Public Health England

Protecting and improving the nation's health

Whole Systems Approach to obesity and promoting a healthy weight

A report on the opportunities to strengthen place-based systems approaches to consider and address associated health inequalities

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Executive summary

Background

Obesity is a complex problem which is driven by individual, societal and environmental factors. Obesity disproportionately affects certain population groups, including those in more disadvantaged communities. Inequalities in the distribution of obesity will contribute to differences in many health outcomes over the life course (Marmot Review 10 Years On). The COVID-19 pandemic has shone a light on health inequalities with certain population groups, including people living with obesity, being more likely to have poorer outcomes from COVID-19 than the general population. To make a real impact understanding wider determinants of obesity and addressing health inequalities must be at the centre of any approach to address and prevent obesity.

In July 2019 Public Health England (PHE) published the Whole Systems Approach (WSA) to obesity guide and supporting resources to support local areas to better understand and address the complex causes of obesity. The WSA guide articulates the importance of considering and addressing health inequalities associated with obesity through a whole systems approach. This was targeted at local authorities due to their uniquely influential position to lead communities and local partners to tackle obesity. Alongside this, in July 2019 PHE (with the LGA and ADPH) published a comprehensive suite of tools and resources - Place-based approaches (PBA) to reducing health inequalities, to enable co-ordinated cross-system strategic level (Sustainability and Transformation Partnership, Integrated Care System, Health and Wellbeing Board) action on the drivers of health inequalities.

PHE commissioned ICF, an independent applied research organisation, to undertake research to understand:

- local authorities' current familiarity and use of the WSA and the PBA
- what approaches local authorities were taking to address health inequalities within their WSA to obesity
- how they could be better supported to strengthen these approaches, including opportunities to utilise the PBA resources and tools

This project was commissioned prior to the COVID-19 pandemic and so was set in the pre COVID-19 context. However, the latter stages of the project did coincide with the early stages of the COVID-19 outbreak in England. The pandemic has not only reinforced the importance of taking whole system, place-based action to address the obesity and associated health inequalities, but it also provides significant opportunities for renewed action in this area.

Methodology

This was qualitative research involving in-depth interviews with stakeholders from 6 local authorities, PHE region and place leads, and national stakeholders. Ideas for further opportunities were either developed by PHE (and tested during interviews) or emerged directly from interview findings. These were then further developed by PHE and ICF and tested in a workshop with both local and national stakeholders.

Limitations

Local authorities were selected on the basis of their knowledge of WSA, consequently they were less likely to be aware of the PBA. During the research period piloting of the use of PBA with 3 systems (not included in this study) was being undertaken.

Key findings

Local implementation of the WSA to obesity

Local authorities have made use of the WSA guidance and resources. Prioritisation of different actions and workstreams have been dependent on a number of factors including the engagement of wider stakeholders, level of senior stakeholder buy-in, and the available opportunities to align corporate policies and local strategies around obesity.

The WSA has proved to be helpful in bringing professional stakeholders and communities together to map their local systems and develop and prioritise actions for addressing obesity at different levels. Implementing the WSA has influenced changes to local policy and service delivery. Respondents often mentioned changes to local planning guidance, local transport strategies and greater engagement of schools and businesses as important achievements of their WSA.

Key learnings that emerged from the implementation of local WSAs included:

- the importance of engaging senior leaders across the local system (including elected members) and a governance structure that enables buy-in to be continually refreshed
- successful WSAs are aligned with key local council priorities and policy agendas, and here the focus on community engagement, community assets and ‘place-making’ in the WSA are particularly relevant
- it is vital that sustainability is considered, and that the ongoing facilitation of a network or community of practice around obesity is appropriately resourced, so to collectively reflect on how the local WSA is progressing and to consider and agree appropriate changes

Addressing health inequalities

Local authorities were most often focused on developing ‘place-based’ approaches at the neighbourhood level, which brought community assets together to improve the wellbeing and health outcomes in their most deprived areas. Some local authorities had prioritised reducing health inequalities and the social determinants of health in their strategic plans, including addressing obesity-related health inequalities in addition to, or as part of, their whole systems approaches. These activities were not always labelled as ‘health inequalities’ as such but did focus on addressing obesity in areas where there was most need, and/or high levels of deprivation.

Overall familiarity with the PBA resources and tools in the local authorities selected was low, although 2 local authorities had plans to use them. In one local authority this was to inform strategic plans around economic growth and local services. In the second, there were plans to use some of the tools to carry out pilot work in neighbourhoods that had been designated a priority for new weight management services, identified through some of the wider childhood obesity work as part of the WSA. This low level of familiarity with the PBA is likely to be associated with the different stages of development of PBA and WSA, and the consequent selection of areas based on knowledge of WSA.

Strengthening consideration of health inequalities within a whole systems approach to obesity

While most respondents thought that additional guidance on health inequalities would be helpful to further developing and informing their WSA, they also highlighted the importance of bringing guidance together, keeping things simple and easy to understand, and not ‘reinventing the wheel’ at the local or national level. Feedback from those implementing local WSA has shown that there is potential for highlighting the PBA within the WSA resources.

Discussion

There was a great deal of learning that emerged from the implementation of local WSAs. Local authorities are beginning to operationalise a WSA within their current work to encourage ‘business as usual’ type of practice. The WSA has helped to include obesity and healthy weight into local strategic plans and helped facilitate relationships between different stakeholders. It is important to engage senior leaders across the local system and to have a governance structure that enables buy-in to be continually refreshed.

Through addressing the social determinants of health and targeting approaches to the most deprived areas, health inequalities and place-based approaches are already at the core of the work that local authorities are doing. The findings suggest that there are, however, clear

opportunities to further strengthen the WSA by placing a greater emphasis on health inequalities related to obesity and referencing the PBA, including how and where it can be used. A key insight to emerge from the findings is that using the PBA tools alongside the WSA resources could help to focus on building up community assets in areas where there are high levels of inequalities, to support action to address inequalities that contribute to obesity and the health gap.

Recommendations for opportunities to support local authorities to strengthen consideration of health inequalities within a whole systems approach to obesity

Below is the full list of opportunities, both developed by PHE and those that emerged from the research, which were tested at the workshop.

