Wales Centre for Public Policy
Canolfan Polisi Cyhoeddus Cymru
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Healthy lifestyle behaviours: Children

Introduction

The Well-being of Future Generations Act (Wales) 2015 requires Welsh Government Ministers to set National Indicators to measure progress towards the seven national well-being goals (Figure 1). On March 16th, 2016, a set of 46 National Indicators were laid. The Act also requires Ministers to lay National Milestones for 2050 which 'set out expectations of progress, including the scale and pace of change required' (Welsh Government, 2019b, p. 3) to assess whether Wales is on track to meet the well-being goals. The Welsh Government is in the process of developing the first wave of Milestones by the end of 2021.

Figure 1: The seven well-being goals for Wales (Source: Welsh Government, 2020)

National indicator 5

The briefing aims to inform the development of a realistic and ambitious Milestone for National Indicator 5: *'percentage of children who have fewer than two healthy lifestyle behaviours'*.[1] The 'healthy lifestyle behaviours' for children identified in the Indicator are:

- not smoking,
- eat five fruit/vegetables daily,
- never/rarely drink alcohol, and,
- meet the physical activity guidelines[2].

In what follows, we outline the determinants of healthy lifestyle behaviours among children (people under the age of 18), policy context and levers, trends in the indicator data, and the impact of the Coronavirus pandemic on children's health and relevant determinants, as well as key considerations for developing the Milestone for Indicator 5. This briefing is based on a rapid review of available evidence and is intended to inform the stakeholder event on the 25th of June 2021. As such, it does not reflect a comprehensive or systematic review of relevant evidence.

The Welsh Government is considering updating the current indicator. It is one of the indicators that was highlighted as potentially requiring amendment in the 2019 consultation on National Milestones (Welsh

[1] This briefing was prepared for June 2021, at which point National Indicator 5 was articulated as shown here and all content relates to this. Publication date is however 2022 in order to share Welsh Government commissioned WCPP briefings on several National Milestones together. In the interim, National Indicator 5 has been revised by the Welsh Government to 'percentage of children who have *two or more* healthy lifestyle behaviours' (see: https://gov.wales/well-being-future-generations-national-indicators-2021-html).

[2] The physical activity guideline for children outlined in national indicator 5 is 'being physically active for an hour or more, 7 days a week' (Welsh Government, 2019a).

Government, 2019b). Officials are exploring the possibility of reframing the indicator to measure the percentage of children with *three or more* healthy lifestyle behaviours rather than those with fewer than two (i.e., one or none). This briefing focuses on the current indicator in its discussion but will also highlight the possibilities and issues related to the proposed change to the indicator where relevant.

Determinants of healthy lifestyle behaviours

Determinants of health are factors that influence health outcomes for individuals and communities. These determinants can include biological (e.g., genetic risk) and medical factors as well as social determinants. Social determinants of health are the non-medical aspects of people's lives that influence their health behaviours and outcomes (World Health Organisaton, 2021). Some of the key determinants of child health, as identified by Dahlgren and Whitehead (1991) (shown in figure 2), include parenting and child health behaviours, parents and carers, household resources, community, living and working conditions and the wider socio-economic, cultural, commercial, political and physical climate. Within these broad categories there are numerous determinants that impact child health and health behaviours.

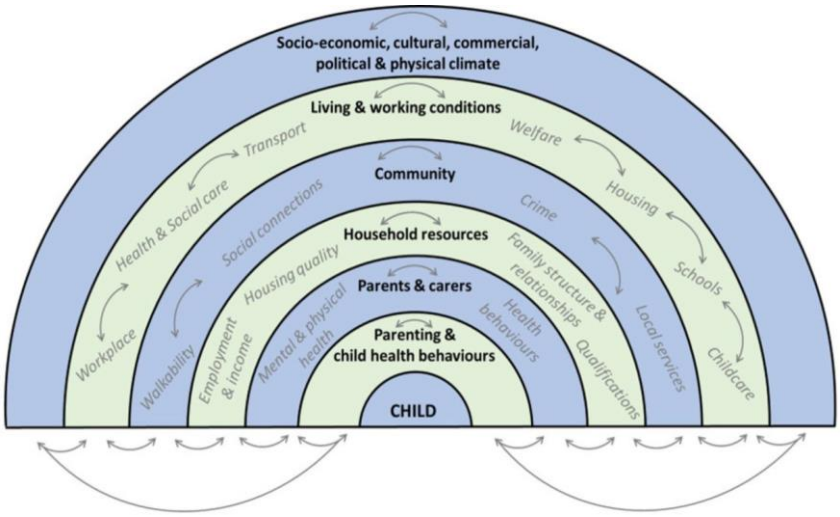

Figure 2 – Social determinants of child health from Pearce et al (2019), adapted from Bronfenbrenner (1979) and Dahlgren and Whitehead (2006).

This section will focus on the key social determinants of healthy lifestyle behaviours among children in Wales.

The four healthy lifestyle behaviours measured by the National indicator are themselves determinants of child health (i.e., engaging in these behaviours influences health outcomes) and are also influenced by broader determinants of health.

While there are many factors that influence child health behaviours, some are of greater relevance for the development of the national Milestone than others. This paper draws on work by the WHO which identifies a selection of social determinants which are particularly important for the health behaviours of children in the UK and Europe (World Health Organisation Europe, 2020).

Using a combination of the WHO framework and the broader social determinants of health model a number of key determinants of child health behaviours for in children in Wales were identified in relation to the behaviours captured in the National Indicator. These are[3]:

- Deprivation and affluence
- Family[4] and community behaviours
- Education and school environment
- Peer group pressures

[3] This does not represent an exhaustive list of determinants that influence child health and health behaviours in Wales. It is instead a group of key determinants which were found to be of the greatest relevance to the behaviours captured in the National Indicator 5 and the associated Milestone for children's healthy lifestyle behaviours.

[4] While the terms 'family' and 'parent' are used in this document to reflect the conventions of literature on this topic, we recognise that families come in many different forms and can include a range of different relationships and care arrangements, not necessarily based on biological relationships.

- Housing
- Neighbourhood
- Age and gender differences

It is important to understand these determinants to consider what factors are likely to be able to affect children's health behaviours by 2050, which is key to thinking about a suitable National Milestone.

Deprivation and/or affluence

Level of deprivation and family affluence is a determinant of healthy behaviours among children. In the case of children, deprivation status and affluence refer primarily to the deprivation and/or affluence level of the child's household[5]. This determinant is therefore subject to a wide range of influences affecting the adults in a household such as labour market position, employment, wealth, resource access and income level (World Health Organisation Europe, 2012). In 2019/20, 31% of children in Wales were living in poverty. This amounts to about 180,000 children (Joseph Rowntree Foundation, 2020).

Being deprived or having low family affluence reduces the ability of parents to provide children with the means to engage in healthy lifestyle behaviours (Hagell, et al., 2018). For example, low-income families may be unable to afford the cost of food necessary to provide five portions of fruit and vegetables daily or may not be able to afford participation or equipment fees which act as barriers to engagement in sports. In contrast families with high-income and high affluence are more likely to have the necessary resources to support healthy behaviours in their children (World Health Organisation Europe, 2012).

