

Equality & Health Impact Assessment for

CARDIFF AND VALE OF GLAMORGAN MOVE MORE, EAT WELL PLAN

1.	For service change, provide the title of the Project Outline Document or Business Case and Reference Number	Move More, Eat Well Plan
2.	Name of Clinical Board / Corporate Directorate and title of lead member of staff, including contact details	Public Health Consultant in Public Health Medicine Suzanne.wood@wales.nhs.uk Principal Public Health Practitioner Rebecca.stewart@wales.nhs.uk
3.	Objectives of strategy/ policy/ plan/ procedure/ service	The vision of the Move More, Eat Well Plan is: People in Cardiff and the Vale of Glamorgan will move more and eat well.
4.	Evidence and background information considered. For example <ul style="list-style-type: none"> • population data • staff and service users data, as applicable • needs assessment • engagement and involvement findings • research • good practice guidelines • participant knowledge • list of stakeholders and how stakeholders have engaged in the development stages 	For the quantitative sections, analyses were conducted from known sources such as the National Child Measurement Programme and the National Survey for Wales by demographic groups where possible. For the qualitative sections, a search was conducted in Google for systematic reviews on each health and equality strand during February 2021, from 2015 to February 2021. A summary for the search terms is provided in the Appendix 1. <u>Equalities strands</u> 1 Age Quantitative

<ul style="list-style-type: none"> • comments from those involved in the designing and development stages <p>Population pyramids are available from Public Health Wales Observatory¹ and the UHB's 'Shaping Our Future Wellbeing' Strategy provides an overview of health need².</p>	<p>In Wales, for children, there is currently only the reception year national child measurement programme. Whereas in England there is an additional measurement programme in Year 6.</p> <p>In Cardiff and Vale of Glamorgan, the current level of obesity is 9.3% in reception year children (2017/18), which is the lowest in Wales, according to the national child measurement programme. In England (2017/18), the national average of Obesity prevalence (including severe obesity) was more than twice as high in year 6 (20.1% which equates to 116,134 children) compared to reception (9.5%, 58,196 children). This implies that at least in children obesity is currently increasing between these two age groups, assuming that the Wales/Cardiff and Vale picture is similar.</p> <p>In adults, obesity continues to increase to middle age at 29% (45-64), and then decreases in older age to 20% in Wales (65+), according to results from the national survey for Wales (2018/19).</p> <p>Qualitative</p> <ul style="list-style-type: none"> • Interventions that included diet and physical activity elements can reduce the risk of obesity in children aged 0-5 years. But interventions that focused only on physical activity were not effective (Brown, 2019) • By contrast, interventions that focused only on physical activity reduced the risk of obesity (BMI) in children aged 6 to 12 years, and adolescents aged 13 to 18 years. In these age groups, there was no evidence that interventions focussed only on diet were effective, and some evidence that diet combined with physical activity interventions may be effective. (Brown, 2019) • Interventions with periods of time greater than six months in duration (nine reviews), and parental involvement in the content and/or planned actions (six reviews) were identified as the most frequent and effective
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¹ <http://nww2.nphs.wales.nhs.uk:8080/PubHObservatoryProjDocs.nsf>

² <http://www.cardiffandvaleuhb.wales.nhs.uk/the-challenges-we-face>

recommendations. Additionally, it was observed that boys respond more effectively to structural interventions, whereas girls respond to behavioral interventions (Guerra, et al., 2016)

- In trials comparing a multicomponent intervention with usual care, enhanced usual care, or information control, we found a greater reduction in body mass index (BMI) z score in the intervention groups at the end of the intervention (6 to 12 months): mean difference (MD) -0.3 units (95% confidence interval (CI) -0.4 to -0.2); $P < 0.00001$; 210 participants; 4 trials; low-quality evidence, at 12 to 18 months' follow-up: MD -0.4 units (95% CI -0.6 to -0.2); $P = 0.0001$; 202 participants; 4 trials; low-quality evidence, and at 2 years' follow-up: MD -0.3 units (95% CI -0.4 to -0.1); 96 participants; 1 trial; low-quality evidence. (Colquitt, et al., 2016)
- The mean difference (MD) of the change in BMI at the longest follow-up period in favour of Behaviour change intervention (BCI) was -1.18 kg/m^2 (95% confidence interval (CI) -1.67 to -0.69); 2774 participants; 28 trials; low quality evidence. BCI lowered the change in BMI z score by -0.13 units (95% CI -0.21 to -0.05); 2399 participants; 20 trials; low quality evidence. BCI lowered body weight by -3.67 kg (95% CI -5.21 to -2.13); 1993 participants; 20 trials; moderate quality evidence. The effect on weight measures persisted in trials with 18 to 24 months' follow-up for both BMI (MD -1.49 kg/m^2 (95% CI -2.56 to -0.41); 760 participants; 6 trials and BMI z score MD -0.34 (95% CI -0.66 to -0.02); 602 participants; 5 trials).
- There was a strong positive association between high childhood BMI and adult obesity [odds ratio 5.21, 95% confidence interval (CI) 4.50 to 6.02]. A positive association was found between high childhood BMI and adult coronary heart disease, diabetes and a range of cancers, but not stroke or breast cancer. (Simmonds, et al., 2015).
- Physical inactivity levels increase with age (ONS, 2017).

2. Persons with a disability as defined in the Equality Act 2010

Quantitative

There is a strong relationship between obesity and type 2 diabetes. The number of people in Cardiff and the Vale of Glamorgan with diabetes is: 26,089 people aged over 17 (Source: GP contract), which is 5.0 per cent of the population. There are no other related disability indicators in routine data sets.

Qualitative

- Diabetes associated with obesity, is a massive and a growing threat to public health. The susceptibility of diabetes is 80 times greater among obese adults than non-obese adults. (Agha & Agha, 2017).
- The consequences associated with diabetes include: congestive heart disease, blindness, kidney failure, stroke, osteoarthritis, leg ulcers, and limb amputation. (Agha & Agha, 2017). Therefore, obesity in itself causes disability through the manifestation of diabetes.
- Emotional and psychological problems due to obesity is a massive public health problem. This results in lower self-esteem, anxiety, clinical depression, and suicidal attempts in extreme cases. Obese people are 3–4 times more likely to be depressed than non-obese people. Obese women are 37% more likely to commit suicide. The emotional damage caused by obesity results in binge-eating, low confidence, social isolation, and humiliation (Agha & Agha, 2017).

3. People of different genders

Quantitative

According to the Child Measurement Programme results for 2017/18 in Cardiff and Vale of Glamorgan, boys (20.7%) were slightly less overweight/obese than girls (21.6%) at reception year (age 4 to 5).

This pattern switches over in adulthood, with 66 per cent of males being overweight or obese and 52 percent of females being overweight or obese (2018/19 figures, from National Survey for Wales).

There are no routine datasets examining transgender people and their BMI levels.

Qualitative

- 67% of people admitted to hospital in 2015/16 in England with a primary or secondary diagnosis of obesity were female. (ONS, 2017). However, males are more likely to be overweight or obese.
- Over $\frac{3}{4}$ of people who had bariatric surgery in England were female in 2015/16. (ONS, 2017).
- Females (27%) in England are more likely to be inactive than males (24%).
- An American study showed that compared with women, overweight and obese men were less likely to have accurate weight perception (odds ratio [OR] = 0.36; 95% confidence interval [CI] = 0.30–0.44), weight dissatisfaction (OR = 0.39; 95% CI = 0.32–0.47), and attempted weight loss (OR = 0.55; 95% CI = 0.48–0.63). The modifying effect of gender on these associations decreased as BMI increased. By BMI 35, the mean probability of women and men to have accurate weight perception and weight dissatisfaction was 90%; attempted weight loss was 60% (women) and 50% (men). At lower BMIs, men had up to 40% less probability than women for these weight loss outcomes. Men who attempted weight loss were more likely than women to lose and maintain ≥ 10 lb over 1 year (OR = 1.41; 95% CI = 1.20–1.65) and increase exercise and eat less fat as weight loss strategies; women were more likely to join weight loss programs, take prescription diet pills, and follow special diets. A need exists for male-specific interventions to improve overweight and obese men's likelihood for accurate weight perception, attempted weight loss, and ultimately, successful weight loss (Tsai, et al., 2015).
- The way the girl views her body can have a marked effect on her self-esteem and self-confidence, with childhood obesity resulting in a greater