- a supplementary briefing document explaining how the PBA could be used as part of a WSA to obesity
- a system maturity matrix, similar to those included in PBA tool A and the What Good Looks Like self-assessment tool, to examine how the system can improve its prioritisation of health inequalities
- a short 4-point 'checklist for strategic plans on health inequalities'
- guidance on relevant health inequalities data to collect and monitor as part of a WSA
- light touch changes to the content or recommended usage of existing WSA resources to better monitor health inequalities
- resources for senior leaders that make the case for bringing health inequalities into WSAs to obesity
- case studies of progress made by local authorities
- case studies, focusing specifically on using the WSA and PBA resources together
- gathering and sharing outputs relating to emerging practice, for example, action plans that have a strong focus on health inequalities
- action learning sets for core staff

Some additional opportunities and learning emerged within the findings, which fall outside the scope of this project. These relate to other areas in the system including opportunities for strengthening relationships, the role of Health and Wellbeing Boards and use of the NHS Long Term Plan.

1. About this report

In November 2019, ICF (an independent applied research organisation) was commissioned by PHE to undertake qualitative research with local authorities (LAs) and their partners to identify how local authorities could be better supported to consider and address health inequalities associated with obesity as part of their whole systems approaches to obesity.

The report was produced primarily as a key insights report to inform future PHE work around obesity and health inequalities. However, throughout the report there are insights and learning which are likely to be useful at a local level, areas of particular interest can be found in the findings section and local practice examples throughout the report and in Annex B.

This report highlights and draws upon the key and relevant learning from the research. This does not reflect all the insights that were gathered from the interviews and workshops.

2. Introduction

Background to this research

Obesity is a complex problem which is driven by individual, societal and environmental factors, and is a major risk factor for numerous chronic diseases, such as cardiovascular diseases, diabetes and cancer. The causes of obesity exist in the places we live, work and play, where defaults in the food and built environment are often those which are less healthy. Obesity and its health consequences are influenced by many complex components which interact in adaptive, nonlinear and unpredictable ways. As illustrated in the Foresight Report, environmental factors including access to healthier food and opportunities for human activity in the built environment, societal and cultural influences, food production, food consumption, biological factors, psychology and individual activity all play their part (1).

Health inequalities are the preventable, unfair and unjust differences in health status between groups, populations or individuals. These arise because of the conditions in which we are born, grow, live, work and age. Obesity rates continue to rise and there are stark health inequalities in the prevalence of obesity. Obesity disproportionately affects populations in more disadvantaged communities, this is particularly stark for children where obesity prevalence is over twice as high for children living in the most deprived areas compared to those in the least deprived areas (2). A higher prevalence of excess weight is also seen in some ethnic minority groups and the health risks associated with obesity arise at a lower BMI (3). Inequalities in the distribution of obesity will contribute to inequalities in many other health outcomes over the life course. The wider determinants of health remain significant drivers of poor health across the life course (4). Alongside this the COVID-19 pandemic has had a disproportionate burden on some communities and, in some cases, exacerbated existing health inequalities (5).

Tackling the drivers of obesity and associated inequalities requires a long-term, system wide approach, to ensure that those groups at highest risk of obesity are reached and that action does not unintentionally widen the existing health gap.

To support local authorities in tackling the drivers of obesity in their local areas, PHE collaborated with the Association of Directors of Public Health (ADPH), the Local Government Association (LGA), local authorities and Leeds Beckett University to develop the Whole Systems Approach (WSA) to address obesity and promote a healthy weight (6). PHE's WSA to obesity process, guide and resources supports local areas to respond to complexity in an ongoing, dynamic and flexible way, enabling local public health teams to bring together stakeholders from across the local system. Annex D provides further detail on WSA to obesity and how it supports consideration of health inequalities.

Additionally, to support local systems to take action on health inequalities, PHE (with the LGA and ADPH) published an online resource, Place-based approaches to reducing health inequalities (PBA) (7). Its key message is that addressing health inequalities at scale requires strong leadership and action across the whole system, and the unique contributions of Civic, Community and Services need to be considered systematically in all policy, planning and action. Annex E provides more detail on the PBA.

Both the WSA and PBA are aimed at enabling the local system at a place level and there are clear synergies to the objectives of these approaches. Whilst the WSA to obesity guide and resources encourage and support local authorities to consider health inequalities associated with obesity throughout the process, it was recognised that there may be value in providing additional support to local authorities to strengthen these approaches. This project was commissioned to understand what approaches local authorities are currently taking to address health inequalities within their WSA to obesity and how they might be better supported to strengthen these approaches. In particular, the project aimed to explore how the local authorities could be supported to use the PBA tools within their WSA as well as exploring further adaptations to existing resources or the need for additional support.

COVID-19

This project was commissioned prior to the COVID-19 pandemic and so is set in the pre-COVID-19 context. However, the latter stages of the project coincided with the early stages of the COVID-19 outbreak in England.

The COVID-19 pandemic has shone a light on health inequalities with the Review of Disparities in the risk and outcomes associated with COVID-19 indicating that some groups including men, older people, people from Black, Asian and Minority Ethnic communities, certain occupation groups and people with certain co-morbidities such as obesity are more likely to have poorer outcomes from COVID-19 than the general population (3) (5). Some of these population groups are also disproportionally affected by obesity, indicating the potential to further exacerbate existing health inequalities. This has highlighted the importance of improving the health of people living with obesity and its risk factors.

Alongside the direct impacts, COVID-19 has impacted on a number of factors associated with obesity including:

- a decline in physical activity levels
- changes in food purchasing (8)
- both temporary and permanent changes to planning policy, which are likely to have an impact on the food environment (9) (10)
- either the cessation or adaptation of existing weight management services (11)

The recognition of the role of obesity-associated conditions in COVID-19 has the potential to provide opportunities for further action on obesity. The government launched a new obesity strategy in the Summer of 2020, building on previous ambitions to now include specific action to address adult obesity (12). There has also been a significant national focus on the importance of being physically active, and this has been supported by national funding and commitments to support infrastructure that promotes active travel (13).

