health as measured by 30 minutes of moderate intensity physical activity on five or more days of the week. This data show little change from earlier years. This year we have seen positive results towards achieving more participation in sporting activities; the Sport Wales School Sport Survey shows the numbers of young people taking part in sport or physical activity three or more times a week has risen from 27 per cent in 2011 to 40 per cent in 2013.

PHYSICAL ACTIVITY

<table>
<thead>
<tr>
<th>Adults, number of days in past week active for at least 30 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>29% (active 5 days)</td>
</tr>
<tr>
<td>34% (active 0 days)</td>
</tr>
</tbody>
</table>

Source: Public Health Wales
2013; and the Active Adults Survey shows that 29 per cent of the adult population taking part three or more times a week in 2008 to 39 per cent in 2012—that’s 262,000 more people, a 34 per cent increase in the number of people enjoying the many benefits of sport. This may be a legacy of the Olympic Games in 2012 which inspired many to get more involved in sporting activities. I hope the next few months show that the Commonwealth Games will have the same positive influence.

Despite this positive information, 34 per cent of the population remain inactive, doing no physical activity. ‘Change4Life’ Wales was launched in 2010 as part of the Welsh Government’s broader response to help people to achieve and maintain a healthy body weight, to eat well and be physically active. To date of 67,624 people have signed up to the programme and more have accessed advice from the website, Facebook and Twitter. The importance of reducing physical inactivity by taking steps to introduce physical activity into our daily lives is enormous.

We are working hard to develop options to motivate the least physically active people to become more active. The Ministerial led Physical Activity Executive Group was formed in 2014 to set a new direction to increase levels of physical activity. The group is focussing on large scale change where different approaches are used dependant on the needs of the community.

Nutrition

There has been a lot of attention recently about sugar and the amount we are consuming. Sugar, in moderation, forms part of a balanced diet, but consumption of excess sugar, along with excess fats, contributes to excess calories which over time lead to obesity. Frequent consumption of sugary foods and drinks is also a major contributor to tooth decay in all sectors of the population. Evidence is compelling that we need to reduce our sugar intake. ‘Added sugar’ intakes exceed the recommendation of not more than ten per cent of energy intake for all age groups in the UK, most notably for children aged four to ten and 11 to 18 years where mean intakes provide 14.7 per cent and 15.6 per cent of food energy respectively. Of particular concern is the amount of soft drinks (including energy drinks) consumed by our children which contributes the largest proportion of their added sugar intakes.

Although as a population we consume more sugar than is recommended, there is recognition that further clarification is required on the link between sugar and obesity.

Furthermore, the Scientific Advisory Committee on Nutrition (SACN) is currently reviewing the evidence on dietary sugar and other carbohydrates. Following a public consultation on its draft recommendations, SACN will provide finalised recommendations to Government early in the new year. The Government will then review dietary advice and any recommendations on specific foods accordingly.

There is much more that the food industry could do to support a decrease in sugar consumption such as reformulation and reduction of portion sizes. It is important that the Welsh Government continues to press for positive action to reduce sugar intake, including consideration of appropriate legislation at the UK level.
Obesity is a major factor in causing many chronic health conditions, and although the latest figures from the Welsh Health Survey suggest a slight drop for the latest year in obesity, it is too soon to judge whether or not this is an indication of stabilising numbers, and the proportion of adults classed as overweight or obese has increased from 18 per cent to 22 per cent over the last decade.

Data from the second year of the Child Measurement Programme (2012/13)\(^7\) indicated that over a quarter (26 per cent) of children aged four to five were overweight or obese, and 11.3 per cent were obese. Obesity levels were higher in more deprived areas.

**Obesity and the Food Industry**

Obesity contributes to many chronic illnesses including: type 2 diabetes, cardiovascular disease, joint problems and sleep apnoea, all of which reduce life expectancy and quality of life. The cost of obesity to the Welsh NHS was £73 million in 2008/9. It is also the most disadvantaged who are most affected by obesity.

Why has this happened? People are eating more processed food and junk food. Sugar is often hidden within processed foods and provides no nutritional value, but can be obesogenic. Studies show that introducing taxation on sugary drinks would reduce the amount of sugar sweetened drinks we consume by 15 to 16 per cent; and there would be 180,000 fewer obese adults in the UK.\(^8\) Children and young people drink the most sugar sweetened beverages and would therefore benefit most from this tax.\(^9\)

The advertising industry is very powerful at influencing children in particular to eat unhealthy foods. One measure that would work well to curb this influence would be to ban all junk food advertising before the 9pm watershed, so that children would be less susceptible to junk food marketing.\(^10\)

A ban on junk food advertisements at all times should be extended to internet ‘on demand’ services too.