		<p>level of psychological distress through into their adolescence and adulthood, and girls being more affected than boys (White, 2019).</p> <ul style="list-style-type: none"> • Nearly half (46%) of trans masculine patients report BMI in the obese range. (Keuroghlian, 2017) • Compared to non-transgender students, transgender students more likely to be either underweight or obese, and less likely to meet recommendations for strenuous physical activity, strengthening physical activity, and screen time (Vankim et al., 2014). (Keuroghlian, 2017) • Transgender students may need more targeted interventions to alleviate existing disparity and improve their long-term health. (Keuroghlian, 2017) • Providers need to deliver weight loss or weight gain messages that are sensitive to and affirming of gender needs and gender expression. (Keuroghlian, 2017) • Weight gain is a documented side effect in the transgender population among those undergoing hormone therapy. Although weight gain has been noted in both MtF and FtM individuals, the composition of the gained weight varies. Typically, in MtF transitions, body weight changes reflect an increase in body fat and decrease in lean body mass owing to feminizing hormones, whereas masculinizing hormones in FtM transitions appear to have the opposite effect (Rahman & Linsenmeyer, 2019). • When schools have positive and inclusive climates and anti-LBTQ harassment is low, all students report lower levels of depression and suicidality and LBT students are very similar to heterosexual students on measures of well-being (Birkett et al., 2009). By extension, when athletic programs and sport teams are bias-free and inclusive, all athletes have a greater likelihood of having positive sporting experiences and gaining the benefits of team sports (e.g., leadership skills, self-confidence, teamwork). (Tucker Center, 2018) <p>4. People who are married or have a civil partner</p> <p>Quantitative No routine datasets on obesity and marriage/civil partnership.</p>
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		<p>Qualitative Protective factors highlighted were: 1. single marital status against overweight (POR: [0.60 (0.38–0.96)]) and obesity (POR: 0.39 [0.16–0.84]) in men, 2. the fact to be widowed against overweight in women (POR: [0.30 (0.07–0.86)]), as well as a non European country of birth (POR: 0.49 [0.19–0.98]), tertiary level of education (POR: 0.34 [0.18–0.64]), moderate alcohol consumption (POR: 0.54 [0.36–0.90]). (Samouda, et al., 2018). This work therefore implies that those in a relationship were more likely to be overweight/obese.</p> <p>We found that when one partner changed to a healthier behavior (newly healthy), the other partner was more likely to make a positive health behavior change than if their partner remained unhealthy (weight loss: men 26% vs 10%, OR, 3.05 [1.96-4.74]; women 36% vs 15%, OR, 3.08 [1.98-4.80]) (Jackson, et al., 2015)</p> <p>5. Women who are expecting a baby, who are on a break from work after having a baby, or who are breastfeeding.</p> <p>Quantitative Data are collected by the midwifery team as to obesity levels in pregnant women, who are booked in.</p> <p>Qualitative Diet and physical activity based interventions during pregnancy reduce gestational weight gain and lower the odds of caesarean section. There is no evidence that effects differ across subgroups of women, which included: women’s body mass index, age, parity, ethnicity, and pre-existing medical condition; and secondarily on individual complications (International Weight Management in Pregnancy (i-WIP) Collaborative, 2017).</p> <p>In one qualitative study, personal, social and environmental factors affect food choices and PA behaviours. Pregnancy is a powerful stimulus for positive changes in food choices particularly. This change is driven by desire for</p>
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		<p>healthy pregnancy outcome, and is not intrinsically motivated. Healthy lifestyle interventions should aim to sustain positive changes beyond pregnancy through: empowerment, intrinsic motivation, family-centred approach, and behavioural goals (O'Brien, et al., 2017).</p> <p>Having the social opportunity to engage in physical activity was identified as an enabler; pregnant women suggested being active was easier when supported by their partners. Knowledge was a commonly reported barrier with women lacking information on safe activities during pregnancy and describing the information received from their midwife as 'limited'. Having the physical capability and physical opportunity to carry out physical activity were also identified as barriers; experiencing pain, a lack of time, having other children, and working prevented women from being active (Flannery, et al., 2018).</p> <p>A cohort study looking at birth to age 6 years, showed that 33% and 17.3% of children in the study were of excess weight and obesity, respectively. Univariate predictors of BMI in children aged 6 were as follows: pre-gestational maternal BMI (kg/m²) (R² = 0.127, p < 0.01); full breastfeeding (weeks) R² = -0.035, p < 0.01); infant weight gain (kg) (R² = 0.348, p < 0.01); and maternal alcohol consumption during pregnancy (g/day) (R² = 0.266, p < 0.01) at age 6. In the ordinal logistic regression, full breastfeeding was associated with a significant decrease in obesity -0.052 (95% CI, -0.10 to -0.003). The delay of bottle feeding introduction may have a protective effect against obesity at 6 years of age. Our findings reinforce the need for greater support of breastfeeding and to promote a healthy environment and antipoverty interventions during pregnancy and infancy, alongside other strategies for obesity prevention (Ortega-García, et al., 2018).</p> <p>6. People of a different race, nationality, colour, culture or ethnic origin including non-English speakers, gypsies/travellers, migrant workers</p> <p>Quantitative</p>
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		<p>According to the Child Measurement Programme, Welsh reception children of black ethnicity were significantly more likely to be obese at 17.2%, compared to the Welsh average of 12.1%. In contrast, when looking at overweight/obesity, South Asian reception year children were statistically significantly less likely to be overweight /obese at 21.9% versus the Welsh average of 26.4%.</p> <p>Results for overweight/obesity in adults are not available by race/ethnicity.</p> <p>Qualitative</p> <p>Disparities in prevalence of obesity in racial/ethnic minorities are apparent as early as the preschool years and factors including genetics, diet, physical activity, psychological factors, stress, income, and discrimination, among others, must be taken into consideration (Byrd, et al., 2018). Recent studies show that this disparity may exist because BMI may underestimate adiposity in Asian populations and concomitantly overestimate adiposity in African Americans (Byrd, et al., 2018).</p> <p>A study in the USA found that higher rates of obesity, represented by BMI were observed in Hispanic and non-Hispanic Black children. Gender did not affect obesity rates but higher levels of education of adult in households were directly related to healthy weight (Asieba, 2016).</p> <p>7. People with a religion or belief or with no religion or belief.</p> <p>Quantitative</p> <p>Data are not collected on religion/belief for either the Child Measurement Programme in Wales or the National Survey for Wales.</p> <p>Qualitative</p>
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There was very little research on religion and obesity/healthy weight, from a Western country perspective within the search strategy timeframe.

8. People who are attracted to people of opposite, same or both sexes

Quantitative

Data are not collected on sexual orientation for either the Child Measurement Programme or National Survey for Wales.

Qualitative

After adjusting for co-variates and allowing for between-study variation, women identifying as lesbian (OR =1.41, 95% CI: 1.16-1.72) or bisexual (OR=1.24, 95%CI: 1.03-1.48) were at increased risk of overweight/obesity as compared to heterosexual women. In contrast men identifying as gay were at a decreased risk (OR=0.72, 95% CI: 0.61, 0.85), as compared to heterosexual men (Semlyen, et al., 2020).

Studies indicate sexual minority females are more likely to be obese than their counterparts (Keuroghlian, 2017). In a study comparing lesbian and heterosexual sisters, lesbians had greater waist circumferences, waist-to-hip ratios, higher body-mass indices, and more extensive weight-cycling. (Fredriksen-Goldsen, et al., 2019).

Recent findings demonstrate an association between discrimination and overweight and obesity among lesbian-identified females (Keuroghlian, 2017)

Lesbian-identified females may engage in negative health behaviors, such as binge eating, to cope with discrimination (Keuroghlian, 2017)

In a qualitative study, lesbian-identified females mentioned that depression and minority stress interfere with ability to eat healthy and exercise (Keuroghlian, 2017)

Sexual minority females more likely to self-perceive as being of healthy weight or underweight despite being overweight or obese. (Keuroghlian, 2017) .