Deprivation is also associated with increased risk of children engaging in behaviours that negatively impact their health. Research by Public Health Wales and data from the Student Health and Well-being survey shows that levels of smoking and drinking (and exposure to these behaviours by their families) are higher among children from low affluence families in Wales (Public Health Wales, 2010; Public Health Wales, 2018; Page, et al., 2021). Children from households with low family affluence also report engaging in these potentially harmful lifestyle behaviours earlier in life than their more affluent peers.

A further important aspect of deprivation and lack of affluence for child health behaviours is the impact of socio-economic status beyond material resource lack, particularly the impact of socio-economic status on levels of stress, control and long-term decision making for health within the family context (WHO, 2003). Deprivation is associated with increased stress and other negative psychological impacts which are known to be damaging to health both in the short and long term. Deprived families are often faced with significant stressors in their everyday lives which can present serious barriers to long-term decision making with regards to health, including the health behaviours of children in the family (WHO,2003).

Family and community behaviours

As children generally live with their families, who make many of the decisions about their lives, their health behaviours are influenced by the behaviours their family and community condone and engage in. This can have both positive and negative effects on children's healthy behaviours (Hagell, et al., 2018).

Adults within a household who are physically active and eat healthily are likely to support and encourage these behaviours in the children they are responsible for and can encourage children to engage in these behaviours through example setting and creating opportunities to do so (Blair, et al., 2010). However, this relationship can also work to reduce children's engagement in healthy behaviours if the adults in their lives are engaging in unhealthy behaviours including heavy drinking and smoking. Children are known to model their behaviour on that of the important adults in their lives which makes family

[5] The WHO uses Family Affluence Scale (FAS) to categorise children by their socioeconomic status. Families are categorised as having low, medium or high affluence based on family ownership of a set selection of material resources (Hartley, et al., 2016).

behaviour a determinant of health (Norman, et al., 2015). Adults within a family also play an important role in building habits in children's lives, both as role models and as facilitators of children's participation in healthy activities, which continue to influence their lifestyle behaviours as they grow-up (Medd, et al., 2020).

While families have the most direct influence on children's lifestyle behaviours, the wider community context also plays a role in determining healthy behaviours in children in much the same way as their family (Blair, et al., 2010). If behaviours and related opportunities are accepted and socially desirable within a community then children in this community are more likely to engage in them (Hagell, et al., 2018). This, like family behaviours, can have both positive and negative impacts on children's health behaviours depending upon the health behaviours in their community.

Education and school environment

Education is a determinant of health across all age groups. Those with greater access to education and higher educational attainment tend to have better overall health outcomes (Guma, et al., 2019). Higher educational attainment is linked to improved career prospects and the ability to obtain higher quality and higher paid work. As already noted, having higher affluence and income increases people's ability to access the resources needed to support healthy behaviours.

For children school environment is also a determinant of health and healthy behaviours. The WHO (2020) highlights the importance of a supportive school environment in increasing the likelihood of children engaging in healthy lifestyle behaviours. Supportive school environments are also known to act as a 'buffer' which protects children from negative lifestyle behaviours such as excessive drinking and smoking. In the context of the pandemic, the home learning environment has become increasingly important as a determinant of educational outcomes (Institute for Fiscal Studies, 2020).

The education of parents and carers is also an important factor in determining the health behaviours of the children in their care. The ability of adults in a family to make informed and positive decisions for children's health and health behaviours is important for promotion of positive health behaviours and prevention of negative behaviours both in childhood and into later life (WHO,2003).

Peer group pressures

The WHO (2012) identifies peer group behaviours, support and pressure as a determinant of health and healthy behaviours. This is a determinant which increases in importance as children get older.

The social acceptability and desirability of specific behaviours, including those which contribute to or are in opposition to a healthy lifestyle, can be a strong determinant of children's willingness to engage in these behaviours. This creates a complex relationship between peer group influence and healthy behaviours in children (Hagell, et al., 2018).

Research by the WHO (2012; 2020) has found that children who have strong social networks report better health and well-being and are more likely to engage in healthy behaviours. However, social networks can also act as a negative influence on children's lifestyle behaviours. For example, peer pressure and the social perception of smoking and drinking as 'cool' can lead to children engaging in these negative behaviours because their peers are doing so (Mpousiou, et al., 2018). Similarly, peer pressure and negative social perception among peers are also known to contribute to the high rate of sport drop out among teenage girls which is linked to a lack of physical activity both as adolescents and later in life (Women's Sports Foundation, 2021).

Housing

Housing conditions and quality are also a determinant of child health and health behaviours. Housing that is overcrowded and/or lacks green space can limit children's ability to engage in physical activity at

home thereby impacting their health. Housing that lacks a space or facilities where healthy meals can be prepared limits the ability of adults in a household to provide a healthy diet for the children and by extension limits children's ability to eat healthily (UNICEF, 2020).

Beyond the physical aspects of housing that can impact child health and lifestyle behaviours, housing tenure and housing security are also determinants of health and healthy lifestyle behaviours in children. Being in insecure housing situations can limit children's ability to consistently engage in healthy behaviours (for example through interrupted access to physical activity opportunities) and contributes to both physical and mental ill health (Child Poverty Action Group, 2017; Clair, 2018). There is also some evidence which suggests that housing tenure can impact child health in the long-term as people who grew up in primarily owner-occupied housing report better health than those who have lived mostly in rented housing (Hagell, et al., 2018).

Neighbourhood

The neighbourhood environment in which children grow up can be a determinant of their health and healthy behaviours. The WHO highlights the links between neighbourhoods that 'engender high levels of social capital' (World Health Organisation Europe, 2016, p. 23) and positive healthy lifestyle behaviours in children.

Children growing up in such neighbourhoods are more likely to engage in physical activity and make healthy dietary choices and are less likely to engage in risky behaviours like smoking and drinking. The WHO (2016) therefore suggests that building neighbourhood social capital (i.e., strong local relationships) has the potential to assist in the reduction of health inequalities among children.

Children growing up in neighbourhoods where they can access safe green spaces are also more readily able to engage in physical activity and exercise (Sanders, et al., 2015).

Age, gender, and other personal characteristics

The determinants of healthy lifestyle behaviours among children appear to vary in importance between age groups.

For older children and adolescents, the influence of their peers often becomes more important as they begin to branch out from their family and make more decisions for themselves. Having positive family relationships and communication with family remains an important determinant of healthy lifestyle behaviours in adolescents and can act as a buffer against some of the peer pressures to engage in negative behaviours faced by older children (Hagell, et al., 2018).

Older children may begin to enter the labour market in their final years of secondary school education or after leaving school at 16. Work status and employment is a determinant of health in adults, and while there is limited research on its impact on health among adolescents, can influence the health and lifestyle behaviours of people beginning their career (Hergenrather, et al., 2015; Blanquet, et al., 2017). People employed on zero hours contracts or in roles with unsociable hours report worse mental and physical health than their peers in full time education and/or in traditional 9-5 roles (UCL, 2017). There are also well documented 'scarring effects' related to unemployment in the early phases of a person's working life. Those who are not in employment, education or training (NEET) experience a higher risk of poor physical and mental health and are more likely to be unemployed or in low quality work later in life – impacting their long-term health behaviours and outcomes (Feng, et al., 2018).