This not only reinforces the importance of place-based whole system action to address obesity and associated health inequalities, but it also provides significant opportunities for renewed action in this area.

Purpose of this research

The aim of this research was to identify how local authorities were embedding health inequalities as part of their WSA and opportunities to strengthen the WSA process, guide and resources to better support local authorities with these approaches. This specifically included how the PBA could be used as part of a WSA to obesity. The objectives of this research were to understand:

- how the WSA guidance and resources were being used locally, exploring stakeholders' familiarity with both the WSA to obesity and the PBA to addressing health inequalities
- how health inequalities are currently being addressed at the local level, with a focus on obesity
- how and where the tools within the PBA for addressing health inequalities might be used as part of the WSA to obesity
- whether the existing WSA to obesity tools can be adapted and strengthened through greater reference to health inequalities, and to test whether new light-touch tools would be useful
- whether and how the PBA guidance could be strengthened

Methodology

Primary data was gathered through 46 in-depth interviews with key stakeholders working in 6 local authorities: Suffolk, Medway, Hull, Liverpool, Lincolnshire, and Bath & North East Somerset. The 6 local authorities were identified by PHE and were chosen because of their familiarity with the PHE WSA, and because they were at various stages of implementation. A mix of local authority types was also an important consideration for the sample (see Table A1 in Annex A). Both unitary authorities and 2-tier (county or district council) local authority areas were included, in varying geographical locations across the country, to cover a range of rural and urban populations facing different challenges in addressing health inequalities. Local authorities participating in related initiatives (such as those receiving an intensive offer of support from PHE or those

leading a local Department of Health and Social Care / PHE / APDH / LGA Childhood Obesity Trailblazer) were excluded from the sample, so as not to overburden local teams. As the PBA was in its early pilot stage there were no areas identified that were both implementing WSA to obesity and who were part of the PBA pilot study (14).

Supplementary feedback was also gathered via in-depth interviews with 6 PHE places and region leads, and 7 national stakeholders and policy makers. The topic guides for these interviews (see Annex C) were developed with support and input from PHE. PHE also developed supplementary summaries of the WSA and PBA resources and guidance (see Annex D and E) that were shared with local stakeholders to support the fieldwork.

Thematic analysis was used to analyse the data which included transcribing interviews and case studies, coding the write ups and identifying common themes and ideas across the data. The findings from interview data were triangulated to ensure that the research reflected the complexity and richness of information and perspectives.

Ideas for next steps included both those that were developed by PHE (and tested during interviews), and others that emerged directly from interview findings. These ideas were then developed by PHE and ICF into user-centred options for strengthening the WSA process, guide and resources to support local areas to better consider and address obesity related health inequalities and to support integrated working across Local authorities, the NHS and other stakeholders. A workshop with both local and national stakeholder participants (13 March 2020) was used to test the findings and options for change. Following feedback on those ideas at the workshop, the final list of opportunities were sent to all workshop attendees to further ensure all participants had the opportunity to provide feedback (see Annex A for a detailed methodology).

Limitations

There are a number of limitations to this research that are relevant to the interpretation of the findings, which are briefly described below:

- a small number of local authorities were sampled purposively so that the research team spoke to areas with experience of implementing WSAs – as such they are not representative of the full range of experiences of using the PHE WSA resources and guidance, but rather are illustrative experiences of selected local authorities that have used it
- towards the end of the project, both national and local stakeholders were increasingly occupied with work relating to the COVID-19 pandemic, which limited the ability of some people (particularly individuals with national roles) to respond to requests for interview or to attend the workshop

3. Findings

Progress made by local areas in implementing the WSA

Local authorities were at various stages of implementing the WSA as summarised in Figure 1.

Figure 1. Progress of WSA to obesity made by selected local authorities when research was undertaken

Local authority 1
- work on whole systems preceded the PHE tools, guidance and resources - starting 2014
- held 5 'healthy weight summit' meeting
- currently refreshing approach and seeking buy-in to make action planning into annual cycle

Local authority 2
- using WSA to obesity tools, guidance and resources since 2017
- held 5 'conversation events'
- about to launch city wide engagement approach to health and wellbeing

Local authority 3
- using WSA to obesity tools, guidance and resources since 2017
- followed guidance during all 6 phases
- are now working closely with supportive district councils and sharing successes

Local authority 4
- Began work in 2018
- Two whole systems workshops held as part of phases 2 and 3; Starting phases 5 and 6 soon
- Working with districts on implementation – all at different places

Local authority 5
- began work in 2018
- two workshops to develop action plan
- tasks and actions are maturing as part of phases 4 and 5

Local authority 6
- began work in 2019
- two workshops held 2019/2020
- currently finalising the action plan (phase 4)

There were a number of differing factors across local authorities and the public health teams within these that influenced the extent of corporate (and stakeholder) engagement with obesity and related health inequalities. These were reflected in the diverse priorities and actions identified through local WSAs. These included:

- roles and responsibilities of the obesity portfolio leads, for example in some local authorities the leads for adult and child obesity were in different teams
- the extent to which Directors of Public Health were represented at the most senior level
- the frequency and topic focus on Health and Wellbeing Board (HWB) meetings and how closely these were linked to, or represented of local NHS Integrated Care Systems
- whether the local authority was a unitary or 2-tier authority

Learning from implementing the WSA

Stakeholders reported a range of different benefits from implementing the WSA process, guide and resources, including:

- the WSA was seen to provide an opportunity to engage local communities (especially in the latter phases) and gather insights about the drivers of health and wellbeing from residents. This enabled local authorities to identify community assets and service gaps
- it was helpful that WSA is not necessarily about extra funding and stakeholders in multiple local authorities said that its value lies in being able to make the most of assets in the community that are currently available
- the tools can be used to facilitate relationships between stakeholders and engage senior leaders. Some local authorities reported challenges in gaining senior leader buy-in and where buy-in was established it proved to be a critical element in the success of their WSA
- the resources can be used flexibly, tailored to local context and save time and effort in creating a framework for collaboration
- the WSA and specifically system mapping encouraged stakeholders to recognise the linkage between sectors and environments, the factors that contribute to decisions people make around food and the value in people working together

These quotes illustrate some of the reported benefits of implementing the WSA:

“There were several valuable components of the WSA process. Principles such as everyone being on an equal footing and only being able to solve problems by working together were very refreshing. There has been very positive energy in the room at the workshops, and there is value in people networking and talking. Similarly, the

conversation format than a conference makes it a safe way to explore ideas with a collective problem-solving experience. It is almost the unwritten components of the WSO such as this that have the real value." (Obesity portfolio lead)

"Public Health aren't the masters…we're here together to discuss a solution and we're all on equal footing: those principles and ways of working were really refreshing…we can only solve this by us working together." (Obesity portfolio lead)

A particular benefit identified was that the WSA had supported positive engagement between public health, planning, housing and transport teams supporting them to influence and embed health considerations within planning and housing decisions.