Gay-identified and heterosexual-identified MSM demonstrated similar CVD risk to exclusively heterosexual men, whereas bisexual-identified men had elevations in several risk factors, including obesity (Adjusted odds ratio 1.69, 95% CI = 1.02–2.72) (Caceres, et al., 2018).

Active People Survey data in England suggest that lesbian women have slightly higher levels of excess weight and that bisexual women have higher levels of healthy weight than heterosexual women. (PHE, 2018).

9. Welsh language

Quantitative

No data are collected as to the language of people who undergo the Child Measurement Programme or National Survey for Wales, and their levels of obesity.

Qualitative

There was a consistent view from stakeholders that to drive quality improvement, services should be provided in Welsh whenever and wherever service users required. Respondents reported variation in the availability and standard of Welsh language services in health and social care. This matters in the context of international evidence, which emphasises the importance of communicating in one's first language with health and care professionals. It is especially true for elderly people, those with dementia or who have experienced a stroke, and young children who only speak Welsh. The challenges of recruiting and retaining health and care staff that can work confidently in Welsh is set within the context of broader recruitment and retention challenges in many parts of the workforce. 'More than just words' is a strong framework that has been put in place by the Welsh Government to guide greater availability of public services in Welsh. Despite this, recruitment campaigns, and the availability of Welsh language training in health and social

care, we note that a concerted effort is needed to increase welsh language skills in the workforce (OGL, 2017).

10. Income group

Quantitative

There are no data on income group per se, only on areas of deprivation. What has been shown is that those in more deprived quintiles are around twice as likely to be obese as compared to those in the least deprived quintile.

Qualitative

In a US study, lower family income (vs higher) was associated with lower fitness score (coefficient = -0.57 ; 95% confidence interval [CI], -0.62 to -0.53). Lower-income children had higher prevalence of obesity (relative risk = 1.81 ; 95% CI, $1.72-1.89$) compared with higher-income children (Jin & Jones-Smith, 2015).

The association between stress in early life and obesity and overweight in adulthood is well established. There is also increasing evidence of a link between stress exposure in childhood (or in utero) and child and adolescent obesity. Major sources of early life stress include adverse childhood experiences (e.g., abuse), poverty, food insecurity, and poor relationships with primary caregivers. Exposure to chronic and acute early life stressors can disrupt the biological stress regulation system, change the structure of regions of the brain responsible for emotion regulation and other important tasks, and promote obesogenic eating behaviour and dietary patterns, as well as lifestyle factors (e.g., poor sleep, low physical activity) that may increase obesity risk (Healthy Eating Research, 2017).

In the Health Survey for England Report (2015 data), the proportion of children classified as obese or overweight was higher in lower income households. Twice as many children living in the lowest income quintile were obese compared to those living in the highest income quintile (18% and 9% respectively) (Office for National Statistics, 2016).

Relatedly, people living in the most deprived communities in New Zealand are significantly more likely to be obese than people living in the least deprived communities (as is the case in most high-income countries) (Ministry of Health, 2013). A review by Drewnowski (2009) indicates that inequitable access to healthy foods (as determined by socioeconomic factors) means that energy-dense and nutrient-poor foods become the best way to provide daily calories at an affordable cost for low-income groups, whereas nutrient-rich foods and high-quality diets are consumed by more affluent groups. Physical activity is also influenced by socioeconomic position (SEP) and related factors such as a lack of leisure time, illness or disability, lack of money to access facilities and lack of transport (Chinn, White, Harland, Drinkwater, & Raybould, 1999). Therefore, weight loss interventions need to be both pro-equity and cost-effective and be readily available for providers to refer patients to (Canterbury District Health Board, 2015).

As part of the Millennium Cohort study, The unadjusted analyses revealed stark income inequalities in the risk of obesity at age 5 and 11. At age 5, children in the bottom income quintile had 2.0 (95% CI: 1.4–2.8) increased relative risk of being obese whilst at age 11 they had 3.0 (95% CI: 2.0–4.5) increased risk compared to children in the top income quintile. Similar income inequalities in the risk of overweight emerged by age 11. Physical activity and diet were particularly important in explaining inequalities. Income inequalities in obesity and overweight widened significantly between age 5 and 11 and a similar set of risk factors protected against upward and promoted downward movements across weight categories (Goisis, et al., 2015).

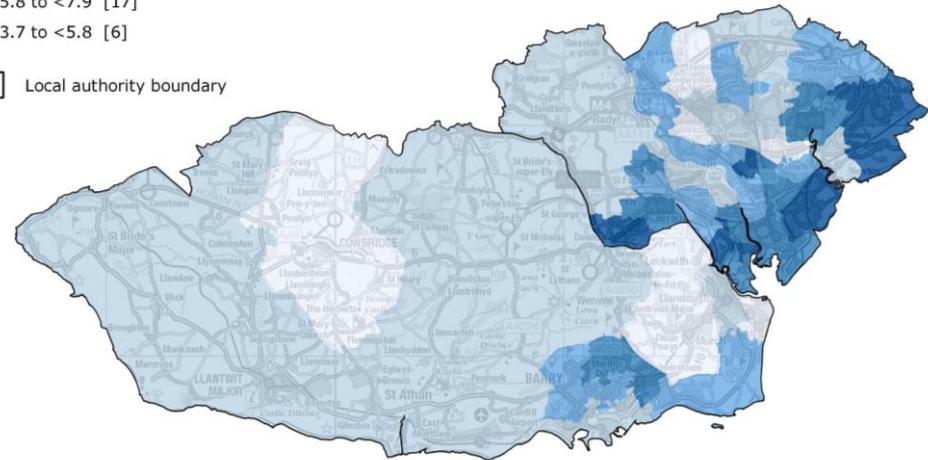
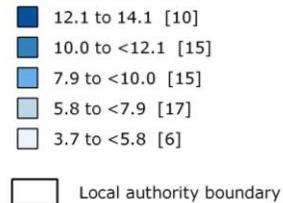
11. People according to where they live

Quantitative

Regarding areas of deprivation, maps produced by the Observatory show that the levels of obesity are higher in geographical areas of deprivation. This is demonstrated through the Child Measurement Programme results for Welsh children. See:

Percentage of children aged 4 to 5 years who are obese, Cardiff & Vale UHB, Child Measurement Programme for Wales 2013/14 - 2017/18

MSOA, percentage



Due to smaller sample sizes at MSOA level, caution should be taken when making comparisons between areas.

Produced by Public Health Wales Observatory, using CMP data (NWIS)
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Qualitative

The lower urban BMI in high-income and industrialized countries appears to reflect a growing rural economic and social disadvantage, including lower education and income, lower availability and higher price of healthy and fresh foods, less access to, and use of, public transport and walking than in cities, and limited availability of facilities for sports and recreational activity, which account for a significant share of overall physical activity in high-income and industrialized countries (Bixby & Bentham, 2019) .

However, the classification of the term rurality is not consistent in the literature, leading to differences in interpretation of association between rurality and obesity. The prevalence of obesity in older adults in United States was found to be highest in intermediate rurality areas (OR in rurality decile #5 1.134, 95% CI: 1.086-1.184) and lowest in the most rural and most urban areas (Cohen, et al., 2017).

Furthermore urban/rural differences in obesity are likely to be confounded by other factors. In the United States, a study in 2019 showed that obesity rates have been were highest and fruit consumption was lowest in the most rural areas. However, for older adults in the most urban areas, there was a significant negative association between obesity and fruit and green vegetable consumption. This association was not observed in more rural older adults (Cohen, et al., 2018).

Similarly, obesity was highest in low- and middle-income areas, regardless of rural-urban status. In high-income areas, obesity among older adults was highest in areas of intermediate rurality and lowest in the most rural areas (OR 0.726, 95% CI: 0.606-0.870) and more urban areas, showing a J-shaped association (Cohen, et al., 2017).