Gender can also impact on the health behaviours of children. Boys and girls face different social pressures and social expectations which can in turn influence the health choices they make (Helfert & Warschburger, 2013).

The WHO highlights that the differences in personal characteristics among children, including age, gender, ethnicity and disability status, are important determinants of health behaviours which contribute to health inequalities among children and also into later life (World Health Organisation 2012; 2016; 2020). A child's background and life experiences, especially Adverse Childhood Experiences, can also have a lasting impact on their health, health behaviours and decision making (Centres for Disease Control and Prevention, 2019).

It is also important to note that what constitutes 'health' and a 'healthy lifestyle' may be different for different children. For example, for children with physical disabilities a healthy lifestyle in terms of physical activity and exercise will likely look very different than that of a child with no physical disabilities (Gadsby & Jones, 2014).

Habit building towards adulthood

Another issue that it is important to note is the role of childhood behaviours in forming healthy or unhealthy lifestyle habits as children grow up. Establishing positive healthy lifestyle behaviours early in a child's life can help them to build good habits as they grow up (Sotos-Prieto, et al., 2015). For example, encouraging children to engage in high levels of physical activity as a child, and supporting this behaviour through their teenage years, helps to establish this habit throughout their lives. Parental and family habits, support and attitudes play a key role in the habit building of children who are likely to mimic the behaviours valued by their family (Norman, et al., 2015; Medd, et al., 2020). As such habit building in childhood can be seen as a key determinant of health and healthy lifestyle behaviours in adulthood.

Policy context and levers

In considering a suitable National Milestone, as well as understanding the determinants of children's health behaviours, it is useful to consider the powers, levers and policies available to the Welsh Government and Welsh public services to promote change in these determinants and ultimately in the Indicator.

Health is a devolved policy area in Wales. As such the Welsh Government has the power to determine its own health policies and strategies independent of the UK Government. The Welsh Government also has the power to propose laws related to health in Wales (Public Health Network Cymru, 2021a).

The overarching health strategy currently in place in Wales is **A healthier Wales: a long-term plan for health and social care.** This plan was set out by the Welsh Government in 2019 and *'sets out a long-term future vision of a 'whole system approach to health and social care', which is focussed on health and wellbeing, and on preventing illness'* (Welsh Government, 2019d, p. 3). It emphasises the importance of 'lifestyle factors' among adults and the children they care for and commits to a 'strong public health approach' to promote healthy behaviours (Welsh Government, 2019d, p. 7).

Public Health Network Cymru (2021) highlight that the nature of health and the number of determinants that influence health behaviours means that a range of policy areas beyond health are relevant to the development of effective health strategy and policy. Wider policy areas that can impact upon health which Welsh Government has considerable power over include education, skills, food, sport and recreation, housing, regeneration, environment and planning, transport, and some tax raising powers, including Land Transaction Tax and Landfill Disposals Tax, and partial control over income tax.

Annex 1 shows a list of recent and current Welsh Government policies with relevance to children's health behaviours.

Limitations on powers

While the Welsh Government has the power to determine its own health policy it does not have power over all of the policy areas and levers that can impact children's health behaviours.

In particular, the Welsh Government only has limited powers over social welfare or social security which limits its ability to address deprivation and inequality (in terms of finances and material resources) – an important influence on health and health behaviours. The tax raising powers of the Welsh Government are also limited. They have no control over VAT or the differential pricing of different foods.

Another related policy lever that is not available to the Welsh Government is control over employment rights. While employment rights may not appear to be directly related to child health, parental working rights and conditions can impact upon the health of their children (Heinrich, 2014). Employment rights can also impact on the health and health behaviours of older children who are in work in terms of their working conditions and the impact of work on physical and mental health (Blanquet, et al., 2017).

When considering the limits of Welsh Government powers it is important to note that healthy behaviours are influenced by a number of factors that operate over a range of scales from the individual to the local, national and even global. As such, it is clear that some of the factors that influence the health behaviour of children in Wales will always remain well beyond the control of Welsh Government and public services.

Baselines and trends

In order to consider a suitable National Milestone, it is necessary to understand the current 'direction of travel' in children's health behaviours and the pace and scale of change that has been seen previously in relation to this indicator.

Data on healthy lifestyle behaviours among children in Wales are collected every two years via the Student Health and Well-being Survey. The World Health Organisation's (WHO) international Health Behaviour of School-aged Children (HBSC) survey is now incorporated into the Student Health and Well-being Survey. The HBSC is conducted every four years and Wales has taken part since 1985.

The Student Health and Well-being and HBSC surveys are completed by children in secondary school years 7-11 in Wales. Children in these year groups are aged between 11 and 16 years old. As such the data that will be used to monitor progress against the healthy lifestyle behaviour Indicator and Milestone will directly relate only to this age group. However, given that health behaviours in early childhood are closely linked to health behaviours in later childhood and adolescence, it will provide an indirect indication of progress across children's health behaviours. It should be noted that the individual components of the child health behaviours Indicator (and other relevant behaviours) are captured in the Public Health Outcomes Framework for Wales produced by Public Health Wales wherein they are referred to as indictors of 'adolescent' health behaviours (Public Health Wales, 2016).

Since 2010 one HBSC survey (2013/14), one Student Health and Well-being survey including the HBSC (2017-18) and one Student Health and Well-being survey without the HBSC (2019/20) have been completed in Wales. The first of these was completed in 2013/14, prior to the introduction of the Well-being of Future Generations Act (Wales) 2015. While the 2013/14 data appears to be a logical baseline from which to compare progress, the small sample size of the 2013/14 dataset[6] means that comparisons of the data from 2013/14 with the later surveys should be treated with caution as the confidence intervals for 2013/14 and subsequent years overlap. The overlap in the confidence intervals means that any change seen between 2013/14 and subsequent years is likely to not be statistically significant and may

[6] The sample sizes were around 9,000 in 2013/14, 58,404 pupils in 2017/18 and 27,950 pupils in 2019/20.

not reflect real change in children's behaviours. As such, it can be argued that 2017/18 would be the better baseline from which to measure change. The following sections continue to use 2013/14 as a comparison year but highlight any issues caused by sample size where relevant.

Overall health behaviours

The HBSC survey 2013/14 found that 12% of children aged 11-16 in Wales had fewer than two healthy lifestyle behaviours (2% of children had no healthy behaviours and 10% had one). The largest proportion (46%) of children reported having two healthy lifestyle behaviours, followed by 36% who reported having three or more. Only 7% of children reported having all four of the healthy lifestyle behaviours.

The 2017/18 and 2019/20 data shows that the percentage of children with fewer than two healthy lifestyle behaviours has remained consistent at 12% since 2013/14.