"Housing teams might be used to discussing an individual's living arrangements so didn't see the link at first, but when you had discussions around supporting clients it became apparent that they're supporting people … within a home – cooking facilities, for example, so they can cook a balanced meal. Initially they didn't really see the relationship but then the link became clearer." (Obesity portfolio lead)

A number of local authorities reported that they had written and implemented new or supplementary planning guidance (example included in Box 1) containing toolkits and evidence for reviewing planning applications from a public health perspective. These were reported to have gathered support from local authority stakeholders to restrict new takeaways opening within a given radius of schools.

Box 1: Obesity and the planning process in Hull

WSA has helped the public health and planning departments to collaborate. There is currently focus and funding towards increasing use of sports and leisure centres, especially for women and children. There is work being done to increase the number of pools and waterplay areas, and to add more pools to facilities, as well as cheaper membership cards which grant access to facilities across the city.

In Hull, they have not approved planning permissions for hot food takeaways within 400m of a secondary school or sixth form college or playing field since 2017. There is an upcoming Supplementary Planning Document ('Healthy Places, Healthy People'), which will provide planning guidance on local plan policies on health and wellbeing, as well as health inequalities. There was a workshop related to this document which followed a similar format to the WSA workshops, in that it brought diverse stakeholders together. As well as considerations around air pollution and other issues, this guidance includes:

- not supporting hot food takeaways in areas with over-proliferation
- new allotments and other food growing spaces, and planting more fruit trees
- sustainable transport initiatives, including promoting walking and cycling
- ensuring homes have room for dining spaces so families can eat together

According to respondents, the initial WSA workshop helped to introduce the planning department to their potential role in tackling obesity, and since then there has been representation from planning present at all subsequent workshops. Although it took time to build those relationships, there are now plans to introduce a public health priority into the overall local plan for Hull.

Local authority stakeholders identified both success factors in bringing people together and learning from challenges they had faced while setting up and running a WSA. These are summarised in Table 2.1 below.

Table 2.1 Learning from implementing the WSA

Theme	Sub theme	Description of learning
Engagement from the most senior level, and corporate support	Directors of Public Health (DPH) have a corporate leadership role	Having DPHs on board with the WSA is helpful for communicating with senior officers and elected members who have wider responsibilities or portfolios than health and wellbeing. Supportive leaders can bring external groups on board, who were reported to be particularly challenging to engage without support from the highest level (for example, GPs, the wider NHS and academy schools). One public health team reported that elected members often appreciated the opportunities afforded by the WSA to engage with residents and community organisations.
	Governance / structures	Developing steering groups can be a way of inviting in important partners outside local authorities, such as universities which are not only large employers and drivers of economic success but also experts. Governance was identified as a critical area for further development, ensuring that any buy-in on paper from leadership teams was then followed up, continuing to give those leaders a clear idea of what their contribution to the obesity agenda should be.
	Relationships with the district levels in 2-tier local authorities	Relationships with selected senior leaders at the district level were important, to bring about changes in planning, environmental health, leisure and other functions where districts take the lead. County-level public health teams worked with districts that were moving at different paces, looking for opportunities to facilitate whole systems working in districts too.
Alignment with other important policy agendas and structures	Importance of evidence supporting the WSA	The WSA helped to bring the national and local evidence about obesity into discussions with partners. Many respondents thought that the wealth of evidence underpinning the WSA and it being co-branded by PHE, ADPH and the LGA were important for securing senior level buy-in.

	Linking in with existing programmes	Stakeholders reported that linking in with other programmes and initiatives which aligned with the WSA was important for developing partnerships and building momentum. These included: • Active Hospitals (emphasising physical activity on hospital wards to reduce the deterioration of patients who have been confined to bed) (14) • Lottery-funded programmes such as the Soil Association's Food for Life (15) • initiatives such as the Healthy Weight Declaration (HWD) developed by Food Active on behalf of the LGA and Sustainable Food Places that aims to build food-partnerships across local food systems (16) (17)
	Making connections with wider frameworks	Local authorities found that the WSA aligned well with wider frameworks and making the connections between these was important to get buy in from different sectors. For example, one local authority aimed to reduce inactivity by implementing the World Health Organisation's Global Action Plan on Physical Activity. This provided a useful framework for action at County and District level, (see Box 2 below).
Using the right language to introduce action on obesity and health inequalities	Use of appropriate language used by local authorities	Many stakeholders reported using alternative language to reduce the stigma around living with overweight or obesity, and instead had adopted phrases such as healthy weight or healthy lifestyles. Some local authority stakeholders reported that they referred to 'place-based planning' at the neighbourhood level, in conversations with different partners. This focuses on community assets and places them at the centre of conversations.
Ensuring that efforts are properly resourced so that networks are active	Effort needed to keep networks energised	Beyond the first phase of the WSA, network building and ongoing communication were thought to be key challenges – continual effort was needed to keep the network energised, monitor activity, follow up with information, and provide encouragement or evidence to partners to keep actions going. It was particularly important to ensure they were taking action over time, rather than allowing attention to focus on the workshops and events.

