Public Health Scotland

Whole systems approach (WSA) to diet and healthy weight: early adopters programme process evaluation

Final report

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Executive summary

Social Marketing Gateway (SMG) is a social and market research agency specialising in behaviour change. SMG was commissioned by Public Health Scotland (PHS) to conduct a process evaluation of the national Whole Systems Approach Early Adopter Programme, with a focus on diet, healthy weight, children and health inequalities. A whole systems approach (WSA) involves applying systems thinking, methods and practice to better understand public health challenges and identify collective actions by a range of relevant stakeholders.

Methodology

SMG reviewed the process followed in selected areas to learn what worked and what did not work, with a view to informing a possible wider roll-out of the WSA. A mixed methodology was followed, combining: desk review; observation of the WSA workshops (both live or recorded if available); interview of stakeholders who had participated in the process (for example in WSA workshops, focus groups and action planning meetings); and interviews with the national partners. Most of the fieldwork conducted by SMG took place between May 2021 and April 2022, the timing of this being largely determined by the progress made in each area and the availability of stakeholders for interview.

Policy context

In response to daunting challenges related to diet, healthy weight and physical activity, one of Scotland's six public health priorities is 'A Scotland where we eat well, have a healthy weight and are physically active'. The 2018 **A healthier future: Scotland's diet and healthy weight delivery plan** set out an aim to halve childhood obesity by 2030 and significantly reduce health inequalities. This will require the whole system to work collaboratively, bringing together local and national decision-makers, and taking action on the many factors that can impact people's health and wellbeing.

Scotland's WSA Early Adopters Programme

A national programme that ultimately consisted of four WSA areas (Dundee, East Region, North Ayrshire and Dumfries and Galloway) was launched by the Scottish Government in 2019. It was supported by national partners PHS, Food Standards Scotland (FSS) and Obesity Action Scotland (OAS). This support was frequently mentioned as being particularly helpful to local processes.

This process evaluation deals with WSA activity in each of these areas, plus a WSA in Aberdeenshire (which was not officially part of the national programme).

All these areas followed Public Health England's (PHE) guide[1] for implementing a WSA to healthy weight and obesity and drew on nine core characteristics of a WSA developed by Public Health Reform.[2] The public health reform programme was a partnership between the Scottish Government and the Convention of Scottish Local Authorities (COSLA). The reform programme had three key components: the development of public health priorities, the establishment of PHS and the development of a whole systems approach to public health. The PHE guide sets out a process involving WSA workshops followed by the development of an action plan and its implementation by the local system network.

Training was provided by Leeds Beckett University (LBU) staff on how to apply the model and guide and deliver two key WSA workshops. This training was delivered to local leads who would be testing the approach. The first workshops were designed to bring stakeholders together to create a comprehensive 'map' of the local system understood to cause poor diet and obesity and to begin to create a shared vision. The second WSA workshops aimed to enable participants to review the causal map, prioritise areas of action and develop specific areas for action (leading to a local action plan).

Pre-workshop promotional activity in each local area built up an understanding of the WSA and generated momentum for the formal process to be embarked on, which was reflected in healthy turnouts across the first WSA workshops. Participation ranged between 20 to 60 people from a mix primarily of public and third sector bodies

at each event. In some areas, however, attendance fell at the second sessions. In early 2022, work was ongoing and all areas were at different points in their journey.

Impact of COVID-19

COVID-19 had a dramatic impact on the national programme. Progress was stalled for many months (by factors such as staff being redeployed to deal with the COVID-19 response). However, the continued availability of support from national partners enabled those areas that decided to press ahead to move to online workshops and undertake additional training to do so. Had the country not experienced the pandemic, the early adopters would likely have been at a more advanced stage in terms of delivering actions supported by local systems networks.

Assessing the process: what worked well

Strategic positioning and alignment: in different ways, the local areas positioned their WSAs to connect with local strategies and structures. The benefits of this are multiple. It gave the WSAs a status and gravitas that fed into support for the working group, it encouraged and helped sustain stakeholder engagement and, more generally, it raised the chances that whole systems working will develop and continue into the future.