The new *Delivering Growth: An Action Plan for the Food and Drinks Industry 2014-2020* provides an opportunity to work with the Welsh food and drinks industry to ensure that food and drink formulations are healthier and that there are incentives to produce healthy foods.

Together, we can combat obesity in Wales.

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**CHILD OBESITY**

Children aged 4–5 years

<table>
<thead>
<tr>
<th></th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight or obese</td>
<td>26%</td>
</tr>
<tr>
<td>Obese</td>
<td>11%</td>
</tr>
</tbody>
</table>

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**Improving child dental health behaviour**

The most recent survey of 12-year-olds shows a steady downward trend in both the proportion of children with tooth decay, and the average number of decayed teeth per child, including in the most disadvantaged groups. Long term trends in tooth decay (shown as mean D$_3$MFT scores) from 1988-89 to 2012-13 suggest accelerated improvement since the turn of the century. This reflects continuing widespread use of fluoride toothpaste as well as the continued efforts of dental teams and other health and teaching professionals to support prevention.
"Designed to Smile" is an NHS Dental programme funded by the Welsh Government helping children to have healthier teeth. The "Designed to Smile" Programme has two elements:

- A preventive programme for Nursery/Primary school children, intending to provide school/nursery-based toothbrushing and fluoride varnish programmes for children aged three to five helping establish good habits early on; in addition children aged six-eleven receive a Fissure Sealant programme as well as preventative advice on how to look after their oral health.

- A preventive programme for children from birth to three years.

The programme currently involves 1,394 nurseries and schools across Wales. In total 87,318 children participate in the daily brushing programme which represents 56.3 per cent of all children from pre-school to year two in Wales. This includes 1,047 settings which took part in the tooth brushing element of the programme, 44 settings which received the fluoride varnish element and a further 303 settings which received both.

Figure 23: Mean $D_3 MFT$ and prevalence of decay experience for 12-year-olds in Wales 1988/89 to 2012-13

Source: Welsh Oral Health Information Unit
It is pleasing that smoking rates among adults have been declining since 2004 and recent results from the *Welsh Health Survey*\textsuperscript{13} show that the percentage of adults who smoke fell from 23 per cent to 21 per cent between 2012 and 2013. This is a positive step.

Regulations arising from the *UK Children and Families Act* will regulate proxy purchase of tobacco products, and prohibit the sale of e-cigarettes to those less than 18 years of age. There is some evidence to suggest that e-cigarettes may be an aid to assist smokers to reduce or quit the habit; with dual use common. However, there is still concern that there is a lack of evidence as to the long term health effects of using e-cigarettes and more worryingly, the re-normalisation of smoking and the effect it will have on younger people taking up smoking through starting on e-cigarettes. I am very interested in research developments on this, particularly in relation to the development of the Public Health Bill which looks to prevent the use of e-cigarettes in enclosed public places.

Wales was able to participate in Stoptober for the first time in 2013. *The Tobacco Control Action Plan for Wales* recognises that mass-media campaigns can encourage smokers to give up.

Stoptober is the 28 day challenge that motivates and encourages smokers to stop smoking for the month of October. It is based on research that smokers are five-times more likely to stay smoke-free if they successfully make it through the first four weeks.

Last year over 80 businesses in Wales supported their staff to give up smoking and pharmacies and healthcare settings across Wales also participated in the campaign.

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**Figure 24: Adult Smoking in Wales, 2003/04 to 2013**

Source: Welsh Health Survey, Welsh Government
Stoptober was advertised across Wales on TV and radio, and the giant, red Stoptober wheel even made an appearance on the summit of Snowdon. Stoptober provided a wide range of free support, guidance and encouragement for smokers in Wales last year and in addition they were also signposted to the support and advice offered by Stop Smoking Wales, local pharmacies and GP surgeries.

Stoptober is currently in Wales for 2014 and I encourage all smokers to get behind the campaign to support each other to quit smoking for 28 days. About 70 per cent of smokers in Wales want to stop smoking, and by providing a detailed 28-day step-by-step programme to support them I hope it will encourage as many as possible to stop smoking for 28 days.

The ‘Fresh Start Wales’ campaign promotes smoke-free cars carrying children and raises awareness to parents and others the risk their smoking poses to the health of children.