Reframing the indicator to examine the proportion of children with three or more healthy behaviours appears to show different trends in this data. Using the reframed indicator shows that in 2013/14, 43% of children in Wales had three or more healthy lifestyle behaviours. This seemed to increase slightly to 45% in 2017/18 and again to 46% in 2019/20. However, due to the small sample size of the 2013/14 data the confidence intervals for 2013/14 and 2017/18 overlap. This means that this change is likely not statistically significant and may be due to chance rather than a real change in children's behaviours.

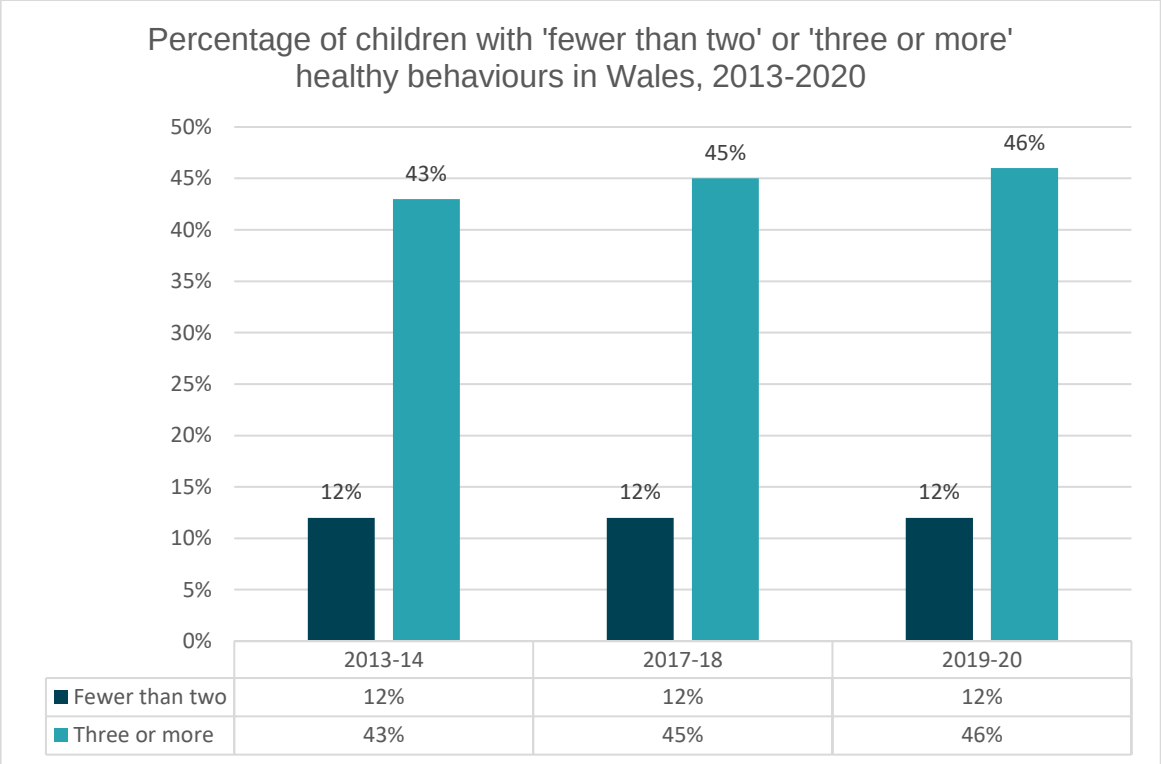

Figure 3 – Graph showing the percentage of children in Wales engaged in different numbers of healthy behaviours, 2013-2020

Gender

There was slight variation in the proportion of boys and girls engaging in fewer than two healthy lifestyle behaviours in 2013/14 – 13% of girls report having fewer than two healthy lifestyle behaviours compared to 11% of boys. There was no gendered difference in the proportion of children with fewer than two healthy lifestyle behaviours in 2017/18 (12% for both boys and girls).

If the reframed indicator is used there is a slight gender difference in the 2017/18 trend as a higher proportion of girls (46%) reported having three or more healthy lifestyle behaviours than boys (44%).

There was no gender difference in percentage of children (43%) meeting the three or more standard in 2013/14.

Age

The percentage of children with fewer than two healthy lifestyle behaviours increased with increasing age/year group; older children were less likely to report healthy behaviours than younger children.

In 2013/14, just 2% of year 7 pupils (11–12-year-olds) reported having fewer than two healthy behaviours. This increased to 4% of year 8 pupils (12-13-year-olds), 9% of year 9 pupils (13-14-year-olds) and 16% of year 10 pupils (14-15-year-olds). The highest proportion of pupils with fewer than two healthy lifestyle behaviours were year 11 pupils (15-16-year-olds) at 27%.

The same pattern as 2013/14 was present in the proportion of pupils in each year group reporting fewer than two healthy lifestyle behaviours in 2017/18. Again, year 7 had the lowest proportion of pupils reporting fewer than two healthy lifestyle behaviours (3%). This increased to 5% of year 8 pupils, 10% of year 9 pupils and 19% of year 10 pupils. Again, year 11 was the group with the highest proportion of pupils (28%) reporting fewer than two healthy lifestyle behaviours. Compared to 2013/14 there was a very slight increase in the proportion of pupils (in terms of percentage points) reporting fewer than two healthy behaviours across all year groups.

The reverse pattern is seen if the reframed three or more indicator is used to examine trends related to age. In 2013/14 the highest proportion of children reporting three or more healthy lifestyle behaviours were year 7 pupils (54%) with the lowest proportion being 27% among year 11 pupils.

The same pattern is seen when the reframed indicator is used for 2017/18. Year 7 again had the highest proportion of pupils reporting three or more healthy lifestyle behaviours (59%), followed by 53% of year 8 pupils, 45% of year 9 pupils, 35% of year 10 pupils and only 28% of year 11 pupils. Again, compared to 2013/14, there was a slight increase in the proportion of pupils reporting three or more healthy behaviours (in terms of percentage points).

Family affluence

In 2013/14 there was a slight variation in the proportion of children reporting having fewer than two heathy lifestyle behaviours when they were classified by family affluence level[7]. Only 10% of children who are categorised as having ‘low family affluence’ reported having fewer than two healthy lifestyle behaviours compared to 13% of children with ‘medium family affluence’ and 12% of children with ‘high family affluence’.

There appears to be some change in the trend related to family affluence levels between 2013/14 and 2017/18. The proportion of children categorised as having ‘low family affluence’ who had fewer than two healthy lifestyle behaviours increased from 10% in 2013/14 to 14% in 2017/18. However, once again, this may not reflect real change in behaviours and might instead be a product of the small sample size in 2013/14. There was no change in the proportion of children with fewer than two healthy lifestyle behaviours in the medium and high family affluence categories.