Stakeholder engagement and participation: a broad base of stakeholder interest has been created and sustained around the WSAs, helped by both the existence of previous partnership working in the localities and by having already very well-connected local leads who could draw on these networks to assemble stakeholder contact lists. It has also required sustained hard work by local leads who have used communication tools and tactics innovatively and effectively.

WSA model and guide: the PHE model helped to get the WSAs off to a good start. It offered a logical framework and path to follow – one that engaged participants in a well-structured, collaborative and deliberative process. Importantly, the model demanded a common focus from a wide mix of participants from different backgrounds, it supported the development of a shared understanding and vision

and enabled a more in-depth, collaborative analysis of the problem/challenge than stakeholders were used to.

Workshop experience: many positives were identified, with positive feedback forthcoming from all WSAs. Workshops were highly collaborative, high-energy events, thoughtfully planned and designed, as well as open and inclusive. In workshop activities, people were going beyond good partnership working. They were starting to work differently. Some 'lightbulb moments' drove home the message that a WSA is more than good partnership working and requires action to address upstream drivers and determinants of health.

Tailoring to the local context: the model has proved capable of being adapted and tailored to suit local needs. While some WSAs largely stuck quite closely to the PHE model process, others felt the need to adapt and have done so with some success.

Assessing the process: difficulties and challenges

Capacity of local leads and other stakeholders: staff capacity to deliver the process has been a challenge across the programme. The time demands associated with preparing for and delivering WSAs were heavy, particularly on local leads and administrative support, but also on working group members and other stakeholders actively involved.

Stakeholder engagement and participation: this has proved to be a challenge, which as manifested in several ways. Potentially important players have not been actively involved and continuity of stakeholder involvement has been difficult. Reasons include: the specific demands associated with COVID-19; limited capacity; difficulties encouraging parts of the system to recognise their role and influence; and stakeholder fatigue with the overall demands placed upon them.

Engagement of local communities: the WSA process has not significantly engaged local people with 'lived experience' of the issues addressed. The 'community view' has been largely inputted by local practitioners who know their communities well. The limited degree to which communities have been directly engaged is widely (though

not universally) seen as one of the main limitations and failings of the process to date.

PHE model and guide: for some, the process felt overly academic and unnecessarily complex. There were some critical reflections on the PHE model including: lack of community engagement; being over theoretical and inaccessible at points; concepts being time-consuming and difficult to grasp; and the process not moving quickly enough to address more relevant, interesting and important issues.

Workshop experience: criticisms of a practical nature included: a loss of interest and momentum between the two main WSA workshops; too much time being devoted to presentations; feeling slightly overwhelmed by the level and complexity of some workshop activities; and struggling to prioritise themes and develop actions. More fundamental concerns included: a perception that the stakeholders attending were not sufficiently senior to make decisions on the priorities and actions developed; and that the output of the workshop activity was over-dependent on attendance on the day, especially if some important players were not present.

Progress against desired short-term outcomes

Some progress had been made against the outcomes set out for early adopter areas, with progress varying across the outcomes.

Outcome 1: Community are engaged in the approach

Communities have not been centrally involved in the WSA workshop process and, overall, community engagement has been limited so far.

Outcome 2: Action is taken to address the upstream drivers and determinants of health

Some progress can be seen in the priority themes and actions identified by some of the WSA areas.*

Outcome 3: Systems thinking practice is being integrated across the local partnership

The momentum growing up around the WSA has been boosted and (as perceived by stakeholders interviewed) the profile of whole systems working has been raised.

Outcome 4: Collaborative working across departments and organisations

Already a strong feature of the local systems, local areas built on the strong connections that previously existed and their WSA has further strengthened collaborative working.

Outcome 5: Actions are jointly prioritised and aligned across the local system to address diet and healthy weight and to reduce inequalities

While the process serves to jointly prioritise actions, parts of the system have not been actively involved and, as such, the priorities and actions collectively agreed by the stakeholders reflect this partial input.