The campaign ended on 31 March 2014 and during its two year term there was extensive promotional activity across Wales with over 37,000 Fresh Start packs, to help smokers protect themselves and their families from second-hand smoke and to support them to give up smoking, were distributed. The final months of the campaign focussed on Community First areas of Wales and built on the momentum of previous campaign activity. Events were held in 23 different locations on high streets and supermarkets and Patch, the Fresh Start mascot, visited primary schools to promote the campaign film “Killer Chemicals”. Fresh Start also engaged with employers, was promoted in local press and radio, via social media and online blogs.

Research findings published on 15 July 2014 show that smoking in cars has declined in recent years but show that a sizeable minority of young people are still being exposed to second hand smoke in cars.

Prohibiting smoking in private vehicles carrying children under 18 has the potential to protect children from the harms associated with passive smoking. Passive smoking can lead to a host of chronic diseases, which are very largely avoidable. Legislation would seem to be the most appropriate way forward to eliminate this harm and close the persistent gap in exposure to second-hand smoke. The First Minister and the Minister for Health and Social Services issued a written statement on 15 July 2014 announcing that a consultation on proposals to prohibit smoking in private vehicles when children under the age of 18 are present will be launched shortly, in line with established procedures.
Alcohol

The 2013 Welsh Health Survey (WHS) headline results show that 42 per cent of adults reported drinking above the recommended guidelines on at least one day in the past week, including 26 per cent who reported drinking more than twice the daily guidelines. The WHS data between 2008 and 2013 suggests that the percentage of adults reporting drinking above the daily guidelines has decreased slightly, but the pattern by age varies – there has been a decrease for young people, figures fluctuate for the middle aged, and an increase for older people, although older people are still overall less likely to drink over the guidelines.

Progress is being made to reduce alcohol consumption in some groups but this is not the case across all age groups.

There were 504 alcohol-related deaths in Wales in 2012, the majority among men, although the percentage increase for women during the last ten years has been greater than for men. In addition there were around 15,500 alcohol specific hospital admissions in Wales in 2011/12.

The Public Health White Paper Listening to you: your health matters included a proposal to implement a minimum unit price of 50p per unit in Wales, utilising legislation to complement the range of activity for tackling the health harms associated with alcohol misuse. Evidence shows that the price of alcohol matters and as the affordability of alcohol has increased substantially in recent decades, alcohol-related death and disease has also risen. Minimum unit pricing would affect those drinks sold at an unacceptably low price relative to their alcohol content, such as cheap spirits and white cider. Imposing a minimum unit price for alcohol in Wales would demonstrate prudent health care as the policy would make a strong contribution to our aims of promoting health, preventing alcohol misuse and reducing alcohol related harm and disease.

To support the evidence base for Wales, the Welsh Government commissioned specific Welsh modelling work from Sheffield University and a public attitude to alcohol survey from Beaufort Research. At the time of writing my report the final reports for both of these commissions had not been published but preliminary findings further strengthened the arguments to introduce a minimum unit price in Wales. Independent advice has also been received from the Advisory Panel on Substance Misuse (APoSM) who have reviewed the literature on minimum unit pricing in a welsh context and have recommended its implementation in Wales.
Recommendations

1. LHBs, Public Health Wales and the Welsh Government should assess the levels of physical activity in communities across Wales and look to share and take up evidence of good practice in promoting it.

2. The Welsh Government should continue to press for positive action to reduce sugar intake, including legislation at the UK level and policy action at the Welsh level.

References


14. Ibid.


As described in previous chapters, avoidable mortality includes ‘amenable’ deaths which are deaths that might have been prevented through the appropriate availability of effective health care.

Therefore:
- there must be continuing focus on the quality of health care to ensure that it is effective; and
- that all people in Wales have access to services with similar levels of safety and quality.

Figure 25 shows that amenable mortality also has a social gradient. This underpins the importance of the inverse care law approach, namely ensuring those in greatest need have access to the right care.

### Improving quality
The Welsh strategy for improving quality in health care covers a wide range of issues. This report will focus on just a few:
- how Wales is using a new focus on transparency to improve care;
- the success to date of specific service delivery improvement programmes, focusing particularly on cancer and heart disease because they account for a large proportion of amenable deaths in Wales; and
- the potential of the new ‘prudent health care’ approach.