There appears to be a clearer trend when the reframed indicator is applied to the data pertaining to family affluence. In 2013/14, 37% of children with ‘low family affluence’ had three or more healthy lifestyle behaviours, compared to 39% of those with medium affluence and 45% of those with high affluence. In 2017/18 there was a change in the trend across all three categories. The proportion of children with ‘low family affluence’ with three or more healthy lifestyle behaviours seemed to decrease

[7] ‘The HBSC survey uses the Family Affluence Scale (FAS) to categorise children by their socioeconomic status. Families are categorised as having low, medium or high affluence based on family ownership of a set selection of material resources (Hartley, et al., 2016).

from 37% in 2013/14 to 35% in 2017/18 – however this could be a product of the sample size issue. The proportion of children with three or more healthy lifestyle behaviours increased for the other family affluence categories, from 39% to 41% among children with 'medium family affluence' and from 45% to 50% among children with 'high family affluence'.

Trends in specific health behaviours

For 2017/18 and 2019/20 data is available which shows the proportion of children engaging in each healthy lifestyle behaviour. This is shown in the table below.

Healthy lifestyle behaviour	2017/18	2019/20
Never smoked	95%	94%
Never/rarely drink alcohol	80%	81%
Meet daily physical activity guidelines	18%	18%
Eat 5+ portions of fruit/veg daily	46%	48%

The data on the specific lifestyle behaviours shows that a very high proportion of children are avoiding the negative lifestyle behaviours of smoking and drinking. However, the uptake of the more positive behaviours – meeting physical activity guidelines and eating at least five portions of fruit and/or vegetables daily – is much lower. It is important to note here that there has been some criticism of the 'never smoked' and 'never/rarely drink alcohol' measures as, particularly for younger age groups, these are not a marker of healthy behaviour per se but rather the avoidance of unhealthy behaviours. It can also be argued that changes in uptake of healthy lifestyle behaviours between age groups (i.e. increase in proportion of children with fewer than two healthy behaviours as age increases) is more likely to be the result of changes in behaviours related to smoking or drinking as children get older rather than being due to change in key physical activity or diet related indicators as uptake of the two 'positive' behaviours are in general much lower than of the avoidance of negative behaviours (as shown in the table above).

Overall, the data currently available suggest that there has been little change in healthy lifestyle behaviours among children in Wales since 2013/14 and that the pace of possible change in children's health behaviours at a population level may well be slow, although a longer period of data collection would allow for further analysis and projection. The data shows that the percentage of children with multiple healthy behaviours decreases with age and that, in line with existing evidence on the determinants of health behaviours, there appears to be a correlation between affluence and increased healthy behaviours.

Utilising the reframed indicator currently being explored by the Welsh Government in conjunction with the current indicator appears to reveal a greater degree of change but further scrutiny of the data suggests that this could be due to the small sample size of the 2013/14 data and that any real change (in terms of both framings of the Indicator) is likely to have been very small. Any attempt to make changes to the indicator should be considered carefully and treated with caution as if only one framing is used the trends revealed by the other will inevitably be missed.

It is important to note the difficulty in interpreting these behaviours as a composite indicator. The impacts of each of these behaviours at their relevant threshold is very different which makes comparison of children's health based on the number of these behaviours they undertake challenging. For example, the impact of smoking at all is very different to the impact of eating four portions of fruit and vegetables each day rather than five, or of doing an hour of exercise five or six days a week instead of everyday. As such a general caution should be exercised in drawing conclusions about the health of children in Wales from the composite National Indicator and in drawing equivalencies between the different behaviours captured by it.

Impact of Coronavirus

As well as having limited powers to influence the determinants of children's health behaviours, there are also broader economic and social factors and circumstances outside of the direct control of the Welsh Government and Welsh public services' that are likely to affect trends in children's health behaviours. A key factor, for example, is the Coronavirus pandemic which began in early 2020 and is likely to influence the health of children in Wales for many years to come, although evidence in this area is only beginning to emerge and is limited.

Health impact of Coronavirus

Children have been identified as a group at low risk of becoming seriously ill if they contract Coronavirus and as such have low reported mortality from Coronavirus. However, there is growing concern about long Covid among children. Data from the Office of National Statistics shows that 13% of under 11s and about 15% of 12- to 16-year-olds in the UK who have had Coronavirus were still experiencing symptoms more than five weeks after having had a positive test for the virus (Office for National Statistics, 2021). The long-term health effects of the Coronavirus in children will require ongoing monitoring over the coming months and years as the effects of 'long Covid' may make engaging in healthy behaviours, like physical activity, more difficult. Services related to children's health and healthy lifestyle behaviours in Wales will need to maintain an awareness of this situation as it unfolds to plan the support that children in Wales will need as they recover from the pandemic.

In addition to the direct health effects of Coronavirus, and possibly more significantly in the longer-term, over the past year the pandemic and associated restrictions introduced as public health precautions have impacted upon the ability of children in Wales to engage in healthy behaviours.

Physical activity

Lockdown and restrictions on people's movements outside their homes limited children's ability to engage in physical activity and exercise. Throughout the pandemic there have been restrictions on children's sports activities and when children were not attending school they were less likely to be engaging in sports lessons and outdoor play activities with their peers. Sport Wales found that, overall, 33% of families reported a reduction in their children's physical activity as a result of the first lockdown in 2020, which is a net reduction in activity of 9 percentage points (Sport Wales, 2020).

This issue is most acute among children in households, which are likely to be lower affluence, that do not have access to outside space or indoor space where they can exercise. The reduction in physical activity was greatest among children from poorer socioeconomic backgrounds, with a net reduction in activity of 13 percentage points (Sport Wales, 2020).

In the short term a lack of opportunities to engage in physical activity can contribute to poor mental health and in the long-term can contribute to poor physical and mental health outcomes, especially if poor exercise habits are formed during childhood (Faculty of Sport and Exercise Medicine UK, 2018). However, further research is needed to understand the long-term impact of the pandemic on children's physical activity habits and levels.

Diet and healthy food

The Coronavirus pandemic has had a negative impact on child nutrition for many families. Just under 10% of families in Wales were food insecure[8] prior to the pandemic (Food Standards Agency, 2017). The economic pressures faced by many households where work has been lost coupled with the added pressure of children spending more time at home has put many more families at risk of food insecurity as

[8] Food insecurity is experienced when people have "limited access to food … due to lack of money or other resources." (UK Parliament, 2019)

the pandemic has progressed (Resolution Foundation, 2021). The Trussell Trust provided more than 54,000 food parcels to families with children in Wales between April 2020 and March 2021. This represents an 8% increase in demand from 2019-20 (Bevan Foundation, 2021).

The Food and Agriculture Organisation of the United Nations (2020) highlights that food insecurity can impact diet in different ways. Being food insecure is not always about having insufficient food but rather can relate to only being able to access poor quality food with poor nutritional value. As such food insecurity 'can affect diet quality in different ways, potentially leading to undernutrition as well as overweight and obesity' (Food and Agriculture Organisation of the United Nations, 2020). Surveys conducted during the pandemic suggest that there has been an increase in the consumption of poor-quality foods such as snacks and junk foods amongst vulnerable families in the UK (Baranuik, 2020; Humanium, 2020). Studies have highlighted the connections between the pandemic and 'overnutrition' of vulnerable children which, when combined with the reduction in physical activity children are experiencing due to public health restrictions, increases the risk of obesity and related health issues in both the short and long term (Zemrani, et al., 2021).