Studies have identified geographic variation in overweight and obesity rates among children, with higher rates of overweight and obesity often found among children living in rural compared to urban areas. A systematic review of childhood obesity in United States found obesity rates are higher among rural children than urban children: the meta-analysis of 74,168 pooled participants ages 2-19 found that rural children have 26% greater odds of obesity, compared to urban children (odds ratio=1.26; 95% confidence interval, 1.21-1.32) (Johnson & Johnson, 2015).

Health strands

1. People being able to access the service offered

Quantitative

There is an association between the density of fast food outlets and obesity with an R^2 of 0.54 (Public Health England, 2017); therefore, where it is easier to access fast food, obesity levels are higher.

Qualitative

Food outlets in low income areas can face particular barriers to offering healthier food and drink choices, such as highly competitive, price-sensitive markets, and a real or perceived lack of demand for healthier food and drink (Public Health England, 2017). Multiple factors, also create barriers to providing healthy options in smaller food establishments, which are also more likely to be local (Public Health England, 2017).

Planning policies can be used by local authorities to help promote healthier food and drink choices. The PHE toolkit outlines a number of suggestions for planning teams to create a healthier food environment such as ensuring shops and markets that sell a diverse food offer are easy to reach by walking, cycling or public transport (Public Health England, 2017)

Deprived neighbourhoods are, for example, the most obesogenic (i.e., encourage the consumption of unhealthy food and/or limit opportunities for physical activity). They have the highest concentration of fast-food outlets and provide the fewest opportunities for physical activity (e.g., being less walkable, limited access to self-contained gardens/yards, leisure facilities) (Noonan, 2018).

School food and physical activity initiatives are crucial in targeting population from all socio-economic groups. Interventions at vocational schools, as carried out in Denmark, specifically reach young people with a lower education (European Commission, 2020).

2. People being able to improve/maintain a healthy lifestyle

Quantitative

Current figures suggest that 56 percent of adults are either overweight or obese in Cardiff and the Vale of Glamorgan. (Stats Wales, Welsh Government, 2020). Figures from the same survey demonstrate that 31 per cent of Cardiff and Vale adults ate five or more fruit and veg a day, the highest in Wales; 57 per cent were active for at least 150 minutes in the previous week (Stats Wales, Welsh Government, 2020).

Qualitative

The purpose of the Move More, Eat Well Plan is for the citizens of Cardiff and Vale to obtain and maintain a healthy weight. Most of the evidence base from the Move More, Eat Well Plan has been taken from both the Healthy Weight, Healthy Wales strategy (Welsh Government, 2019), and the whole systems approach to obesity (Public Health England, 2019). Innovative ideas and concepts were taken from two workshops held in March 2019, from a broad range of stakeholders. This is available upon request.

3. People in terms of their income and employment status**Quantitative**

The ability to work, and therefore income and employment status is directly or indirectly related to having a healthy weight. Being overweight or obese means you are more likely to have musculo-skeletal problems, which affect the ability to work; obesity increases the risk of type 2 diabetes, cardiovascular disease and some cancers, and their complications also (Welsh Government, 2019). As mentioned above 56 per cent of the adult population are overweight or obese (Stats Wales, Welsh Government, 2020), therefore over half the population will be at an increased risk of all of the above conditions. All could potentially affect employment or income status.

Qualitative

In one study, unadjusted analyses revealed stark income inequalities in the risk of obesity at age 5 and 11. At age 5, children in the bottom income quintile had 2.0 (95% CI: 1.4–2.8) increased relative risk of being obese whilst at age

11 they had 3.0 (95% CI: 2.0–4.5) increased risk compared to children in the top income quintile (Goisis, et al., 2016).

The lower the household income, the greater the trend was towards being more obese, for both adult males and females in England (National Statistics, 2017). A recent journal article tested whether the association between income and obesity was through causation or reverse causality. A meta-analysis showed that the strongest direction was towards obesity causing lower income status (reverse causality). After adjusting for publication bias, the opposite direction of lower income status causing obesity, no longer held (Kim & von dem Knesebeck, 2018). One plausible reason for this is negative stereotyping and stigmatisation of obese people in the labour market (Kim & von dem Knesebeck, 2018).

In a further report, findings suggested that the following were risk factors for obesity: working patterns (such as night shifts); working more than 40 hour weeks; low control and low autonomy in work; and sedentary behaviour in the workplace. There are also links between obesity and unemployment (Bajorek & Bevan, 2019).

4. People in terms of their use of the physical environment

Quantitative

Offering price reductions and subsidies on healthier food and drink including financial discounts on purchasing fruit and vegetables is supported by moderate quality evidence of effectiveness. A meta- analysis of 9 study arms, 3 randomised control trials and 4 non-randomised interventional studies found 10% subsidies increased consumption of fruits and vegetables by 14% (95% CI 11 to 17%) (Afshil, et al., 2017). It is also acknowledged however, that whilst price reductions and subsidies are moderately effective in the short term, the long-term effectiveness of subsidies in influencing behaviour is unclear.

		<p>Supporting walking and cycling has been identified as a 'best buy' to increase physical activity levels estimated that living in an active friendly neighbourhood can provide between 32-59% of the 150 minutes of weekly physical activity that is recommended for good health (PHE, 2019). Although the evidence for multi component whole community interventions to promote cycling along with the introduction of cycle lanes on roads is not conclusive there is some evidence to show that they may be effective at promoting cycling. It is recognized that the impact is also likely to be greater for those living nearby (Bennie, et al., 2017).</p> <p>Qualitative Our environment influences our ability to be active and make healthy food choices (PHE, 2019). In recognition of this, the Move More Eat well plan includes 'Healthy Environments' and priority action areas relating to local development and planning, creating accessible outdoor spaces, restricting takeaways as well as creating supportive and safe environments.</p> <p>Safety and security are recognised as key factors influencing public use of outdoor spaces (Bishop & Arowobusoye, 2019). Use of parks is thought to be influenced by the specific features and condition of the park, access to it, aesthetics, safety and whether it offers a social environment. Similarly, safety and security, environmental aesthetics, social relations, convenience and efficiency are thought to influence peoples walking experiences.</p> <p>Access to green open spaces, opportunities to be active as well as the availability of local healthy, affordable food are associated with improved attitudes towards associated healthy behaviours and uptake as well as overall population health and wellbeing. The majority of the studies included in the recent systematic review by (Jia, et al., 2020) found a positive association between access to green space and physical activity, and a negative association between access to green space and childhood weight-related behaviours/outcomes. There is recognition however of the need for methods</p>
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		<p>of defining and measuring green space access to be improved in order to accurately estimate individuals' exposure to green space.</p> <p>Conversely where access is limited, there is likely to be a negative impact on population health and wellbeing with those living in more disadvantaged areas experiencing a disadvantaged level of adverse impacts (PHW, 2018). Increased access to unhealthier food retail outlets is associated with increased weight status and unhealthy eating behaviours among children particularly in low income areas (PHE, 2019). Findings from a recent systematic review suggests that the associations between food rather than built environmental factors may be more significant amongst children and adolescents (Mei, et al., 2020).</p> <p>The Move More, Eat Well plan recognises the specific support that communities with highest needs will need to be more physically active and to eat well</p> <p>Improving access to green infrastructure and spaces also contributes to reducing exposure to environmental hazards and air pollution. Air quality can be improved through establishing green infrastructure (open spaces, trees and hedgerows), promoting active travel and sustainable transport, providing a fully integrated transport system, developing well connected, active and social communities and through reducing traffic congestion and emissions (IHE, 2014). Recent evidence indicates that living in an area with clean air can lead to positive changes in people's health behaviours and is associated with increased physical activity among older adults (Bishop & Arowobusoye, 2019).</p> <p>5. People in terms of social and community influences on their health:</p> <p>Quantitative</p>
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Social interaction and enjoyment are recognised as key reasons for participating in sport or (leisure) physical activity for both children and adults. The systematic review conducted by (Smith, et al., 2017) acknowledges the positive association between social support for physical activity and physical activity levels. This is particularly pertinent to older adults with greater support to undertake physical activity, specifically from their family found to increase the likelihood of older adults being more generally physically active. Negative associations between loneliness and physical activity levels were also found, indicating that people who were lonelier had lower PA levels. There is some evidence to suggest that the PA levels of women are more likely than men to be influenced by general social support or loneliness with 'buddy' style interventions encouraging participants to exercise with a partner, associated with increased levels of physical activity.