**LEADING CAUSES OF DEATH**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulatory</td>
<td>9296</td>
</tr>
<tr>
<td>Cancer</td>
<td>8694</td>
</tr>
<tr>
<td>Respiratory</td>
<td>4603</td>
</tr>
<tr>
<td>External causes</td>
<td>1172</td>
</tr>
</tbody>
</table>
Transparency

Considerable progress has been made over the last 12 months to improve transparency within the NHS in Wales. More information is now available to the public than ever before about the way the health service is delivering services. More accessible information from each Local Health Board (LHB) is published on a regular basis. This includes information on mortality, waiting times, staffing levels and infection rates.

Good information on infection rates has prompted targeted action on improvement (see page 56). In 2014, there has been heightened interest in the way in which death rates in hospitals are measured and interpreted. This is a complex issue which is influenced by multiple variables including population health and individual hospital services. This section discusses the advancements made in improving transparency and measuring performance, with suggestions for future work which needs to be undertaken.

At least in part, the heightened interest in transparency is the result of the Francis Report, which detailed the poor quality of care being delivered at Mid Staffordshire. Several high profile reports subsequently echoed the message that improving transparency across the NHS is vital. Trusted to Care, a recent report by Professor June Andrews and Mark Butler highlighted significant failings of care at Abertawe Bro Morganwg University Health Board and reinforced the need for an increasingly transparent system which is open to scrutiny in order to drive improvement. This can enable people working within the health service to become increasingly accountable for the care that they deliver and ultimately improve the quality of these services.

A further factor is the importance in helping people who use health services to understand how they can best engage with their health and health services – what they can do to exercise control and responsibility in the case of their own health and wellbeing and how to act responsibly towards the NHS and use the system to best effect. This can facilitate open discussion, shared-decision making and enable equity between health care staff and those they serve.

The last year has seen advances in the way in which performance information is delivered to the public. LHBs now publish “Annual Quality Statements” which highlight both the strengths and the weakness in their services. All LHBs and trusts in Wales have quality and safety committees which closely monitor the quality of services of their organisations. Systems are in place which allow LHBs to monitor information at several different levels across their systems and produce summary data for Boards to review and act upon the results.

The transparency and mortality taskforce

A Welsh Government transparency and mortality taskforce in March 2014 produced several key recommendations and oversaw development of a new website called My Local Health Service, designed to enable the public, NHS staff and others to easily find up-to-date information on NHS performance. It includes details on hospitals, general practice and LHBs across Wales. This is a significant step forward. The format and content of the site is continuously being developed and feedback (via the online e-form) is welcomed.

Figure 26: My Local Health Service

Source: Welsh Government
Deaths in hospital – is it useful to count them?

The taskforce considered the measures that are used to review the performance of health services. One such measure was hospital mortality. In general, looking at how many people die and why helps explain the overall health of any society. As stated previously, overall mortality reflects the influence of many factors including nutrition, genetics and social circumstance and can be affected, for example, by policy and performance in areas such as education, the economy, housing, and social welfare.

The mortality rate for groups of patients in a hospital can also give some information, but care is needed when interpreting the data. Besides saying something about the quality of patient care and clinical skills, it will also reflect other factors, such as the underlying health of patients, their age and their social circumstances.

Mortality rates can be adjusted to draw out more clearly the impact of the quality of care, but adjustment of this type is neither simple nor uncontroversial. One issue is who to include in the calculations. For example, should groups with different patterns of health care usage and generally lower risks of death or those with very short admissions be excluded? Should areas such as hospices or rehabilitation facilities be included when part of the hospital?

Another issue relates to how patients’ episodes of care are recorded – the coding system. Clinical coding systems differ between different health care systems, as do other matters including political focus, financial incentives, organisational structure and managerial culture, and all these make simple comparisons across different systems difficult and potentially misleading.

These difficulties explain why the Welsh Government commissioned Professor Stephen Palmer, the Mansel Talbot Professor of Epidemiology and Public Health at Cardiff University, to review the use of risk adjusted mortality data in Welsh hospitals. This provided an extremely useful overview of the way in which quality and safety data is collected, processed and interpreted across NHS Wales. His report reinforced the need for a robust process of reviewing hospital deaths in Welsh hospitals and to learn from cases to ensure a continuously improving system.

Case note mortality reviews ensure that patients have not died because of unrecognised sub-optimal care. They can also reveal underlying themes about care quality, for example, poor communication between staff, treatment, or situations where dignity and respect have been compromised.

In 2013, 1000 Lives produced guidance on how to conduct these reviews in a standardised approach and NHS Wales is building strong foundations for the sustainable implementation of systematic mortality and harm reviews.