* Where the term 'WSA areas' (WSAs) is used, this covers the early adopters and Aberdeenshire WSAs.

Outcome 6: Learning is being captured and shared

This outcome has been progressed and a huge amount of learning has been captured and shared across the WSAs that progressed their work online during the COVID-19 pandemic. There continues to be a very strong appetite across the WSA areas to continue to learn from other areas that have progressed a WSA approach.

Conclusion

COVID-19, by demonstrating how local systems can work better to deal with complex challenges, has accelerated interest in the WSA. Enthusiasm for whole systems working, even in the areas that have made less progress, appears to be stronger than ever. Progress across the national programme stands as a valuable body of learning that can support further WSA work. There is, therefore, a very strong case to continue national support for the WSA, and to tap into the widespread positivity that stakeholders report has built up around whole systems working.

Recommendations

Recommendations are made based on combining: a) maintenance of the momentum generated by the WSAs; and b) further new enthusiasm and priority for the WSA concept leading from the COVID-19 experience. Specific recommendations are:

1. Communication of the findings of this evaluation across partners at national and local levels, highlighting the potential transferability of WSA across other areas and policy agendas.

2. The development of a bespoke Scottish WSA model that incorporates the recognised strengths of the PHE approach, while addressing the identified limitations of this from the practical experiences of the WSA areas. This could include:

    a. adaptation and simplification of key concepts and supporting materials

b. use of good and imaginative mechanisms to communicate WSA concepts and progress, presented in simple, ‘bite-sized’ chunks

c. clearer articulation (with guidance and examples) of how and when direct community engagement activities might be used in the WSA, to reflect the voice of ‘lived experience’

d. balancing work that needs to be advanced via workshop sessions/events with offline research and less formal engagements

e. offering blended options for participants balancing the positive gains of online experiences with the value of traditional face-to-face work

f. the development of an appropriate suite of training activities and supporting materials (including pre-training for local leads and training that enables the process to be followed online if this is the local preference).

3. Ensure this bespoke Scottish model incorporates guidance to reinforce key success features for an effective WSA highlighted by the local areas, such as the importance of comprehensive initial engagement activities; clearly articulated senior buy in; getting a wider set of senior staff actively engaged in the working group from the outset; early connections to key wider local strategies and structures; appropriate resourcing to deliver the WSA based on realistic estimates of required time commitments from project leads and other key stakeholders; and targeted support from national partners.

4. To get round the issue of the output relying mainly (or solely) on who participates in workshop events, mechanisms should be found to ensure that more stakeholder voices and existing evidence are involved in the causal mapping and action development.

5. National partners should consider setting up a short life working group, with strong representation from local leads from the WSA areas that took part in the national WSA programme (including Aberdeenshire), with a remit to address

what the scope and content of a new WSA methodology suited to the Scottish context could look like.

6. Consider and articulate respective responsibilities of national, regional and local levels in delivering a WSA, ensuring appropriate local flexibility and that key responsibility and ownership of the WSA is focused on the local level.

7. Further consider the appropriate geographic levels to establish a WSA based on reflecting on individual area approaches, which ranged from local authority-wide to a local community of only 3,500 people.

8. Quickly establish a WSA as the future ‘normal’ way of working, not an ‘add on’ or optional extra. It should be recognised that this requires investment locally and nationally on the basis that it will return much more in terms of wider effectiveness and value for money in public sector spending.

9. Recognise that measuring tangible impacts and outcomes of a WSA takes time, involving fundamental organisational behaviour change, as well as the importance of balancing quick wins with processes, the benefits of which inevitably take longer to evidence.

1. Introduction

Prior to the outbreak of the COVID-19 pandemic, Social Marketing Gateway (SMG) was commissioned by Public Health Scotland (PHS) to conduct a process evaluation of the whole systems approach (WSA) to diet and healthy weight, with a focus on children and health inequalities. A WSA involves applying systems thinking (described more fully below), methods and practice to better understand public health challenges and identify collective actions by a range of relevant stakeholder organisations.