Qualitative

Social relationships and in particular adequate social networks (in terms of quantity and quality) can be health promoting through providing individuals with; a sense of belonging, material support or increasing knowledge alongside influencing behaviour and enabling individuals to cope with stressors. There is recognition that the risk of an individual becoming socially isolated are across the different stages of the life course, from pregnancy through to retirement and later life) with particular at-risk groups more vulnerable depending on factors such as physical and mental health as well as social determinants. Those living in more deprived areas are more likely to lack adequate social support and their low income may reduce their ability to participate in social networks which also as a result, contribute to a lack of social support. The risk of social isolation that individuals with caring responsibilities has also been highlighted as the burden of care giving can result in low resistance to stressors, weight loss and physical inactivity which in turn increases the risk of social isolation (IHE, 2015).

The built environment can have a significant impact on whether or not a person becomes socially isolated. Poor transport and safe public places for

		<p>example affecting an individual's access to family, friends and services and therefore opportunities that help to build and maintain social relationships. Designing and planning the build environment to make public places safe and conducive to walking is likely to encourage social connectivity, strengthen social ties alongside enabling physical activity (IHE, 2015).</p> <p>There is some evidence that key messengers such as park managers play an important role in promoting and encouraging physical activity (Bishop & Arowobusoye, 2019). A single randomized controlled trial which investigated the effects of training and resourcing park managers to promote physical activity within urban green space was assessed by systematic reviewers as being of low risk of bias and showed a significant increase in physical activity and number of park users over the follow up period of 24 months (Hunter, et al., 2015).</p> <p>Personal motivation for change is thought to be fundamental to the adoption of desired behaviours. Key to this is the promotion of self-efficacy defined as the 'belief that an individual has the ability to successfully engage in a specific behaviour'. One of the behaviour change techniques correlating significantly with positive changes in self-efficacy highlighted by (Olander, 2013) is 'plan social support/social change'.</p> <p>6. People in terms of macro-economic, environmental and sustainability factors consider the impact of government policies, gross domestic product, economic development, biological diversity, climate:</p> <p>Quantitative</p> <p>Policy change in response to the pandemic and resulting national and local restrictions has impacted on health behaviours and choices. As more people have spent time at home and their movements restricted, consumption of foods and drink high in sugar fat and salt (e.g. Alcohol, savoury snack, sweet home cooking and take-home confectionary) as well as takeaway foods and</p>
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home deliveries has increased (PHE, 2020). The picture is mixed relating to physical activity. Whilst the evidence suggests that people have become more sedentary, and actual activity levels decreased, interest in activity is high (PHE, 2020).

The public engagement survey on health and well-being during coronavirus measures, 'How are we doing in Wales?' Conducted by Public Health Wales highlights some of the differences in behaviour relevant to the MMEW agenda from people across Wales. Their demographic report public in May 2020 provided some early findings from the weekly national telephone survey of adult Welsh residents. People living in deprivation (53%) were found to be more likely to be increasing their TV/Netflix viewing or gaming compared to those living in affluence (40%). Conversely, people in affluence were more likely to be increasing their level of exercise (27%) compared to the most deprived areas (19%) as well as, increasing time spent outdoors (41%); deprived areas (26%) (PHW, 2020)

Qualitative

Good quality and stable employment opportunities are vital for the health of individuals and communities. This is especially pertinent to young people. As Spending time not in employment, education or training (NEET) has been shown to have a detrimental effect on physical and mental health. This is due partly because of an increased likelihood of unemployment, low wages, or low quality work later on in life. Being NEET can also have an impact on healthy lifestyle behaviours including poor diets, being sedentary and excess weight (PHE, 2018). There is recognition that the workplace can play an important role in promoting health with significant workplace costs associated with obesity.

The concept of healthy sustainable diets has increasingly grown in importance Sustainable diets combine good nutrition and food security alongside low environmental impacts for present and future generations (Fanzo, 2019).

		<p>There is the risk that such diets can be environmentally stable and not healthy, or healthy and not environmentally stable. The linkages between food systems, diets, human health and the environment are complex and therefore to realise the co-benefits that sustainable diets can produce to be realised, the right balance between human and environmental health needs to be achieved (Fanzo, 2019). In addition, interventions that promote access to healthy sustainable diets need to allow for sustainable development for all and not inadvertently disadvantage low income households.</p> <p>The current COVID -19 pandemic has both short- and longer-term implications for population health and wellbeing. Excess weight is a recognised risk factor for COVID-19 with evidence suggesting its association with; an increased risk of developing COVID -19, hospitalisation, advanced levels of treatment and even death. Although evidence is still emerging, there is also some evidence to suggest that disparities in excess weight may explain some of the observed differences in outcomes linked to COVID-19 for older adults and some BAME groups (PHE, 2020).</p>
5	Who will be affected by the strategy/ policy/ plan/ procedure/ service	The vision of the Move More, Eat Well Plan is: People in Cardiff and the Vale of Glamorgan will move more and eat well the plan. As such, delivered in partnership and across PSB organisations, the plan has the potential to affect the whole population at both an individual as well as at an organisational level.

2 EQIA / How will the strategy, policy, plan, procedure and/or service impact on people?

Questions in this section relate to the impact on people on the basis of their 'protected characteristics'. Specific alignment with the 7 goals of the Well-being of Future Generations (Wales) Act 2015 is included against the relevant sections.