School closures have contributed to food insecurity for children who are in receipt of Free School Meals (FSM), despite Welsh Government support for these families (Bevan Foundation, 2020). UNICEF (2020) highlights a lack of adequate cooking facilities and the relatively low value of the support given to FSM children (£3 per day) as key barriers faced by parents trying to provide nutritious meals for their children during the pandemic.

Demand for foodbank services have increased rapidly during the pandemic as many families faced a rapid drop in income. The Trussell Trust (2020) highlight that families with children have been the hardest hit by the pandemic in terms of food insecurity. Data from the Trust shows that, across the UK, there was a 95% increase[9] in food parcels given out to families with children during the pandemic (The Trussell Trust, 2020).

In the short-term many families are at risk of not being able to provide a nutritious diet for their children, while the longer-term health ramifications of the food insecurity brought about by the pandemic are not yet clear.

Negative lifestyle behaviours

Children have spent far more time in their homes during the Coronavirus pandemic as the country was under lockdown and schools remained closed as a public health measure. While for some children this has removed them from situations where they might have been pressured by their peers to engage in unhealthy lifestyle behaviours such as drinking and smoking, for other children more time spent at home may increase their exposure to unhealthy lifestyle behaviours (UNICEF, 2020).

Children in homes with parents who smoke faced increased exposure to second-hand smoke during the pandemic. Similarly, children of parents who drink alcohol excessively faced greater exposure to this and the issues this can cause in the home (UNICEF, 2020).

However, there is currently limited data available on children's lifestyle behaviours as related to smoking and drinking during the pandemic.

Mental health, loneliness and isolation

One of the issues for child health and well-being highlighted throughout the pandemic has been the negative effect of lockdown and school closures on children's mental health (Mental Health Foundation, 2020). This is important given that there is some evidence that poorer mental health can be associated with poorer health behaviours among children (and visa versa) (Largerberg, 2005; Ahn, et al., 2018)).

[9] 95% increase in April 2020 compared to April 2019 (The Trussell Trust, 2020).

Many children (and their parents) have reported that the pandemic has negatively impacted their mental health, with many children highlighting that not being able to see their peers has left them feeling lonely and isolated – contributing to a decline in their mental health (YoungMinds, 2021). We also know that weak social networks are associated with poorer health behaviours among children (World Health Organisation Europe, 2016). There is a limited body of research on the risk factors which contribute to poor mental health outcomes from lockdown. However, the research that has been conducted thus far suggests that poverty and deprivation, additional educational needs and having a pre-existing mental health condition are all risk factors for mental health problems during the pandemic (UNICEF, 2020).

Poor mental health is known to impact on healthy behaviours in children. For example, children who have clinical depression have been shown to be 13 times more likely to smoke than their peers (Krans, 2018). A systematic review of studies of the links between diet and mental health has found that there is evidence for a link between a good diet and good mental health and vice versa (O'Neil, et al., 2014). The adverse effects of the pandemic on children's mental health is therefore likely to have had an impact levels of engagement in healthy behaviours.

For children with pre-existing mental health conditions, the pandemic has limited their ability to access medical and support services that could help them manage their condition. Some children lost access to support all together while others have switched to remote support (i.e., via telephone) which may create privacy issues if family are present in the home and can impact the effectiveness of support (YoungMinds, 2021).

UNICEF (2020) also highlights that the disruption of routines caused by school closures could have negative effects on the mental health of children already suffering from mental health conditions including eating disorders, anxiety and other mental health conditions. School is often a place of safety and respite for children who face a challenging home environment. The removal of this time away from the home presents a key challenge to these children's mental health and their ability to engage in healthy behaviours such as physical activity and healthy dietary habits (YoungMinds, 2021).

Many children also utilise sports as a method of managing their mental health and a means of preventing mental health decline. The closure of schools (and sports facilities) during the pandemic has limited children's ability to engage in physical activity leaving many children in Wales without this means of managing their mental health (Henderson, 2021).

The pandemic itself has also had a negative impact on the mental health of many children. Worry and anxiety about the pandemic, the safety of friends and family and the impact on the future are contributing to a decline in the mental health of many children as the pandemic continues (UNICEF, 2020; YoungMinds, 2021).

While the healthy lifestyle behaviour indicator does not currently capture mental health in children as part of its measurement, the pandemic has highlighted the importance of mental well-being as a key component of children's health.

Vulnerable children

The Coronavirus pandemic and the associated public health measures have led to most children spending far more time at home. This has placed the most vulnerable children in Wales at higher risk of abuse and exposure to harmful behaviours in the home. At the UK-level, child abuse related referrals from the NSPCC have increased by 79% during the pandemic (BBC News, 2020). Adverse Childhood Experiences (ACEs) are known to impact on health behaviours and have long-term detrimental impacts on physical and mental health outcomes (Centres for Disease Control and Prevention, 2019).

The NSPCC have highlighted that the Welsh Government will need to invest in long-term support to help children who have suffered from abuse and trauma during the pandemic (BBC News, 2020). UNICEF

(2020) also highlight that many children are likely to fall through the cracks as social services are both put under strain and limited by public health measures during the pandemic.

Early years development

The interruption to the delivery of early years services has been highlighted by health care professionals as an effect of the pandemic that is likely to have long-term impacts on children's health outcomes (Institute for Health Visiting, 2020; Nursing Times, 2021).

Lockdown restrictions have resulted in the closure of many parent and child groups and other services, such as healthy eating programmes, that would normally be utilised by parents of young children. As such the support received by these parents has reduced. They have been less able to spend time with other parents and their children have not been able to socialise with other children their age which is key to child development (Cornerstones Education, 2021). Health visitors and other professionals have also been less able to provide support for new parents with many services, such as breastfeeding support which is key to early nutrition, being provided remotely. The number of health visitors has also fallen during the pandemic as staff have been moved to provide frontline Coronavirus care (Nursing Times, 2020).

The Institute for Health Visiting (2020) highlights that the pandemic will have a long-term impact on children currently in the early years phase and that this is likely to be worse for children in deprived areas (BBC News, 2021). However, further research is needed to understand the extent to which the impact of the pandemic on early years development will impact on children's health behaviours and it will depend on the future trajectory of the pandemic.

Education

The Coronavirus pandemic led to most children in Wales shifting to home learning during periods of lockdown. While schools have now re-opened experts highlight that missed school-based education will have long-term education and health impacts for many children. The sections above have already discussed some of the health issues created by children being unable to attend school.

The effects of school closure will be significant for all children in Wales. However, some children are likely to be more badly affected than others. Children in low-income families who cannot afford the resources necessary to support at-home learning are more likely to fall behind their wealthier peers as are children whose parent are unable to support their learning due to low levels of parental educational attainment or a lack of English or Welsh language skills (UNICEF, 2020). The home environment can also impact upon children's ability to learn at home. Children who do not have a space in which to learn or who have to share this space are also more likely to fall behind (Wales Centre for Public Policy, 2021). Falling behind in school can have negative health outcomes in both the short and long-term. Children who fall behind may experience stress and anxiety because of this in the short-term and their long-term prospects may be harmed by poor educational achievement leading to physical and mental health issues later in life.