Action on avoidable deaths

AVOIDABLE DEATHS

Deaths from causes considered avoidable in the presence of timely and effective healthcare or public health interventions

Source: Welsh Government
Health Care Associated Infections (HCAI)

Local Health Boards (LHBs) and Trusts in Wales have continued to work towards preventing avoidable HCAI. This year has seen significant challenges from infections that are already known to us, such as Clostridium difficile (C.diff), as well as signs of newer and emerging antibiotic resistant organisms on the near horizon.

Reductions in C.diff and MRSA have been achieved in many areas, with a provisional Wales reduction of 19 per cent in C.diff in inpatients aged 66+ compared to 2012-13, but progress must continue and we must do better across all of Wales, for all patients and their families. Following a serious outbreak of C.diff in one LHB, a response was co-ordinated involving the LHB, Welsh Government, Public Health Wales and patients working together to protect patients. That LHB is currently installing an information system to help manage individual cases and outbreaks more effectively and is now showing that large scale reductions in infection are achievable. In addition, the whole of NHS Wales has renewed its commitment to infection reduction programmes that are ambitious, addressing not just C.diff and MRSA but continuing to reduce surgical site infections, particularly in Caesarean Sections, as well as all other HCAI.

A commitment to transparency regarding HCAI has also been demonstrated by the monthly publication of C.diff and MRSA figures by each LHB and Trust since July 2013.

Cancer

Wales has a Cancer Delivery Plan and good progress has been noted in the two annual reports on its implementation published since its launch in 2011. Wales has shown a large improvement in cancer survival among the four countries of the UK, which is a marker for effective treatment and care.

Another way of measuring quality of care is through patient experience. In the Cancer Patient Experience Survey, 89 per cent of patients said that their care was excellent or very good and this rises to 97 per cent when the good category is added.

There are, however, a number of areas where progress has not been as good as we would wish. In particular in relation to reducing avoidable mortality and inequalities, it is notable that Wales’ survival rates from smoking-related cancers (stomach, lung and kidney) are lower than the European average. The welcome reduction in smoking rates will take time to result in reduced cancer rates.

The incidence rate of cancer is 20 per cent higher in the most deprived areas of Wales, compared to the least deprived – that’s around 80 extra cancer cases for every 100,000 people living in the most deprived areas. Smoking is the major risk factor for...
lung cancer, which has even wider inequalities in incidence in Wales. This level of inequity cannot be accepted.

Lung cancer survival in Wales is worse than most countries in Europe, partly because early diagnosis is a problem here. I am concerned that we have a higher proportion of cases diagnosed at a late stage, which has a very low survival. It is a problem across all of Wales as there is little difference in stage at diagnosis or survival between our least and most disadvantaged areas.

I am pleased therefore that the Cancer Implementation Group have prioritised a work programme on lung cancer this year. This will involve studies by our Welsh Cancer Intelligence Unit to look into the detail of how and where people are diagnosed with lung cancer, look at our pathways and professional skills and give consideration to public information on symptoms.

Screening programmes are important public health initiatives as they allow for the early detection and treatment of potential health problems.

NHS Wales provides three cancer screening programmes for breast, cervical and bowel cancer. The programmes are delivered on behalf of the Welsh Government by Public Health Wales.

It is important that health professionals maximise opportunities to raise awareness of these screening programmes, and provide balanced information that supports individuals to make informed choices about participating in the programmes. It is essential that cancer is diagnosed early to achieve optimal outcomes.

Heart disease
The total number of people living with coronary heart disease in Wales is falling; the total in 2012-13 of 125,567 is a reduction of 8,040 people since 2006-07. The percentage of patients living with coronary heart disease and recorded on GP disease registers has fallen from 4.3 per cent in 2006-07 to 3.9 per cent in 2012-13.

There are signs of improved clinical care. The death rates linked with coronary heart disease have fallen every year since 1980. The mortality rates for deaths in hospital within 30 days of emergency admission with a heart attack for patients aged 35 to 74 has fallen from 4.4 per cent in June 2010 to 3.4 per cent in June 2013.

Yet, while death rates in Wales for coronary heart disease have been falling over the last three decades, they vary significantly across Wales. The death rate in the most deprived fifth of wards is almost a third higher than in the least deprived fifth.

Improving access to care
There are two separate issues concerning access. One is the matter of whether the right services exist, the other is making sure that the right services are available to the right people.