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
<p>6.1 Age For most purposes, the main categories are:</p> <ul style="list-style-type: none"> • under 18; • between 18 and 65; and • over 65 	<p><i>There was a strong positive association between high childhood BMI and adult obesity. A positive association was found between high childhood BMI and adult coronary heart disease, diabetes and a range of cancers, but not stroke or breast cancer. (Simmonds, et al., 2015). In adults, obesity continues to increase to middle age at 29% (45-64), and then decreases in older age to 20% in Wales (65+)</i></p>	<p><i>A life course approach is recommended</i></p>	<p>The MMEW plan incorporates action across the life course.</p> <p>Routine monitoring of data (National survey for Wales/ Child Measurement Programme) against the overarching outcomes of the plan will where available, be monitored by age category.</p>
<p>6.2 Persons with a disability as defined in the Equality Act 2010 Those with physical impairments, learning disability, sensory loss or impairment, mental health conditions, long-term medical conditions such as diabetes</p>	<p><i>Obese people are 3–4 times more likely to be depressed than non-obese.</i></p>	<p><i>Healthy weight service development should be multicomponent including diet, physical activity and behavioural support.</i></p> <p><i>Weight management services should consider the needs of persons with a disability</i></p>	<p>Through Healthy Weight Healthy Wales obesity pathway funding service development for children and adults will include psychological components.</p> <p>Following referral (self/professional) into weight management services, and as part</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
	<p><i>There is a strong relationship between obesity and type 2 diabetes.</i></p> <p><i>Accessibility to opportunities for physical activity may be an issue for those with physical impairments or long-term conditions. This may be exacerbated by issues accessing weight management services</i></p>	<p><i>Accessibility to opportunities for people with physical impairments or long-term conditions should be considered as part of service development</i></p>	<p>of the booking process, through a person-centred approach, the needs of individuals are considered. Services are designed to make them accessible for all through utilising accessible venues and virtual appointments. Disability levels tend to be higher amongst patients accessing level 3 weight management services. In this case, use of hospital transport/home visits can be made available if necessary.</p> <p>Pre-diabetes programme development is an identified action within the MMEW plan as part of priority area 10 'Healthy Weight Services'</p> <p>MMEW plan priority area 9 'Healthy communities' identifies action relating to increasing physical activity older people in communities with highest need.</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
			MMEW is funded through the Prevention and Early Years fund and is part of wider action. This includes localised enhancement of the National Exercise Referral Scheme (NERS). As part of the referral process for NERS, long term conditions are captured.
<p>6.3 People of different genders: Consider men, women, people undergoing gender reassignment</p> <p>NB Gender-reassignment is anyone who proposes to, starts, is going through or who has completed a process to change his or her gender with or without going through any medical procedures. Sometimes referred to as Trans or Transgender</p>	<p><i>Obesity can occur at all ages, with implications for a range of physical and mental health co-morbidities. For example, the way the girl views her body can have a marked effect on her self-esteem and self-confidence, with childhood obesity resulting in a greater level of psychological distress through into their adolescence and adulthood, and girls being more affected than boys.</i></p> <p><i>Weight gain is a documented side effect in the transgender population among those undergoing hormone therapy</i></p>	<p><i>Ensure that intervention design considers the needs of people of different genders.</i></p>	<p>From a behavioural insight perspective, and to further understanding of the factors pertinent to the ability of people of different genders to move more and eat well, consideration will be given to existing local insight. Where there are insight gaps, opportunities to gather further insight will be sought. Insight will be shared with partners to help inform intervention design aligned to actions across the plan.</p> <p>Routine monitoring of data (National survey for Wales/ Child Measurement Programme) against the overarching outcomes of the</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
		<p><i>Weight management services should consider the needs of people of different genders.</i></p>	<p>plan will where available, be monitored by gender.</p> <p>Following referral (self/professional) into weight management services, and as part of the booking process, through a person-centred approach, the needs of individuals are considered.</p>
<p>6.4 People who are married or who have a civil partner.</p>	<p><i>There are no routine datasets on obesity and marriage/civil partnership.</i></p>	<p><i>Potential exists in intervention design for exploiting research which found that when one partner changed to a healthier behavior (newly healthy), the other partner was more likely to make a positive health behavior change than if their partner remained unhealthy.</i></p>	<p>Local community partners will be supported and influenced to incorporate 'social support' as a recognised behaviour change technique (BCT) into their intervention design.</p> <p>Dietetic staff delivering weight management services use a person-centred approach and motivational interviewing skills to explore the support network</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
			available to service users as part of exit strategy planning.
<p>6.5 Women who are expecting a baby, who are on a break from work after having a baby, or who are breastfeeding. They are protected for 26 weeks after having a baby whether or not they are on maternity leave.</p>	<p><i>Diet and physical activity based interventions during pregnancy reduce gestational weight gain and lower the odds of caesarean section. Pregnancy is a powerful stimulus for positive changes in food choices particularly.</i></p>	<p><i>Healthy lifestyle interventions should aim to sustain positive changes beyond pregnancy through: empowerment, intrinsic motivation, family-centred approach, and behavioural goals</i></p>	<p>Communication of the projects and programmes available to pregnant women and those with young children will be widely promoted.</p> <p>Work with local partners delivering interventions aimed at pregnant women will seek to ensure that partners and participants are aware of further local opportunities to support sustained behaviour change beyond pregnancy.</p> <p>Healthy weight funding has supported the delivery of motivational interviewing training/COMPACT training for midwives to support their behaviour change conversations with pregnant women. Adapted level 2 food and nutrition skills training has also increased knowledge, awareness and understanding amongst midwives</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
			In addition, dietetic staff that will deliver weight management services for pregnant women will use a person-centred approach and motivational interviewing skills to explore the support network available to women as part of exit strategy planning.
6.6 People of a different race, nationality, colour, culture or ethnic origin including non-English speakers, gypsies/travellers, migrant workers	<i>Disparities in prevalence of obesity in racial/ethnic minorities are apparent as early as the preschool years.</i>	<i>Factors including genetics, diet, physical activity, psychological factors, stress, income, and discrimination, among others, must be taken into consideration when designing interventions</i>	<p>From a behavioural insight perspective, and to further understanding of the factors pertinent to the ability of people of a different race, nationality, colour, culture or ethnic origin to move more and eat well, consideration will be given to existing local insight. Where there are insight gaps, opportunities to gather further insight will be sought. Insight will be shared with partners to help inform intervention design aligned to actions across the plan.</p> <p>Following referral (self/professional) into weight</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
			management services, and as part of the booking process, through a person-centred approach, the needs of individuals are considered. Services endeavour to meet the language and cultural needs of service users. For example, development of bespoke resources in different languages, use of interpreters during consultations/ group delivery and development of bespoke cultural sessions co-developed with the community
<p>6.7 People with a religion or belief or with no religion or belief. The term 'religion' includes a religious or philosophical belief</p>	<p><i>There was very little research on religion and obesity/healthy weight, from a Western country perspective within the search strategy timeframe.</i></p>	<p><i>Weight management services should consider the needs of people with a religion or belief or with no religion or belief</i></p>	<p>Following referral (self/professional) into weight management services, and as part of the booking process, through a person-centred approach, the needs of individuals are considered. Dietetic staff are trained to consider different dietary practices/customs and embed this into their practice through consultations that are adapted to</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
			meet individuals' religious and cultural needs
<p>6.8 People who are attracted to other people of:</p> <ul style="list-style-type: none"> • the opposite sex (heterosexual); • the same sex (lesbian or gay); • both sexes (bisexual) 	<p><i>Studies indicate sexual minority females are more likely to be obese than their counterparts. In a study comparing lesbian and heterosexual sisters, lesbians had greater waist circumferences, waist-to-hip ratios, higher body-mass indices, and more extensive weight-cycling.</i></p>	<p><i>Healthy lifestyle intervention design should aim to meeting the needs of sexual minority females.</i></p>	<p>From a behavioural insight perspective, and to further understanding of the factors pertinent to the ability of sexual minority females to move more and eat well, consideration will be given to existing local insight. Where there are insight gaps, opportunities to gather further insight will be sought. Insight will be shared with partners to help inform intervention design aligned to actions across the plan.</p>
<p>6.9 People who communicate using the Welsh language in terms of correspondence, information leaflets, or service plans and design</p> <p>Well-being Goal – A Wales of vibrant culture and thriving Welsh language</p>	<p><i>Respondents reported variation in the availability and standard of Welsh language services in health and social care. This matters in the context of international evidence, which emphasises the importance of communicating in one's first</i></p>	<p><i>Intervention design should consider the language needs of participants as part of planning.</i></p>	<p>All MMEW communications will be bilingual including website and social media presence.</p> <p>Monitoring procedures will be put in place to monitor website hits/social media metrics</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
	<i>language with health and care professionals.</i>		
<p>6.10 People according to their income related group: Consider people on low income, economically inactive, unemployed/workless, people who are unable to work due to ill-health</p>	<p><i>Those living in more deprived quintiles are twice as likely to be obese compared to least deprived quintiles. There are stark income inequalities in the risk of obesity at age 5 and age 11.</i></p> <p><i>The association between stress in early life and overweight/obesity in adult hood is well established. There is also increasing evidence of a link between stress exposure in childhood (or in utero) and child and adolescent obesity.</i></p>	<p><i>Action should take a proportionate universalism approach, balancing the level of action based on the needs and level of disadvantage in the target population.</i></p> <p><i>In taking a life course approach, interventions should focus on the first 1,000 days</i></p>	<p>The MMEW plan incorporates universal action as well as targeted action in areas of deprivation.</p> <p>Partner projects and programmes aligned to the MMEW plan offer support to mothers, their partners, families and children in the first 1,000 days.</p> <p>Priority area 10 ‘Healthy weight services’ will include the establishment of a maternal obesity service.</p> <p>MMEW is funded through the Prevention and Early Years fund and is therefore part of wider action focused on health improvement in the early years.</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
<p>6.11 People according to where they live: Consider people living in areas known to exhibit poor economic and/or health indicators, people unable to access services and facilities</p>	<p><i>Child Measurement Programme data shows that the level of obesity is higher in geographical areas of deprivation.</i></p> <p><i>Some studies have identified variation in child overweight and obesity levels between rural and urban areas.</i></p>	<p><i>Action should take a proportionate universalism approach, balancing the level of action based on the needs and level of disadvantage in the target population.</i></p> <p><i>Consideration should be given to the differing needs of those living in rural and urban areas where pockets of deprivation at a lower geographical level may exist.</i></p>	<p>The MMEW plan incorporates universal action as well as targeted action in areas of deprivation.</p> <p>From a behavioural insight perspective, and to further understanding of the factors pertinent to the ability of people living in rural and urban areas to move more and eat well, consideration will be given to existing local insight. Where there are insight gaps, opportunities to gather further insight will be sought. Insight will be shared with partners to help inform intervention design aligned to actions across the plan.</p> <p>Healthy weight service provision is planned to maximise access for all and across all localities, with some</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
			specific targeting of services to the southern arc of Cardiff and the Vale. Home visits are available for housebound service users and additionally, the current option of a virtual appointment is also in place
6.12 Consider any other groups and risk factors relevant to this strategy, policy, plan, procedure and/or service	N/A	N/A	N/A

3 HIA / How will the strategy, policy, plan, procedure and/or service impact on the health and well-being of our population and help address inequalities in health?