The Scottish Government's 2018 Diet and Healthy Weight Delivery Plan[3] sets out how the government will work with partners in the public and private sectors to help people make healthier choices about food. One of the actions in the delivery plan is for the Scottish Government to work with partners, including PHS, FSS and OAS. The plan also calls for commitment from leaders of three early adopter areas, identified as North Ayrshire, East Region[†] and Dundee, to work with the government and partners to develop and test a whole systems approach to diet and healthy weight. Dumfries and Galloway was subsequently added as the fourth early adopter area.

This process evaluation covers activity in all four early adopter areas. Also, at an advanced point in the study, a WSA in Aberdeenshire, focused on healthy eating and active living, was added to the work programme. While Aberdeenshire was not one of the early adopters, it followed the same approach. In total, seven local case study areas are therefore covered by this process evaluation. These comprise three of the five areas in the East Region that tested the approach and Dundee, Dumfries and Galloway, North Ayrshire and Aberdeenshire.

Progress in all areas was significantly disrupted by the COVID-19 pandemic. For example, while early adopter areas (over the latter part of 2019) prepared for a lot of

[†] Where the term 'East Region' is used, this refers to **The East of Scotland Partnership; Prevention and Remission of Type 2 Diabetes Programme**.

WSA activity happening during 2020, progress in the areas covered by the national programme stalled and did not move ahead as planned. The impact of COVID-19 on both the WSAs and the process evaluation is considered more fully below.

The following report draws on what has been learned from evaluating WSAs across these seven areas. Each of the areas has been written up as a separate case study available in the Case study document accompanying this report.

In addition to this process evaluation, two areas independently bid and successfully achieved NIHR PHIRST[4] evaluation support, including an evaluation of the WSA to diet and healthy weight in the East Region of Scotland.[5] This evaluation is being carried out by the central PHIRST team and includes Midlothian and West Lothian, which are not included in this process evaluation. The second is an evaluation of Healthy Weight Tayside, a WSA to healthy weight in Dundee, being undertaken by the North PHIRST team. Dundee is included in this process evaluation.

1.1. Methodology

SMG reviewed the process followed in the selected areas to learn what worked and what did not work, with a view to informing a possible wider roll-out of the WSA. A mixed methodology was followed, combining: desk review; observation of the WSA workshops (both live or recorded if available); interviewing of stakeholders who had participated in the process (for example in WSA workshops, focus groups and action planning meetings); and interviews with the national partners.

Most of the fieldwork took place between May 2021 and April 2022, the timing of this being largely determined by the progress made in each area and the availability of stakeholders for interview.

1.2. Recruitment of stakeholders

A detailed participant information sheet and a participant online consent form were prepared. These were circulated by local leads to stakeholders who had been involved in the WSA process (SMG was not advised of who this information was sent to). Once stakeholders had given their online consent, SMG made contact to arrange

a suitable time for interview. In response to small numbers of respondents giving consent in the above way, SMG requested local leads to speak directly to stakeholders to check if they would be happy to participate and, if so, for their emails to be passed to SMG, with their permission. This approach generated additional stakeholders for interview, with SMG making contact and securing consent before proceeding.

1.3. Number of stakeholders interviewed across the WSA areas

A total of 42 stakeholders involved in the local WSAs were interviewed as part of the process evaluation. These were mainly staff from the participating local authority and NHS board, with some third sector involvement also. The table below shows the number and type of stakeholders interviewed in each of the WSA areas.