		Ideas that could help maintain momentum included: • celebrating success with networks or partners, once the WSA started to show results • using the WSA to build communities of practice, in neighbourhoods and local authority-wide, which could also support ongoing learning
	Managing expectations	Stakeholders stated that it was important not to overwhelm participants with information, and to use the action planning process to focus on feasible actions, rather than a long action list, which can be difficult for a large workshop to prioritise effectively. It was also important to recognise that change might not be immediate or might temporarily go into reverse while people learn about what works. Rather than trying for 'one pace fits everyone', stakeholders need to move at their own pace.

Box 2: Making connections with wider frameworks in Lincolnshire

In Lincolnshire, the County Council adopted the World Health Organization's Global Action Plan on Physical Activity, which consists of 4 strands: active society, active place, active people, active systems. There was consensus among interviewees that the work on active place is the most advanced at both the county and district levels. Local plans at a district level now incorporate the built environment in relation to obesity, and at the county level, obesity is being linked to the future growth agenda which includes 100,000 new homes being built in Lincolnshire over the next 6 years. Thus, ideas about active place are key to the way in which the 2 tiers work together.

Using the language of different stakeholder groups, and reducing health sector jargon, was also thought to be important in getting wider buy-in. Interviewees discussed the need to show stakeholders how their agendas and strategies linked in with obesity. For example, market towns in Lincolnshire are working on local transport strategies focused on cycling, creating transport hubs and aiming to reduce car use. These provide a natural link with the aims of reducing obesity and increasing physical activity whilst also tying into the climate change agenda. Showing these links was thought to be key, using terminology from the transport or environmental sectors.

Addressing health inequalities including as part of whole systems approaches

Many respondents recognised that there is a clear link between whole systems and health inequalities and saw the potential for local authorities and their partners to bring about change in this area. They also thought that focusing on addressing health inequalities requires additional effort and that the WSA could be improved to make the links clearer. Some respondents suggested that references to the PBA within the WSA would be useful for placing emphasis on the importance of health inequalities and social determinants of health.

However, some respondents felt the current WSA was not a natural fit for efforts to reduce health inequalities, and that further effort was needed to be made in the public health system. The new NHS structures and the focus in the NHS Long Term Plan (LTP) on health inequalities could help PHE have a greater role in shifting the thinking among NHS leaders to think more holistically about inequalities (beyond the idea of protected characteristics) and look at NHS employers as 'anchor institutions' that shape communities.

Additionally, it was recognised by some public health teams that by focusing too much in places where existing community assets and enthusiasm were strongest, inequalities might widen because health would improve faster in those neighbourhoods. An example of this was where work had been done to improve food consumption in nurseries, but those with the fewest assets did not take part in their pilot project. Similarly, improvements can be made so

that public health considerations are included in new planning decisions (for example, co-locating GP surgeries or dentists in leisure centres). Revisiting older and pre-existing developments can be more challenging, but if not addressed there is a risk of widening inequalities. In this respect, further support to consider the wider impacts that interventions may have on health inequalities (that may not currently be considered using the WSA process and resources) would be helpful.

Not all local authorities had made high-level commitments to reducing health inequalities in their strategic plans, although the Joint Strategic Needs Assessments (JSNA) usually did describe obesity related health inequalities using National Child Measurement Programme (NCMP) data or data on physical activity levels. Despite this, respondents recognised that reducing health inequalities was an important part of their local WSA, and that it was important to bring the 2 together:

“We've got 50,000 children who are overweight or obese. We've got the same number of children who live in poverty ... So that figure isn’t a coincidence, but we don’t always make those connections. And it’s about how we engage with those families who are dealing with those inequalities and poverty every day, day in, day out, when what they're eating might not exactly be the top of their list. That’s one of the challenges we're hoping to start to work through as part of the place-based work.” (Public health consultant)

Most respondents agreed that additional guidance around health inequalities would be helpful for further developing and informing their WSA and would help bring obesity related health inequalities to wider attention. They also highlighted the importance of bringing existing guidance together making it easier to understand the role of different sources of guidance and help ensure that the impact on health inequalities is more systematically considered in each phase of a WSA to obesity. Stakeholders also felt that having a senior leader resource that clearly makes the case for bringing health inequalities into whole systems approaches would be beneficial.

Key insights from the interviews with national stakeholders and PHE Places and Regions teams on how health inequalities could be brought into the WSA resources included:

- PHE’s ‘bite-size’ resources such as blogs are generally well regarded and could be used to highlight links between PHE resources
- there was acknowledgement that while senior engagement in health inequalities cannot be enforced from above, the tools can be an offer that can help local authorities to achieve their goals
- collective resources that bring together existing guidance or signposting across resources is helpful for readers that do not have much time, as “lots of people are looking for tools that are already there”
- people need to be supported to use the tools, otherwise parts of them that might be challenging could be ignored

Learning from implementing the PBA

Few local areas were aware or familiar with the content of the PBA resources and tools. One was intending to use them to inform strategic plans around economic growth and local services. In another, there were plans to use some of the tools to carry out pilot work at the neighbourhood or district level. The aim was to use some of the PBA tools in neighbourhoods that had been designated a priority for new weight management services, identified through wider childhood obesity work as part of the WSA. Targets for reducing health inequalities were built into the pilot's delivery plan. The overall goals drew on the Amsterdam Healthy Weight programme as a blueprint, encouraging moderate and sustainable weight loss and long-term weight maintenance in service users (18). The priority areas were chosen because 60% of children on the programme had to come from the most deprived areas in the county.

Box 3: An example of Hull's approach in planning to use specific parts of the PBA

Hull is currently considering tool B from the PBA around community engagement and civic support to communities and are hoping to work with PHE to help them progress conversations around this area. Engagement is one of the key future priorities for the local Health and Wellbeing Board, and Hull will soon launch a new city-wide engagement approach to health and wellbeing to encourage co-production with residents. Hull have decided to rebrand the work from childhood obesity to 'childhood healthy weight' in order to be more engaging for the public. For city wide actions, the local authority is working with the planning department and building a health promoting food industry locally (for example, ensuring procurement promotes healthy eating), but they are also seeking to understand which actions community members would like to see on the ground in order to ensure the approaches are appropriate. Hull are also focused on understanding the role of the cultural sector in tackling obesity.