A good recent example of action to try to ensure services are more generally available is the Welsh Government’s efforts to extend access to donor organs for those who need them.
Organ Donation – new legislation

Increasing organ donation rates continues to be a priority area. In 2012/13 in Wales, 36 people died waiting for an organ transplant and over 200 people were on the waiting list. Improvements in the donation rate in the past few years have been achieved, largely due to more staff and better infrastructure. However, rates of consent to donation remain relatively unchanged and many possible donations are lost at this point. To address this, a new soft opt-out system of consent to organ donation will be introduced in Wales from 1 December 2015 – this is also known as “deemed consent”. Under the new system people living in Wales will have three choices – to register a decision to be a donor (opt in); to register a decision not to be a donor (opt out) or choose to do nothing and have their consent deemed.

A two-year public awareness campaign is underway to inform the public about their choices and to encourage them to talk to family and friends about their organ donation decision.

The change is expected to deliver a 25 per cent increase in the number of organ donors, which means around 15 additional donors in Wales, and around 45 more organs available to those waiting.

The move to deemed consent is only one strand in how we hope to improve donation and transplantation in Wales, Taking Organ Transplantation to 2020 – Wales Action Plan will drive continuous improvement on all aspects of organ donation and transplantation.

We need to offer in some areas a much greater volume of services because the need there is greater. The concept of ‘Inverse Care’ was first described by Julian Tudor Hart in 1971. It states that, “the availability of good medical care tends to vary inversely with the need for it in the population served”.

A new programme designed by Aneurin Bevan Health Board plans to address this concept for their population. This will focus on premature mortality from heart disease in disadvantaged areas, particularly targeting men and women over 40 years of age, who have not visited their GP for three years. This will initially target five neighbourhoods with the highest level of disadvantage, starting in Blaenau Gwent West and plans to provide demonstrated outcomes within five years. The LHB has recently piloted a programme to improve the identification and management of cardiovascular disease in Blaenau Gwent. This included a number of changes aimed at increased uptake by improving access to appointments, clinical software to prompt staff, visual patient delays in the waiting room and raising awareness with agencies such as Communities First. In Pen y Cae Surgery, 405 patients (47 per cent eligible uptake) attended clinics for lifestyle advice on weight management, smoking cessation, exercise referral and personal goal setting.

Prudent Healthcare

When thinking about high quality healthcare, the emphasis in Wales on ‘prudent healthcare’ offers significant potential for further development. This is the Welsh variant of an international movement that is developing in many countries and grows out of recent assessments of how health services have changed in recent years and what are their
prospects. It is important when judging the future that we consider the state of economies across the world and the changes in demographic structure. In Wales, the Nuffield Trust published their report on what a decade of austerity could mean for the NHS funding pressures through to 2025/26.

Many clinicians and others have become concerned that the balance between health professionals and those they serve is out of kilter. The hugely increased capability of modern medicine to offer solutions, or at least provide an intervention, may have created a situation where more is done than need be or should be. Professionals feel obliged to offer everything to resolve health problems and the public may not feel able to have a real say. This is especially important where the balance of risks and benefits is not clear cut. This can lead to unnecessary or unwanted intervention and a waste of resources, coupled with missed opportunities for members of the public to take more control and ownership themselves. Prudent healthcare puts the emphasis back on a more thoughtful, less emphatic approach by services and a more active role for citizens.

This is a not a sudden shift but catches a growing mood within the health professions and beyond. It suggests an adjustment to the role of both the clinician and the patient. The latter could be more active and engaged in thinking about their health and taking action, the former more focussed on balancing the best evidence and the patient’s assessment in helping to agree the best goal for the course of treatment and a shared decision on the grounds for any intervention. Through placing greater value on patient outcomes, prudent healthcare aims to rebalance the NHS and create a more patient-centred system.

The Welsh approach is built around a set of principles, which state that any service or person providing care should:

- do no harm, so that interventions which do harm or provide no clinical benefit are eliminated;
- carry out the minimum appropriate intervention,
- have the workforce organised on the basis of ‘only do what only you can do’, so everyone working for NHS Wales should operate at the top of their clinical competence with, for example, nobody being seen routinely by a consultant when his or her needs could be appropriately dealt with by say an advanced nurse practitioner;
- promote equity, so that the prime criterion for NHS treatment is the individual’s clinical need; and
- remodel the relationship between user and provider on the basis of coproduction.

The aim in Wales is to tie this to efforts to strengthen primary and community services.