Table 1: Numbers and type of stakeholders interviewed by WSA area[6]

WSA	Total	Local authority	NHS	Other public	Third sector
Dundee	10	3	5	2	–
Scottish Borders	12	5	4	–	3
North Ayrshire	2	1	1	–	–
East Lothian	7	3	–	2	2
Aberdeenshire	1	1	–	–	–
Dumfries and Galloway	2	1	–	1	–
Fife	8	–	6	1	1
Total	42	14	16	6	6

1.4. Key lines of enquiry

The depth interviews with stakeholders explored:

- experience of the local WSA process, in particular the workshops/meetings
- aspects of the WSA process that worked well or not so well
- participants' views on the PHE model and guide
- the extent to which stakeholders felt that the key elements of WSA working (as set out by the Scottish **Public Health Reform**) had been followed
- any noticeable differences and outcomes the WSA had made to date
- lessons from the WSA experience that can inform future WSA practice.

1.5. Data recording and analysis

All interviews were carried out by a senior member of the SMG team using a discussion guide agreed with PHS. With the participants' permission, interviews were recorded. To ease analysis, a data template was created on Smart Survey that reflected the main areas of the discussion guide. Following each interview, the researcher reviewed their notes, and (where necessary) the recording, and entered salient content into the Smart Survey template. This allowed the research team to read across key elements of the discussions with stakeholders and draw out themes and findings when analysing the data.

1.6. Case studies

Each case study was written up as a free-standing Word document and shared with the local leads who had assisted in the study. This enabled the SMG team to check accuracy of the data and give the leads (and other key stakeholders who the leads had shared the draft case study report with) the ability to feedback comments and views. Case studies were then revised and shared again with the local leads until an agreed, accurate account of the local WSA had been reached. These case studies

have been assembled separately (see the accompanying ‘Whole systems approach (WSA) to diet and healthy weight: early adopters programme process evaluation: Case studies’) and provide more detail on each local WSA experience.

2. Policy context

Some of the most daunting public health challenges facing Scotland relate to poor diet, healthy weight and physical activity. Poor diet, having a higher weight and physical inactivity present major and growing issues for Scotland, impacting all public services and communities, with significant costs to the economy.

Scotland has the lowest life expectancy among UK constituent countries and in Europe. Over two-thirds of adults in Scotland live with overweight (including obesity) and more than one in four adults live with obesity.[7] Additionally, around a third of children aged 2–15 years are at risk of obesity,[7] with children consuming food and drink high in fat and/or sugar more often than adults.[8] Dietary risk factors are the second biggest contributing factors to death and disability after smoking, costing the economy up to £4.6 billion.[9] Physical inactivity contributes to nearly 2,500 deaths each year, costing the NHS around £9.4 million.[10] These challenges are being addressed by one of six public health priorities agreed between the Scottish Government and COSLA in June 2018 – priority 6, 'A Scotland where we eat well, have a healthy weight and are physically active'.[11]

A person's diet and weight are influenced by a range of factors, many of which are outside the control of the individual, for example income, availability and affordability of food, the energy density of food and the influence of promotion and marketing activity. Similarly, a person's physical activity levels are influenced by access to affordable leisure and sporting facilities, transport and planning systems, availability of safe space in local neighbourhoods, and many other factors that also lie outside the control of the individual. These factors are collectively known as 'upstream determinants' of health and wellbeing.

Research shows that higher weight impacts people of all backgrounds. However, levels of obesity are very closely linked to the socio-economic circumstances within which people live.[12]

In considering how to address complex challenges like poor diet and physical inactivity, the Scottish Government has recognised that this will require the whole system to work collaboratively, bringing together local and national decision-makers

within healthcare, transport, planning, education and other sectors. The 2018 Diet and Healthy Weight Delivery Plan actions, for example, aim to halve childhood obesity by 2030.[2] As part of this effort, action on the upstream determinants of health and wellbeing will be critically important.

The Scottish Government's commitment to a WSA to tackling the above challenges was evident in the Scottish Government's Programme for Government 2021–22, which stated:

> 'We will also focus on improving the health of our young people, aiming to halve childhood obesity by 2030 and significantly reduce diet-related health inequalities, by taking forward the actions in our Diet and Healthy Weight Delivery Plan. We will evaluate 3 pilots of whole systems approaches to improving diet and healthy weight services, to scale up and implement best practice across all Health Boards. £650,000 has also been made available this year to help Health Boards and local partners, support services which encourage and reinforce good nutrition, healthy eating habits and physical activity for children under five and their families.'[13]

3. Scotland's Whole Systems Approach Early Adopters Programme

It was against this background that the Scottish Government launched a national programme in 2019 for a series of local WSAs. The programme has enabled several local authorities and NHS boards to test a WSA to improve diet and tackle unhealthy weight across the local population, with a focus on children and health inequalities.