An upcoming Health and Wellbeing strategy 'refresh' will have a greater focus on the wider determinants of health, taking the responsibility of the Health and Wellbeing Board as a starting point, but also including reference to a wide range of partners. Hull is in the process of establishing a fairness commission, which will focus on health inequalities, including considering the role of employment, money, and skills. The PBA toolkits will help to shape the workstreams for the commission, and it was reported that the tools have the credibility of the LGA and ADPH branding which is helpful in making the case to senior leaders. The PBA toolkit was thought to offer ways to expand practical applications of the WSA action plan too, for example in getting wider partners engaged.

Learning from implementing approaches to reducing health inequalities within the WSA

Local approaches to reducing health inequalities can be grouped into 2 broad areas: aligning strategic efforts and working at the neighbourhood level. Mostly, these are already linked to their WSAs, and there are examples of where learning from whole systems has informed work to reduce obesity related health inequalities and vice versa. Annex B provides 6 local area examples of the implementation of the WSA, including examples of the work some of the areas are doing to address health inequalities.

Table 2.2, below, presents the learning generated from local authority approaches to addressing health inequalities related to obesity as part of their WSAs

Table 2.2 Learning from implementing approaches to reducing health inequalities within the WSA

Theme	Sub theme	Description of learning
Strategic alignment	Alignment with relevant policy agenda for local authorities	Promoting 'inclusive growth' refers to the idea of reducing poverty and deprivation by engaging all sections of society where health outcomes can be improved when more people will be able to access the resources they need for healthier lives. Tackling '2-tiered economies' were mentioned by some stakeholders, which focuses on ensuring that the benefits of attracting and generating successful businesses are felt locally. For example, by encouraging businesses to contribute to their local communities, provide employment and training for local people, and also by encouraging public sector employers to act as anchor institutions for their local economy – actions that would keep more money circulating in the local economy, and could help reduce inequalities. By demonstrating alignment with these local authority agendas, public health teams were more able to ensure that there was a clear link with reducing health inequalities related to obesity within their WSA work.
	Inclusion and reference to health inequalities in local plans	Health inequalities were linked to and included within local plans but with a wider focus than specifically around obesity. Key strategic plans (Health and Wellbeing plans and Equality and Diversity Plans) either acknowledge challenges around obesity, have priorities for reducing inequalities in a systematic way or include health inequalities as a strategic priority across multiple departments (sharing the responsibility rather than it being the responsibility of one individual or team). These plans were used to make the case so that teams outside the public health function would engage with the WSA and take actions to reduce health inequalities. In this way, the WSA on obesity has opened partnerships and conversations in different ways around health inequalities in general. Stakeholders wanted to see the WSA way of working, such as action planning, extended to addressing a range of other policy areas (for example, mental health or sexual health).

	Role of HWBs and local government as levers to reduce health inequalities	Health and Wellbeing Boards were thought by stakeholders to play an important role. Engaging them in the WSA work to address health inequalities issues was thought to be an important area of work for local authorities.
Neighbourhood approaches	Using 'place-based' approaches in areas of high deprivation	There were examples of focused work around reducing obesity-related health inequalities in addition to, or as part of their WSA – although this work was not always labelled as 'health inequalities' as such. In particular, local authorities were most often focused on developing 'place-based' approaches at the neighbourhood level, mindful of bringing community assets together to improve wellbeing and health outcomes in the most deprived areas, including addressing obesity.
	Use of community assets at the neighbourhood level	There were several examples of using data (for example, linking NCMP to service referrals) to identify deprived areas or priority wards where interventions might have the greatest effect, and using the WSA workshops to shine a light on the needs of particular target groups or populations at risk of poor outcomes. In doing so, it was sometimes argued by respondents that public health staff needed to have a good grounding in, and understanding of, health inequalities. Central to the neighbourhood approaches was the importance of scaling up activities or interventions that showed results but also providing a voice for communities in those changes.
	Work in priority wards with local communities	The WSA work focused on priority wards in some local authorities. For example, in one local authority, the JSNA identifies priority areas to focus on and the wards in greatest need, illustrating how health inequalities impacted on residents' outcomes throughout the life course. In other local authorities their WSA work had been targeted towards improving children's weight in key target areas. This has included hosting local meetings which involved a network of community organisations, schools, youth providers, and other neighbourhood level partners, as well as some city-wide stakeholders. Please see Box 4 for an example of using neighbourhood approaches to reducing inequalities associated with obesity as part of a WSA.

	Social prescribing	Social prescribing is a common approach used in local authorities that helps to target areas (and people) where there is most need and was used to provide a focus for WSA work. Sometimes these are coordinated by local council neighbourhood teams which were described as an important wider resource for WSA, outside of the core public health team. In one local authority, a database of interventions and community assets related to healthy weight was developed so opportunities for activities could be viewed by staff and residents. A more systematic approach to making use of data about community needs and assets can help to inform social prescribing and co-produce projects that are tailored to local needs.

Box 4: Using neighbourhood approaches to reducing inequalities associated with obesity in Liverpool

The approach to obesity adopted in Liverpool is that of 'proportionate universalism' (the delivery of universal services at a scale and intensity proportionate to the degree of need). Liverpool have reviewed their approach to obesity, which was described as previously service oriented, with access limited to those people that can take up these services, depending on the services provided by the City Council. Their new approach now has an emphasis on the environment, particularly with a focus on planning in their priority areas (areas of greatest deprivation). This is in addition to other areas related to the wider determinants of health (for example, housing, food marketing or advertising and whole school approaches).

Stakeholders stressed that their WSA approach is already underpinned by health inequalities. Their Healthy Weight Declaration is integrated within their WSA to obesity as part of 'health in all policies' which focuses on health inequalities data (19):

"I think [that work on reducing health inequalities] is happening already, for example when you're looking at the need of an area and what the drivers for obesity are, I think you're already talking about it … the key is all in the data and listening to our local community, and the way we set it up in the first workshop." (Obesity portfolio lead).

4. Discussion

What was learned by local authorities?