The initial approach has been to get people talking about the approach, the underlying principles and the implications of its practical application. This involved testing it with clinical teams in four treatment areas – orthopaedics, pain management, prescribing, and ear, nose, and throat services to assess the impact it might have.

More discussion is needed to draw out how best this might work in practice, but the early signs are very promising.

**Recommendations**

1. The Welsh Government and the NHS should review whether improving the transparency of NHS performance across Wales is helping to improve services and take action to ensure that it is doing so.

2. Welsh Government and LHBs should work together to ensure all healthcare professionals take ownership and responsibility for accurate clinical record keeping.
Conclusion

My first year has been marked by a number of important developments that will offer real improvements in health and health services in coming years.

First there is a shifting relationship with the public. Last year I described the potential for more ‘coproduction’ – that is a full partnership between the public and public services at every level. During the last year I have seen how that movement is growing, and beginning to open up the NHS to new influences and give people across Wales more say over services and more sense of their own capabilities. I have seen real interest and enthusiasm among my clinical colleagues and the way in which thinking is changing across public services. As part of that a more transparent approach to what the NHS is doing has developed, as described earlier. I would like to see the new information strategy for the NHS clearly recognising that information is the essential ingredient in helping people manage their own health and in facilitating a much more proactive and productive relationship between the NHS and those it serves.

Second, there is the introduction of prudent healthcare as a new way of thinking about health care and as a tool for redesigning it to meet the needs of today and for the future. This explicitly builds on coproduction as a core principle and will help strengthen that bond of trust between clinicians and patients that is at the heart of our NHS, and provide a platform for an ever widening engagement on health matters. I look forward to seeing that approach spreading to influence all our services and our efforts to work with people to improve their own health.

Coproduction and prudent healthcare then will be important factors in shaping people’s life experience and health services in future years. An earlier chapter stressed the importance of primary and community care and the strong commitment in Wales to strengthen them as the foundation of our NHS. Last year I stressed the role that the NHS can play in helping tackle poverty and support prosperity in Wales. These elements must all be brought together into a common framework for making change happen. That framework is set by the new planning system in the NHS. It is now in place and each year the NHS will need to update its plans and reset objectives to better meet the needs of local residents. That process will ensure that these vital but complex ambitions for Wales are turned into a process that gives everyone safe and sustainable services that meet their needs.

A third aspiration that is beginning to pass from an idea into durable change is the Welsh Government’s aspiration for a Wales firmly rooted in sustainable development principles. This year has seen the emergence of the new Wellbeing and Future Generations Bill, that will entrench in law the need for major organisations in Wales to demonstrate their commitment that what they do now will enhance the lives of our children and grandchildren. The World Health Organization once memorably defined health as ‘physical, mental and social well-being’ and the Wellbeing and Future Generations Bill will help us make that an embedded aim of government in Wales.

I am very optimistic that we can make significant improvements to health in future years by working together and using all our talents.
References


5. Ibid.


My previous report included a number of recommendations which aim to help create the conditions for better health, safer and more resilient health services and greater prosperity. I have provided updates on these below.

**Making Wales healthier, happier and fairer**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Increase prevention-focussed services and coordinated cross-government action.</td>
<td>Opportunities for this to be part of the implementation of the Williams commission and Wellbeing in Future Generations Bill.</td>
</tr>
<tr>
<td>1.2. Improve the understanding of happiness and wellbeing in Wales and take action to promote wellbeing</td>
<td>Information is included in chapter 1.</td>
</tr>
<tr>
<td>1.3. Incorporate action to reduce health inequalities into all policies and services with a focus on changing healthy life chances for children.</td>
<td>We are working on a new Healthy Child Programme – more on this in future reports.</td>
</tr>
</tbody>
</table>

**Protecting the nations’ health**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. 1. Focus on optimal vaccination rates to reduce the risk of outbreaks.</td>
<td>Information is included in chapter 3.</td>
</tr>
<tr>
<td>2. 2. Reduce rates of infection, especially HCAIs.</td>
<td>Concerted action plan being implemented by Public Health Wales and Local Health Boards.</td>
</tr>
<tr>
<td>2. 3. Develop a strategy to address the issue of antimicrobial resistance.</td>
<td>Information is included in chapter 3.</td>
</tr>
<tr>
<td>2. 4. Improve understanding of the burden of disease from air pollution exposure and take action to reduce it.</td>
<td>Information is included in chapter 3.</td>
</tr>
<tr>
<td>2. 5. Improve community resilience, advice and recovery strategies to respond to extreme weather and other natural events.</td>
<td>Information is included in chapter 3.</td>
</tr>
<tr>
<td>2. 6. Improve understanding of how the risks from extreme weather events and climate change affect health services.</td>
<td>Information is included in chapter 3.</td>
</tr>
</tbody>
</table>
# Achieving health and happiness through prevention