Another issue related to education that may have long-term impacts on children's health outcomes is the impact of alternative examinations. UNICEF (2020) and other third sector organisations highlight that alternative examinations based on predicted marks are known to disadvantage students in deprived areas and those who belong to minority groups, as well as those working to improve their marks to achieve better grades in their final exams. Again, poor educational attainment has both short and long-term implications for children's health behaviours and health more broadly. In this case, the stress and uncertainty of changes to important examinations can cause stress and anxiety for children worried about their future. While poor exam results can have long-term impacts on children's career opportunities and associated health behaviours and outcomes (Institute for Fiscal Studies, 2021).

Poverty and inequality

Coronavirus has also impacted on the financial security of many families in Wales. The pandemic has pushed many families into or near to poverty and has led to many families in Wales having to claim benefits for the first time. The number of Universal Credit claimants in Wales has increased by 82% since March 2020 (UK Parliament, 2021).

Deprivation and poverty are known to be key determinants of child health and health behaviours. A lack of family financial resources limits children's ability to engage in sporting activities, to obtain resources to support their learning, to access healthy foods and to engage in other healthy behaviours (World Health Organisation Europe, 2020). The Coronavirus pandemic has resulted in many more children in Wales facing these challenges. Whether or not this has a lasting impact is likely to depend largely on the long-term economic impact of the pandemic in Wales.

Key considerations for Milestone development

The evidence base reviewed suggests some key considerations for the development of a Milestone for healthy lifestyle behaviours in children. These include:

Indicator change

It is necessary to ensure that the right Indicator for children's healthy behaviours is set now in order to ensure that an appropriate National Milestone can be developed which reflects collective priorities for what 'success' in terms of children's healthy behaviours looks like. There are advantages and disadvantages presented by either the 'fewer than two healthy behaviours' option or the 'more than three healthy behaviours' option.

The 'more than three' option is more intuitive and accessible, in that it focuses on increasing desired outcomes. While it has potentially revealed a greater degree of behaviour change since 2013/14 compared with the 'fewer than two' option, this analysis should be treated with caution due to the sample size of the 2013/14 survey, related issues with confidence intervals, and the very small degree of change observed.

On the other hand, while the 'fewer than two' option is less intuitive and engaging, as it focuses on reducing the proportion of young people with one or no healthy behaviours, without stating this clearly in its wording and it can be interpreted as a double negative (which many people find difficult to understand). However, the advantage of this option is that it focuses attention on the children with the least healthy behaviours, which could help to reduce health inequality over the long-term.

Any changes to the Indicator should be made cautiously and with attention paid to the ways in which the Indicator is likely to focus attention on particular groups of children and health behaviours.

Pace of change

Data trends in children's overall healthy lifestyle behaviours at a population level since 2013/14 show either no or very gradual levels of change up to 2019/20. While this reflects a limited time-period, and only a fraction of the time we have to achieve the Milestone by 2050, it suggests that the pace of positive change which can be expected in this Indicator is likely to be gradual, albeit an ambitious Milestone may help to galvanise efforts to promote such change.

Coronavirus

While developing the Milestone it will be important to maintain an awareness of the many impacts that the Coronavirus pandemic has had (and may continue to have) on children's lives and health

behaviours. All public services will need to plan and address these impacts in order to minimise their long-term effects on current and future generations of school-age Welsh children.

The Milestone should therefore reflect the fact that progress towards the 'healthier Wales' goal in the coming years will be at least somewhat affected by Wales' Coronavirus recovery and that a 'healthier Wales' may look different in light of the pandemic and its lasting impacts. How far the pandemic will affect the health behaviours of children in the future will depend on many factors including the ongoing trajectory of the pandemic, the responses of the Welsh and UK Governments, and the resilience of children.

Type of Milestone

There are multiple options for the type of Milestone which could be set in relation to children's health behaviours. In this work, we have not had time to adequately assess the merits of different potential approaches. However, there are two broad ways in which a Milestone could measure 'progress':

1. **Comparison with a 'comparable' country/area or basket of countries/areas**. The uncertainty around the impact of the pandemic is one argument in favour of a Milestone which compares progress in Wales with progress in other comparable countries (or areas) as this would go some way to controlling for macro social and economic shifts and events (such as the pandemic or economic crises) which are unpredictable and partially outside of the control of the Welsh Government. For instance, this type of Milestone could frame continuity or even deterioration of children's health behaviours as a 'success' if Wales' trends compared favourably to other countries by 2050, although such an approach may reduce 'buy in' among various stakeholders, not least the public, who are understandably likely to want to see progress.

2. **'Point to point' comparison**. There are inevitably limitations in the extent to which any other country, including other UK nations can be considered 'comparable' with Wales, both in terms of baseline social and economic conditions or 'starting points', and in terms of governance arrangements and policy levers. On this basis, it could be considered most appropriate to take a 'point to point' approach which compare Wales 'against itself', from 2013/14 to 2050. This approach might be most intuitive and meaningful in terms of framing the ambition in terms of improving the situation in Wales over time.

For any type of Milestone, it would be beneficial to include interim targets and supporting analysis to support progress towards to main Milestone target. Setting such interim targets would help to operationalise the 2050 Milestone, and to encourage early and ongoing monitoring and buy-in. For example, interim targets could be set every five or ten years. Setting any early interim goals at a relatively low and achievable level may help secure buy-in and momentum early on.

Adult healthy behaviours

While the focus of this paper has been child healthy behaviours, it is important to note that adult healthy behaviour inform and are informed by child healthy behaviours. Adult healthy behaviours share many of the same determinants as child healthy behaviours, though their importance changes across different age groups, so generating improvements for families in these areas (for example by reducing deprivation or improving housing) will support increased engagement in healthy lifestyle behaviours for the whole household.

As noted above, the behaviours we form as children (often under the guidance of our parents) often influence the behaviours we engage in for the rest of our lives. As such it is important that the child healthy behaviour milestone is complemented by a suitable accompanying milestone for adults so that these goals can work in tandem to improve healthy lifestyle behaviours across the generations and for future generations to come.

Longevity of the Milestone

The analysis presented here should be considered with a note of caution on the longevity of the Milestone. The children who will be the generation through whom progress against the Milestone will be measured will not be born for at least another 20 years. As such, while it is important to consider issues arising from the Coronavirus pandemic and to conduct analysis of small year on year variation at this stage of Milestone development, it is likely that the short-term issues discussed in this paper will be less relevant as the Milestone date of 2050 draws nearer and longer-term trends in the longitudinal data become clear.

Further research

This paper has demonstrated the need for further research in this area to support the development, implementation and governance of the Milestone and associated interventions. Examples of such research needs include:

- Examination of the levers and interventions that could generate behavioural change within the timescales associated with the Milestone, including both the main Milestone target and any interim targets associated with it. Further research of this kind is needed in relation to both generic determinants and also those specific to each behaviour being measured.