The 6 local authorities included in this research illustrate a wide range of experiences of implementing PHE's WSA in practice. The WSA has proved to be helpful in bringing both professional stakeholders and communities together to map their local systems and develop and prioritise actions for addressing obesity at different levels.

A critical success factor in the WSA has been gaining senior leadership buy-in, although the tools have supported this, some local authorities still reported challenges. Therefore, it was felt that having a senior leader resource that clearly makes the case for bringing health inequalities into whole systems approaches would be beneficial.

Use of the WSA has contributed to the inclusion of obesity and healthy weight in local strategic plans. In some places the tools have helped to reduce silo working around complex public health issues. In the view of many stakeholders, the structure of the WSA and the tools have reduced 'reinventing the wheel' while allowing for local context to be considered.

Learning that emerged from the implementation of local WSAs reflected that in the findings of the WSA learning report – this included:

- the importance of engaging senior leaders across the local system (including elected members) (20)
- aligning the WSA with local priorities and policy agendas
- the importance of community engagement and community assets
- maintaining progress through appropriate resourcing and facilitation of a local community of practice network

These findings reflect that local authorities are beginning to operationalise a WSA within their current work to encourage a 'business as usual' type of practice. Stakeholders suggested that this was important when engaging wider partners outside of public health, because it was important that the WSA work does not increase people's workload, but rather is seen as aligning well with work already taking place.

How health inequalities in relation to obesity are currently being addressed as part of a WSA, including through the PBA

The PBA was being used (or about to be used) in 2 of the 6 local authorities studied. Public health teams elsewhere were not familiar with the detail of the PBA, although some local authorities had prioritised reducing health inequalities and working on the social determinants of health in their strategic plans, and there were examples of local

authorities working on reducing obesity-related health inequalities in addition to, or as part of their WSA for example through targeting in the most deprived areas.

Local area examples within this report demonstrate that there was some local authority work around health inequalities that had clear links to WSAs. Although there was variation in terms of the considerations of health inequalities related to obesity within WSAs, this research highlights the positive work around health inequalities that local authorities are doing. Through addressing the social determinants of health and focusing on the most deprived areas some stakeholders reported that health inequalities and place-based approaches were already at the core of the work that they do. For example, one local practice example (Annex B) selected 3 priority wards based on high levels of deprivation and obesity rates for their focus on childhood obesity, whilst another local authority focused on health inequalities through their work on planning and neighbourhood working. The PBA was identified by local authorities as a useful resource that could help to enhance current work around health inequalities related to obesity. The resources could be used to support local authorities to ensure approaches are systematic and sustainable to reduce health inequalities at scale.

In relation to learning, local authorities pointed out the importance of aligning efforts to reduce health inequalities related to obesity with local plans for increasing wellbeing or fairness in the local economy – the engagement of HWBs was thought to be particularly key in thinking through the linkages. The PBA, which has been piloted at both HWB's and Integrated Care Systems / Sustainability and Transformation Partnership level has a key focus on ensuring engagement across systems, place and community. It may be a helpful resource to draw upon where some public health teams said that their local HWB struggled to be heard in these bigger structures that cover multiple local authority areas. This also suggests that briefing material for senior leaders across local systems, including elected members, may be helpful to show how action on health inequalities can help to achieve strategic goals.

As described in the findings of this report, the focus on systems and place-based thinking is at the heart of many policies in and around local government – so the PBA tools are likely to be helpful in further emphasising the links between public health and place. In addition, the NHS LTP also emphasises the important role of the health system in reducing obesity and health inequalities, which may provide an opportunity for local authorities to work together more closely with their NHS counterparts across a wider 'place'.

What opportunities are there to strengthen the WSA to obesity through linkages to the PBA?

The findings suggest that there are clear opportunities to further strengthen the WSA by placing a greater emphasis on health inequalities related to obesity and referencing how

and where the PBA resources and tools could be used. While the WSA and the PBA share important foundations such as the focus on community engagement and asset based approaches, using the PBA tools alongside the WSA resources could help to focus on building up community assets in areas where there are high levels of inequalities supporting action to address inequalities that contribute to obesity and the health gap.

Most respondents agreed that additional guidance around health inequalities would be helpful for further developing and informing their WSA and helping bring obesity related health inequalities to wider attention. They also highlighted the importance of bringing existing guidance together, so that the role of different sources of guidance would be more easily understood. It might also help ensure that the impact on health inequalities is considered in each phase of a WSA to obesity. Building on the findings, there are various ways in which health inequalities focus might also be brought further into local WSAs, by referencing:

- the importance of neighbourhoods as a fundamental unit of 'place' with the focus on greater engagement with communities to understand what they need and want, and rolling out this approach more widely following piloting
- building on the current policy agenda around social prescribing, that is, making the most of existing community assets, organisations and skills
- making use of data about community needs and assets in a systematic way could help to inform social prescribing and co-produce projects that are tailored to local needs

How could the PBA be strengthened?

Very few respondents were familiar enough with implementing the PBA to provide feedback. This limited awareness of the PBA may be because the PBA was initially targeted at a system level (Integrated Care Systems and Health and Wellbeing Boards). It may also be reflective of the method of selecting local authority case studies for this research, which focussed on familiarity and engagement with the WSA. The PBA piloting work provides the ideal opportunity to explore how to strengthen the PBA to support local areas to consider health inequalities more systematically and to enhance their current work to reduce health inequalities at scale.

5. Options to support local authorities to strengthen consideration of health inequalities within a whole systems approach to obesity

This section details the opportunities which were both developed by PHE and those that emerged through interview findings. During the interviews it was generally felt all support would be useful, but more detailed comment on the ideas that were formulated by PHE could not be provided due to limited insight of the PBA.

The ideas were further tested in a workshop, where all developed ideas were again supported, and the following additional insights were emphasised:

- peer support and sharing learning or tips across local authorities in implementing the WSA to obesity and tackling health inequalities in relation to obesity would be welcomed. This could include building on existing PHE networks, webinars or other online events
- it is important that tools and guidance, especially those aimed at a wider audience than public health teams, are as simple and jargon free as possible
- the new PHE and NHS Regional Directors of Public Health ought to have a role in bringing policy partners together and advocating for a preventative approach in wider structures – for example, in NHS Integrated Care Systems

Table 3.1 below outlines the ideas for strengthening approaches to addressing health inequalities associated with obesity as part of a WSA, including what these might look like.