<table>
<thead>
<tr>
<th>3. 1. Ensure there are comprehensive prevention programmes tailored to each stage of life.</th>
<th>For children see note 1.3. above.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. 2. Improve prevention impact at large scale with an initial focus on promoting physical activity and reducing childhood obesity.</td>
<td>Work underway on both these areas.</td>
</tr>
<tr>
<td>3. 3. Use technology to support good health through helping people have greater knowledge, control and access to advice and services.</td>
<td>An update on the new Add to your Life programme is included.</td>
</tr>
<tr>
<td>3. 4. Include in all legislation consideration of how it contributes to better health and wellbeing.</td>
<td>Wellbeing and Future Generations bill provides an opportunity for this.</td>
</tr>
</tbody>
</table>

# Creating safe and resilient 21st century health care services

<table>
<thead>
<tr>
<th>4. 1. Ensure a relentless focus on quality and safety and on the importance of the clinician-patient relationship.</th>
<th>Information is included in chapter 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. 2. Ensure action on prevention is embedded across the health care system</td>
<td>New targets are being used for prevention activity within the NHS.</td>
</tr>
<tr>
<td>4. 3. Ensure health care constantly adapts to meet the needs of the 21st century.</td>
<td>New approaches being developed through Health Technology Fund. See chapter on primary and community care.</td>
</tr>
</tbody>
</table>

# Acting on the relationship between health and wealth

<table>
<thead>
<tr>
<th>1. Improve health at work by supporting people to maintain healthy lifestyles and designing health services that reduce lost productivity.</th>
<th>Over 1,800 employers, employing 27.9 per cent of people working in Wales, supported through Healthy Working Wales programme. Proposals for a bid for 2014-20 European Social Fund (ESF) monies have been developed. The bid aims to help people to stay and progress in work by providing rapid access to work focused health interventions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Secure European funding to support economic growth, regenerate communities and improve health.</td>
<td>A targeted approach to improving success in attracting European Innovation funds is being developed.</td>
</tr>
<tr>
<td>3. Drive economic development through a strong life science sector, and focus research on improving prevention and high quality care.</td>
<td>Departments across Welsh Government are working with the NHS and industry in a new, more focussed way, to support growth in that sector. Welsh Government health and social care R&amp;D is being refocused with a greater emphasis on effectiveness and public engagement.</td>
</tr>
</tbody>
</table>
4. Develop a distinct health and wellbeing economic sector through appropriate skills development linked to local assets.

Working with key stakeholders, proposals have been developed for systematically linking health improvement to economic value. Approaches to knowledge transfer, intellectual property management and commercialisation are being reviewed.

In my report last year I suggested that for the future we could track progress on improvements in quality and performance and public engagement around those issues. In relation to the three areas I mentioned then, listed below, I can report that:

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. whether increasingly people are able to access simple, clear information about the availability and performance of their local health service</td>
<td>In September 2013 the Welsh Government launched an on-line service called MyLocalHealthService. Since its launch, the site has provided access to data such as health care acquired infections, GP access, and waiting times. At a hospital and GP level there is also information on condition specific areas such as heart disease, dementia and diabetes. In 2014, data were added on smoking cessation and hospital mortality. Future plans include: adding summary statistics for each health board to give the user a demographic overview of the area they live in; and adding further performance information to give patients a greater view of the performance of the health providers in their locality.</td>
</tr>
<tr>
<td>2. whether increasingly people can feed back their views on the care they receive</td>
<td>The National Survey for Wales fulfils the requirement in 'Together for Health' for a national measure for patient satisfaction. To fulfil the requirement in the Quality Delivery Plan for a national approach to measure service user experience 'The Framework for Assuring Service User Experience' was developed by the National Service User Experience Group and issued to the NHS in May 2013. This requires every NHS organisation to use the four quadrant Framework to provide assurance to their Boards that service user experience is at the heart of all service delivery. We are now piloting another systematic method of generating, analysing and responding to patient feedback, using the patient voice to transform services, improve safety and empower staff.</td>
</tr>
</tbody>
</table>
### References