Questions in this section relate to the impact on the overall health of individual people and on the impact on our population. Specific alignment with the 7 goals of the Well-being of Future Generations (Wales) Act 2015 is included against the relevant sections.

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
<p>7.1 People being able to access the service offered: Consider access for those living in areas of deprivation and/or those experiencing health inequalities</p> <p>Well-being Goal - A more equal Wales</p>	<p><i>Deprived neighbourhoods tend to be the most obesogenic with the highest levels of fast food outlets and provision for the fewest opportunities for physical activity.</i></p>	<p><i>Integral to the design of planning policy should be action that considers the creation of healthy environments</i></p>	<p>Action area 2 of the MMEW plan aims to ensure that planning creates healthy environments</p>
<p>7.2 People being able to improve /maintain healthy lifestyles: Consider the impact on healthy lifestyles, including healthy eating, being active, no smoking /smoking cessation, reducing the harm caused by alcohol and /or non-prescribed drugs plus access to services that support disease prevention (eg immunisation and vaccination, falls prevention). Also consider</p>	<p><i>The purpose of the MMEW plan is for the citizens of Cardiff and the Vale to obtain and maintain a healthy weight. Developed in partnership, the plan recognised the role that individuals, settings and private and public organisations can play in preventing obesity</i></p>	<p>Action across the system is necessary to collectively support the citizens of Cardiff and the Vale to move more and eat well.</p>	<p>Dedicated MMEW capacity will help to drive forward the plan through a systems leadership approach that will support and enable collective partnership action.</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
<p>impact on access to supportive services including smoking cessation services, weight management services etc</p> <p>Well-being Goal – A healthier Wales</p>			
<p>7.3 People in terms of their income and employment status: Consider the impact on the availability and accessibility of work, paid/ unpaid employment, wage levels, job security, working conditions</p> <p>Well-being Goal – A prosperous Wales</p>	<p><i>The ability to work, and therefore income and employment status is directly or indirectly related to having a healthy weight</i></p> <p><i>Risk factors for obesity in the workplace are also present such as working patterns.</i></p>	<p><i>Action should take a proportionate universalism approach, balancing the level of action based on the needs and level of disadvantage in the target population.</i></p> <p><i>Targeted action should focus on areas most deprived where income levels are likely to be low, unemployment high and job security poor.</i></p> <p><i>Interventions in the workplaces should consider the specific needs of subsections of the workforce that may be most at risk.</i></p>	<p>The MMEW plan incorporates universal action as well as targeted action in areas of deprivation.</p> <p>In taking forward priority area 4 'healthy workplaces', employers will be encouraged to consider the specific needs of its workforce when designing and planning workplace based interventions.</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
<p>7.4 People in terms of their use of the physical environment: Consider the impact on the availability and accessibility of transport, healthy food, leisure activities, green spaces; of the design of the built environment on the physical and mental health of patients, staff and visitors; on air quality, exposure to pollutants; safety of neighbourhoods, exposure to crime; road safety and preventing injuries/accidents; quality and safety of play areas and open spaces</p> <p>Well-being Goal – A resilient Wales</p>	<p><i>Price reductions and subsidies on healthy food and drink can increase consumption in the short term, longer term effectiveness is less clear.</i></p> <p><i>Supporting walking and cycling are considered to be the ‘best buys’ for increasing physical activity. Cycle lanes can be effective for promoting cycling but the impact is greater for those living nearby.</i></p>	<p><i>Interventions that include the subsidy of healthy food and drink should consider what else may need to be put into place to support long term health behaviour change.</i></p> <p><i>Cycling and walking infrastructure should be continuously developed and maintained.</i></p>	<p>MMEW action to create ‘healthy communities’ that may involve the subsidising healthy food or drink will consider its sustainability and the wrap around support necessary to encourage longer term change.</p> <p>Priority area 2 ‘Healthy planning’ focuses on longer term action to create healthy environments whereby the healthy choices are made easier choices</p> <p>Priority area 3 of the MMEW plan focuses on active travel and the creation of an environment and culture which supports healthy travel</p>
<p>7.5 People in terms of social and community influences on their health: Consider the impact on family organisation and roles; social support and social networks; neighbourliness and sense of belonging; social isolation; peer</p>	<p><i>Safety and security are key factors that influence public use of outdoor spaces. Limited access to green space and high levels of access to unhealthy food retail outlets are associated with high weight status. Those in disadvantaged areas</i></p>	<p>Safety and security should be a key consideration for planning outdoor spaces.</p> <p>Planning design should seek to limit the availability of unhealthy food and retail outlets and increase green</p>	<p>Priority area 2 of the MMEW plan focuses on ‘healthy environments’ and action that will through the planning process, incorporate measures that promote active and healthy environments</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
<p>pressure; community identity; cultural and spiritual ethos</p> <p>Well-being Goal – A Wales of cohesive communities</p>	<p><i>experiencing a disadvantaged level of impact.</i></p> <p><i>Living in an area with clean air can lead to positive changes in people’s health behaviours.</i></p> <p><i>There is some evidence to suggest that physical activity levels may be lower amongst those that are socially isolated with social support, emotional support and social relationships recognised key influences on self-efficacy and behaviour particularly for women. Social isolation can occur across the life course. Individuals with caring responsibilities may be particularly at risk</i></p> <p><i>There is some evidence that key messengers such as park</i></p>	<p>spaces especially in areas of deprivation.</p> <p>Sustainable change to support air quality improvements requires collective action</p> <p>Consider the needs of those that are socially isolated including individuals with caring responsibilities, building opportunities for social support into intervention design.</p> <p>Consider the role that ‘key messengers’ can play in</p>	<p>MMEW action to develop an integrated public transport system as part of priority area 3 ‘healthy travel’ will support air quality improvements.</p> <p>From a behavioural insight perspective, and to further understanding of the factors pertinent to the ability of individuals at risk of social isolation (including those with caring responsibilities) to move more and eat well, consideration will be given to existing local insight. Where there are insight gaps, opportunities to gather further insight will be sought. Insight will be shared with partners to help inform intervention design aligned to actions across the plan.</p> <p>As part of local insight gathering and review, consideration will be given to the identification of key</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
	<i>managers play an important role in promoting and encouraging physical activity</i>	<i>promoting and encouraging positive health behaviours</i>	messengers most relevant to the people of Cardiff and Vale.
<p>7.6 People in terms of macro-economic, environmental and sustainability factors: Consider the impact of government policies; gross domestic product; economic development; biological diversity; climate</p> <p>Well-being Goal – A globally responsible Wales</p>	<p><i>Recent Government policy change in response to the COVID 19 pandemic may have had an adverse effect on health behaviours particularly consumption of foods and drinks high in fat, sugar and salt.</i></p> <p><i>Differences in levels of physical activity during recent restrictions may exist between more affluent and deprived areas with higher levels of sedentary behaviour reported by people living in more deprived areas.</i></p> <p><i>Emerging evidence highlights the risk for older adults and some BAME groups of excess weight and COVID 19 risk/ poorer outcomes.</i></p> <p><i>Young people not in education, employment or training (NEET) may have been adversely affected by current public policy</i></p>	<p><i>Intervention design should consider the impact that policy change has had on health behaviours (both directly and indirectly)</i></p>	<p>Consideration will be given to the impact of policy change (as a result of the COVID-19 pandemic) on the health behaviours of the citizens of Cardiff and Vale taking opportunities through the MMEW plan to direct support where there has been a negative impact and to share learning where the impact has been positive.</p> <p>From a behavioural insight perspective, and to further understanding of the factors pertinent to the ability of young</p>