- Identification of examples of long-term changes in any nation relating to constituent components of the National Indicator measure or similar behaviours.

- Further research to increase understanding of the nature of constituent elements of the composite indicator at different age groups. For example, understanding the distribution of fruit & veg intake/physical activity between different age groups within the overall group ‘children’ (in relation to thresholds of 5 a day/7 days of 1 hour), and what shifts in these might be needed to achieve change in composite indicators to meet any milestone.

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Annex 1: List of Welsh Government policies related to children's health behaviours

The following list provides a non-exhaustive overview of some key policies and policy approaches in Wales related to children's health and health behaviours.

Health-related policies and strategies

The overarching health strategy currently in place in Wales is **A healthier Wales: a long-term plan for health and social care.** This plan was set out by the Welsh Government in 2019 and *'sets out a long-term future vision of a 'whole system approach to health and social care', which is focussed on health and wellbeing, and on preventing illness'.* (Welsh Government, 2019d, p. 3)

In addition to this long-term plan, some key health policies and programmes in Wales that relate to children and healthy lifestyle behaviours include:

Healthy Child Wales Programme (HCWP)

The Healthy Child Wales programme, introduced in 2016, outlines how the Welsh Government supports the health and welfare of children from conception up to age seven. The programme encourages partnership working between key actors including maternity services, health boards, education providers, the third sector and communities in recognition that many actors contribute to and influence child health and well-being. The HCWP sets out the key contacts and interactions that children and their families should expect from their health board up until age seven. Three areas of health board intervention are covered by the HCWP - screening; immunisation; and monitoring and supporting child development (surveillance) (Welsh Government, 2016).

The health of children in Wales is also addressed by a number of sub-national plans implemented by local governance actors including Local Area Development Plans which are developed and implemented by local authorities and the Well-being Plans of Public Services Boards which were brought into existence by the Well-being of Future Generations Act (Wales) 2015. Many of the current well-being plans include healthy start in life (or a variant of this) as a key aim.

Healthy Weight, Healthy Wales

Introduced in 2019, this is the Welsh Government's strategy to reduce and prevent obesity, including among children. This plan consists of four national themes, each with goals to be met by 2030, and consists of five plans delivered over two-year cycles between 2020 and 2030. The current cycle has been disrupted by the Coronavirus pandemic (Welsh Government, 2019c).

Tobacco Control Action Plan (TCAP)

Introduced in 2012, this plan ran until the end of 2020 and had the overall aim of reducing adult smoking levels to 16% by 2020, including preventing the uptake of smoking among children and young people. The plan's interim target of 20% smoking prevalence among adults by 2016 was met ahead of schedule. The TCAP had four action areas and was supported in its implementation by the Tobacco Control Strategic Board which was established in 2016 and a Tobacco Control Delivery Plan which covered the period 2017-2020 (Welsh Government, 2017).

Public Health (Minimum Price for Alcohol) (Wales) Act 2018

The Welsh Government is able to set a minimum price for alcohol under the Public Health (Minimum Price for Alcohol) (Wales) Act 2018. In March of 2020 Wales introduced Minimum Unit Pricing on alcohol which requires retailers to charge at least 50p per unit of alcohol in their products. This is intended to discourage people, including young people, from engaging in unhealthy drinking behaviours (BBC News, 2020). The Welsh Government also has control over the enforcement of age of sale and alcohol availability regulations in Wales.

Policy approaches

Health in All Policies

It should also be noted that the Well-being of Future Generations Act (Wales) 2015 encourages a Health in All Policies (HiAP) approach. HiAP is an approach to policy-making and governance which acknowledges that health is impacted by all areas of life and has various social determinants which lie outside the purview of health policy (Public Health Network Cymru, 2019).

The HiAP approach encourages policy makers to (Public Health Network Cymru, 2019):

- Acknowledge and consider the health implications of the decisions they make in all policy areas.
- Seek out synergies between health objectives and the objectives of policy in other areas.
- Target the social determinants of health in policymaking in all areas.
- Avoid causing harm to health outcomes through active consideration of the health implications of all policies.
- Seek to reduce health inequalities through all policymaking.

As can be seen in the new Welsh curriculum and the Future Wales plan above, health objectives are being woven into some wider policies and strategies.

Making Every Contact Count

The Making Every Contact Count (MECC) approach to behaviour change is being promoted among health and care services (and their partner organisations) in Wales. This approach 'enables health and care workers to engage people in conversations about improving their health by addressing risk factors such as alcohol, diet, physical activity, smoking and mental wellbeing. (Public Health Network Cymru, 2021b)'

It encourages health and social care workers to recognise the importance of each contact they have with individuals, including children, and to use these interactions to support healthy lifestyle behaviours and choices. Public Health Network Cymru (2021) highlight that MECC should not be viewed as a public health initiative but instead should be something that all service providers engage in. They suggest that doing so 'will allow us to move to a position where discussion of lifestyle and wellbeing is routine, non-judgemental and integral to everyone's professional and social responsibility' (Public Health Network Cymru, 2021b). In this way the MECC approach can support healthy lifestyle behaviours across all aspects of life.

Other relevant policies and policy areas

As highlighted at the start of this section, health and healthy behaviours are also affected by factors and policy areas outside health policy. Key policy areas that impact upon health and its determinants include income security and social protection policies, living condition policies, social and human capital policies, and employment and working conditions policies.

Some key policies and interventions in Wales that influence child health and its determinants but are not themselves health specific include:

Future Wales: The National Plan 2040

The Future Wales plan is the national development plan for Wales which runs until 2040. This plan influences all levels of planning and development in Wales and aims to support the healthier Wales goal of the Well-being of Future Generations Act (Wales) 2015, and the increase extent to which the built environment and neighbourhoods enable health behaviours (Welsh Government, 2021a).

Active Travel Act 2013

The Active Travel Act, which was introduced in 2013, aims to promote active travel in Wales and to 'make active travel the most attractive option for shorter journeys'. It requires local authorities to support active travel, including among children and young people, by continuously improving active travel routes and facilities. This legislation and the action it requires local authorities to take aims to support active travel to school among children in Wales – encouraging daily physical activity (Welsh Government, 2014).

Curriculum and Assessment (Wales) Act 2021

On 29th April 2021, the Curriculum and Assessment (Wales) Act 2021 became law. This Act provides a framework which supports the development and implementation of a new Welsh curriculum and assessment framework. The new curriculum in Wales will be rolled out from September 2022. It includes healthy individuals as a key goal and will allow schools in Wales to promote healthy lifestyle behaviours among children in Wales in ways that are most relevant to them and their communities (Welsh Government, 2021b).

As already noted, there are many more policies that can and do influence child health and lifestyle and its determinants in Wales that are not explored here.

About the Wales Centre for Public Policy

Here at the Centre, we collaborate with leading policy experts to provide ministers, the civil service and Welsh public services with high quality evidence and independent advice that helps them to improve policy decisions and outcomes.

Funded by the Economic and Social Research Council and Welsh Government, the Centre is based at Cardiff University and a member of the UK's What Works Network.

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