Table 3.1 Options for strengthening approaches to addressing health inequalities

Ideas for strengthening approaches to addressing health inequalities associated with obesity as part of a whole systems approach	What this would look like	How this would strengthen approaches to health inequalities related to obesity
A supplementary briefing document explaining how the Place-based approaches to Health Inequalities could be used as part of a WSA to obesity (7).	A short document to signpost relevant sections and resources in the PBA guidance, explaining where they could add value to local authorities' use of the existing WSA guidance and resources. It is particularly important for this document not to be prescriptive, but rather to bring the PBA and the WSA to obesity, together.	The document would enable public health teams and their partners to quickly understand how the PBA could be used to help them to better strengthen the consideration of and approaches to address health inequalities associated with obesity as part of their WSA to obesity. Having 'bite-size' resources such as blogs that highlight links between the PBA and WSA that are not prescriptive, would be helpful for readers that do not have much time.
Develop a system maturity matrix, similar to those included in the PBA tools, to examine how the system can improve its prioritisation of health inequalities.	Based on Screening Tool A in the PBA guidance, this could be used by local systems to assess the strength of its current health inequalities scope, planning, delivery and evaluation mechanisms (21). This needs to include support to help people use the tools.	This would help to engage system leaders in a discussion about what goals and beliefs need to change in respect to health inequalities. Results could be used to galvanise strategic action and show where the most improvement could be made.
A simple 4-point 'Checklist for Strategic Plans on Health Inequalities'	This could be a short checklist adapted from the health equity assessment tool (see Annex F) to help public health teams and their partners to plan, assess, refine, apply and review the way in which health inequalities related to obesity are included in strategic	This would help public health teams take a strategic approach to considering health inequalities from the outset and provide support for evidence-based initiatives and programmes of work to encourage wider partner buy-in. This would also help local areas scrutinise and review their work in this area.

	planning (23). The short list of prompts could be used in phases 4 to 6 of the WSA, to help ensure that health inequalities are embedded both in the development and the reflect and refresh of the vision and action plans. Local authorities could then link through to the health equity assessment tool for more detailed information if required.	
Guidance on relevant health inequalities data to collect and monitor as part of a whole systems approach	The PBA includes a guide to using national and local data to address health inequalities (22). This guide could be linked to or included as an additional resource in the WSA to obesity.	This would allow local partners to easily access relevant data regarding local health inequalities, help to make the case as to why and where action is required and provide a way to track progress.
Light touch changes to the content or recommended usage of existing whole systems approaches tools to better monitor health inequalities.	These changes could include suggestions on where else existing tools could be used throughout the whole systems process or edits to strengthen the content of the existing tools to better consider health inequalities. Examples: • advice on using the WSA action mapping tool as an evaluation tool as part of the 'reflect and refresh' stage to understand any changes in the distribution of actions across the 'wider determinants of health' model • strengthening the health inequalities column within the action planning tool	This would give greater emphasis to health inequalities in the existing WSA to obesity resources.

Produce resources for senior leaders that make the case for bringing health inequalities into whole systems approaches	This could include briefings and communication aids that would help public health teams to make the case for addressing health inequalities as part of a WSA to obesity, including elected members or senior officers outside of public health.	The fieldwork identified that senior buy-in was a critical element in the success of WSA, so additional support in this area could help to focus attention on health inequalities at a corporate level. This could be similar to this example of a previous elected members' briefing (23).
Circulate case studies of progress made by local authorities to date, in addressing and reducing health inequalities as part of a WSA to obesity.	Promising practice case studies highlighting how local areas, including both local authorities and system partners, are addressing health inequalities as part of the whole systems approach to obesity.	Giving more examples for public health teams as to what action could be taken, or the outcomes that WSA might lead to, with a particular focus on helping focus action on health inequalities.
Circulate case studies of progress	Capture the experience of a local area that is using the WSA and PBA resources together and produce a case study of the learnings.	This would provide specific worked examples of how the PBA and WSA can work together.
Gathering and sharing outputs relating to emerging practice	The document would collate examples of key documents from local areas that have implemented WSA with a focus on addressing health inequalities. This could include examples of local causal maps, local log frames or action plans. These outputs could either be shared via the upcoming 'whole systems approach community of learning' site or stored alongside current whole systems resources on Knowledge Hub.	This would provide examples of practice in other areas and what has worked well as well as ideas for further development in a library for public health teams.
Action learning sets for core staff with focus on Health inequalities	This would involve PHE working with local core teams involved in developing a WSA to share their experiences via learning sets.	This might enable local areas to learn from each other's progress and contribute to solving each other's challenges related to health inequalities as part of their WSA.

Some additional opportunities and learning emerged within the findings, which fall outside the scope of this project as they do not directly relate to outputs that can be developed to strengthen the WSA process, guide and resources. These relate to more strategic opportunities at both a national, regional and local level for strengthening relationships across the system including the role of HWBs and opportunities to link with the NHS LTP.

6. Conclusion

This research took place in the early stages of the COVID-19 pandemic. As the pandemic has progressed it has further highlighted and reinforced the stark health inequalities that exist within our society. Evidence suggests that a number of groups are being disproportionately impacted by COVID-19, including those living with obesity (5). There is a real risk that the longer-term impacts of this pandemic will increase existing inequalities.

The pandemic has reaffirmed the need for local whole systems approaches to address obesity and the ingrained associated health inequalities, but it also provides significant opportunities for renewed action in this area. This research has highlighted some of the positive work that local authorities are already doing to address obesity and associated health inequalities as part of their WSA. It has also identified a number of opportunities for PHE to explore that could support local authorities to further strengthen existing approaches. Whilst the opportunities are largely focussed on action for PHE, many of the learnings are transferable across the local system highlighting areas to work collaboratively. These emphasise the shared ambition to improve the health of the population and identifies the requirement for all parts of the system to understand and address health inequalities aligning with a ‘Health in All Policies’ approach.

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