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
	<p><i>and at risk of poor lifestyle behaviours.</i></p> <p><i>For the co-benefits that sustainable diets can produce to be realised, the right balance between human and environmental health needs to be achieved. In addition, interventions that promote access to healthy sustainable diets need to allow for sustainable development for all and not inadvertently disadvantage low income households.</i></p>	<p><i>Intervention design should seek to establish the right balance between human and environmental health and not inadvertently disadvantage low income households.</i></p>	<p>people NEET to move more and eat well, consideration will be given to existing local insight. Where there are insight gaps, opportunities to gather further insight will be sought. Insight will be shared with partners to help inform intervention design aligned to actions across the plan.</p> <p>Relevant action will be taken forward through MMEW priority action 8 'Healthy and sustainable food procurement' as well through community led projects supported by Food Cardiff and Food Vale Partnerships.</p> <p>Priority area 5 focuses on 'Healthy marketing and advertising' whereby public sector policy to restrict junk food advertising will incorporate sustainability factors</p>

Please answer question 8.1 following the completion of the EHIA and complete the action plan

<p>8.1 Please summarise the potential positive and/or negative impacts of the strategy, policy, plan or service</p>	<p><i>Through partnership action the MMEW plan has the potential to positively impact on the ability of the citizens of Cardiff and the Vale to obtain and maintain a healthy weight. Positive impacts of the MMEW plan is likely across the following groups:</i></p> <ul style="list-style-type: none"> • <i>Pregnant women</i> • <i>Pre-school children</i> • <i>School-aged children</i> • <i>Young people</i> • <i>Working aged adults</i> • <i>Older adults</i> <p><i>Through the EHIA process a number of potential negative impacts have been identified. There is potential for negative impacts to be experienced by the following groups:</i></p> <ul style="list-style-type: none"> • <i>People of different genders</i> • <i>People of different race, nationality, colour, culture or ethnic origin</i> • <i>Sexual minority females</i> • <i>Young people (NEETS)</i> • <i>Individuals at risk of social isolation including individuals with caring responsibilities</i> • <i>People living in rural and urban areas</i> <p><i>Relevant to the groups listed, subsequent mitigating action that will be put in place through both intervention design/partnership action to drive forward the relevant priority area of the plan, has been outlined.</i></p> <p><i>Where further improvement may be necessary to support of the overall delivery of the plan and to achieve the vision outlined, these actions are detailed below.</i></p>
<p>8.2</p>	

Action Plan for Mitigation / Improvement and Implementation

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
8.3 What are the key actions identified as a result of completing the EHIA? -	Consider from a behavioural insight perspective existing local insight/potential insight gaps pertinent to the ability of the following people to move more and eat well: <ul style="list-style-type: none"> • People of different genders • People of different race, nationality, colour, culture or ethnic origin • Sexual minority females • Young people (NEETS) • Individuals at risk of social isolation including individuals with caring responsibilities • People living in rural and urban areas 	C&V LPHT	By March'22	Action incorporated and monitored through MMEW communication and engagement plan
	As part of local insight gathering and review, consider the role of 'key messengers' in amplifying the reach of MMEW communications and key messages.	C&V LPHT	By March' 22	Action incorporated and monitored through MMEW communication and engagement plan
	Support partners to consider how they will embed specific behaviour change techniques (BCTs) as part of intervention design	C&V LPHT	Ongoing	Action incorporated and monitored through MMEW communication and engagement plan/ MMEW partnership project plan
	Identify any potential pockets of deprivation at a lower geographical level to support the targeting of action.	C&V LPHT	By March'22	Action incorporated and monitored through the MMEW evaluation plan

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
	<p>Consider the impact of policy change (as a result of the COVID-19 pandemic) on the health behaviours of the citizens of Cardiff and Vale.</p> <p>Take opportunities through the MMEW plan to direct support where there has been a negative impact, and to share learning where the impact has been positive.</p>	C&V LPHT	<p>By March'22</p> <p>Ongoing</p>	Action incorporated and monitored through the MMEW evaluation plan/ MMEW communication and engagement plan
	<p>Explore the mechanisms available through Health Board systems to inform an approach to monitoring demographic data (where available) relating to referrals to, and uptake of, healthy weight services. Consider what additional data at a cluster level may be available to inform subsequent action to increase referrals/improve engagement as to ensure equitable delivery</p>	C&V Dietetics/ C&V LPHT	By March'22	Action incorporated and monitored through the MMEW partnership project plan (action area 10.1/10.2)

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
<p>8.4 Is a more comprehensive Equalities Impact Assessment or Health Impact Assessment required?</p> <p>This means thinking about relevance and proportionality to the Equality Act and asking: is the impact significant enough that a more formal and full consultation is required?</p>	<p>No, a more comprehensive assessment is not required.</p> <p>During the development of the MMEW plan, a consultation process with partners was undertaken. The plan is available in both Welsh and English</p> <p>Opportunities to ensure that intervention design/the partnership action that will drive forward the priority areas of the plan meets the needs of the public will be sought through the insight gathering action outlined above.</p>	C&V LPHT	Ongoing	As above

<p>8.5 What are the next steps?</p> <p>Some suggestions:-</p> <ul style="list-style-type: none"> • Decide whether the strategy, policy, plan, procedure and/or service proposition <ul style="list-style-type: none"> ○ continues unchanged as there are no significant negative impacts ○ adjusts to account for the negative impacts ○ continues despite potential for adverse impact or missed opportunities to advance equality (set out the justifications for doing so) ○ stops. • Have your strategy, policy, 	<p>The MMEW plan will remain unchanged.</p> <p>Mitigating action as outlined above will help to influence and shape intervention design/partnership action that will drive forward the priority areas identified in the plan.</p>	<p>C&V LPHT</p>	<p>Ongoing</p>	<p>Monitoring and review will be incorporated into MMEW programme management</p>
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	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
<p>plan, procedure and/or service proposal approved</p> <ul style="list-style-type: none"> • Publish your report of this impact assessment • Monitor and review 				

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Appendix 1 - SEARCH STRATEGY FOR MMEW PLAN EHIA: 1 Jan 2015 to 18 Feb 2021
on Google

1. (child or young) and (physical activity or diet) and (obes* or overweight)
2. (middle age) and (physical activity or diet) and (obes* or overweight)
3. (old or age) and (physical activity or diet) and (obes* or overweight)
4. (disability) and (physical activity or diet) and (obes* or overweight)
5. (diabetes) and (physical activity or diet) and (obes* or overweight)
6. (male or boy) and (physical activity or diet) and (obese* or overweight)
7. (female or girl) and (physical activity or diet) and (obes* or overweight)
8. (transgender or trans) and (physical activity or diet) and (obes* or overweight)
9. (married or marriage or civil partnership) and (physical activity or diet) and (obes* or overweight)
10. (pregnan*) and (physical activity or diet) and (obes* or overweight)
11. (breast feed*) and (physical activity or diet) and (obes* or overweight)
12. (race or ethnic*) and (physical activity or diet) and (obes* or overweight)
13. (religio* or belief) and (physical activity or diet) and (obes* or overweight)
14. (gay or lesbian or heterosexual* or homosexual*) and (physical activity or diet) and (obes* or overweight)
15. (Welsh or Cymraeg) and (physical activity or diet) and (obes* or overweight)
16. (Income) and (physical activity or diet) and (obes* or overweight)
17. (rural or urban or access or geography) and (physical activity or diet) and (obes* or overweight)
18. (access or depriv* or health inequal*) and (physical activity or diet) and (obes* or overweight)
19. (Income or employ*) and (physical activity or diet) and (obes* or overweight)
20. (transport or food or leisure or green space or environment) and (physical activity or diet) and (obes* or overweight)
21. (social support or isolation or peer pressure or commun*) and (physical activity or diet) and (obes* or overweight)
22. (Econom* development or diversity or climate or sustain*) and (physical activity or diet) and (obes* or overweight)