Whole systems working has been defined as applying systems thinking and processes that enable, 'An ongoing, flexible approach by a broad-range of stakeholders to identify and understand current and emerging public health issues where, by working together, we can deliver sustainable change and better lives for the people of Scotland'.[2]

A WSA involves the application of complex systems thinking, methods and practices to better understand public health challenges and identify collective actions. Adopting a WSA to Scotland's public health priorities[2] is recognised as a long-term endeavour that will require new partnerships between a broad range of stakeholders to deliver better lives for the people of Scotland.

3.1. The early adopters

Original early adopters were North Ayrshire, Dundee and East Region. The East Region made a local decision to test the approach in five areas covered by the East of Scotland Partnership for the Prevention and Remission of Type 2 Diabetes (Fife, East Lothian, Midlothian, Scottish Borders and West Lothian).

Dumfries and Galloway, while not originally included in the diet and healthy weight WSA programme, was also testing out the WSA approach for physical activity. To avoid duplication of effort, and make the most efficient use of resources, Dumfries and Galloway was invited to join the early adopter programme. This enabled local leads to make use of the support being provided by national partners, including training and ongoing support from the national coordinator based in OAS.

The process evaluation deals with WSA activity in all four early adopter areas. In the East of Scotland region, three of the five localities covered by this early adopter have been included in the evaluation. These localities are: Scottish Borders, focusing on Eyemouth; Fife, focusing on Dunfermline and Cowdenbeath; and East Lothian, focusing on Musselburgh.

The geographical focus of the local WSAs varies widely. Some early adopters have chosen to focus on relatively small localities (like the small towns of Eyemouth or Musselburgh), while others (Dundee, North Ayrshire and Dumfries and Galloway) have maintained a city-wide or region-wide focus with no specific settlement(s) or communities targeted (see **Appendix 1**).

Short-term outcomes

At the outset of the national WSA programme, six short-term outcomes were identified to be progressed over the next five years. These desired outcomes are:

- communities are engaged in the approach
- action is taken to address the upstream drivers and determinants of health
- systems thinking practice is being integrated across the local partnership
- collaborative working across departments and organisations
- actions are jointly prioritised and aligned across the local system to address diet and healthy weight and to reduce inequalities
- learning is being captured and shared.

Towards the end of this report, these outcomes are revisited and progress to date assessed.

National support to the programme

National support was put in place: a steering group to oversee early adopter activity and the process evaluation, and a WSA national coordinator hosted within OAS with

a remit to help coordinate and support the WSAs. A range of support was also made available by national partners (PHS, OAS, FSS and the Scottish Government), such as: access to an existing whole systems model with supporting guidance (discussed below); tools and resources; training and capacity building for the local leads; support to facilitate workshops; and skills sharing sessions across the WSAs. Support from the national partners has been welcomed, with OAS and PHS being frequently mentioned as being particularly helpful to local processes.

Governance, resourcing and leadership

Each early adopter was required to identify a project lead from the local authority and the NHS board respectively and secure senior sponsorship from these partners. While most of the WSAs adhered to this starting point, governance and working structures varied, with important implications for how closely linked the WSAs have been with local stakeholders, partnerships, related local strategies and developments.

In the East Region, where local areas were supported by the East of Scotland Partnership for the Prevention and Remission of Type 2 Diabetes, a three-tiered structure operated. Above the local governance and leadership structures, a region-wide Governance Group provided senior staff support and funding. £60,000 was earmarked for each WSA and made available in two phases: £10,000 to support the process up to the development of a local action plan, and £50,000 to support implementation of that plan. An officer from the partnership initially provided 'invaluable' support in encouraging local partners, providing information on other WSAs and generally offering reassurance that the Fife WSA was progressing as expected. Unfortunately, this officer moved to another post during the WSA.

In the East Region, local governance groups have been made up of senior officers from, for example, the local authority, NHS, the Health and Social Care Partnership (HSCP) and key third sector bodies. Local working groups have drawn on a mix of stakeholders from public and third sectors expected to be actively involved in the WSA process. The NHS boards and local authorities involved in the East Region are

NHS Borders, Scottish Borders Council, NHS Lothian, East Lothian Council, NHS Fife and Fife Council.

Governance arrangements in the other three early adopters varied. In Dundee, governance is vested in the Dundee Partnership, with the lead sponsor Dundee City Council's (DCC) Executive Director of Children and Families Services. The working group consists of three leads only (one from DCC and two from NHS Tayside), which makes it an exception among the WSAs in not having a larger working group. The Dundee leads have been able to engage a very large number of stakeholders, which reflects both their excellent personal networks and their central involvement in the development of Tayside's Child Healthy Weight Strategy, which took place alongside the WSAs and positions the WSA at the heart of strategy delivery.

In Dumfries and Galloway, governance was vested in the existing Dumfries and Galloway Physical Activity Alliance as a strategic partnership for physical activity. Senior leadership for the approach was secured from their Chief Executive Officer and the Chief Executive Officer of NHS Dumfries and Galloway. The WSA was paused in March 2020 due to the pandemic as the lead officer, core working group and contributing staff were redeployed to respond to the COVID-19 pandemic. Opportunities to position physical activity in the context of COVID-19 recovery also highlighted the need for closer alignment of the Dumfries and Galloway Alliance to Community Planning. Learning from work progressed nationally by PHS on a systems-based approach to physical activity will be used to inform a revised approach for Dumfries and Galloway.

In Ayrshire, the three local authorities and NHS Ayrshire and Arran were already in partnership around a 10-year healthy weight strategy when the opportunity to become a WSA early adopter arose. The partnership decided to focus its WSA on one of three community planning partnerships (CPPs) in the region, North Ayrshire. Importantly, the idea received support from the CPP at a time when the CPP was refreshing its strategic priorities, thus allowing the WSA to embed diet and healthy weight within the new priorities. Also, with the two local leads actively involved in advancing the Healthy Weight Strategy and Active Community work, they were already engaged in networks dealing with issues related to obesity, such as active travel and leisure provision, and were able to connect the WSA to them.

In Aberdeenshire, again, a different governance and leadership arrangement can be seen. Here the WSA has been advanced entirely with Aberdeenshire-based resources. Importantly, governance of the WSA is vested in the CPP, with progress reported on a regular basis, and the whole systems work has been formally incorporated into the Local Outcomes Improvement Plan (LOIP). These links ensure WSA visibility, secure longevity and embed connectivity across partners. The work is led by two project officers, one jointly funded by the HSCP Public Health Team and local authority, the other fully funded by the HSCP Public Health Team. Dedicated community engagement resource (from the Council and funded by the HSCP) has added very significant further working capacity: a three days per week secondment for a year of a senior Council Community Development Officer.

The resources that have gone into supporting the WSA process in the local areas have, therefore, largely been in the form of staff time, providing local capacity to get the process started and carry it forward. Some areas, like Aberdeenshire, have been able to commit more significant staff resource than most, whereas in other areas the process has been led by a very small number of staff who have also had other responsibilities to deliver.

Dedicated funding to support the process has only been available for the WSAs in East Region (not in any of the other early adopter areas). Here, in addition to £10,000 being made available to support each WSA with its early work, some £50,000 was earmarked to support implementation. It is notable that two areas (Scottish Borders and East Lothian) are the only local WSAs covered by this evaluation to have developed formal action plans by early 2022. It seems reasonable to suggest that the availability of this implementation funding may have focused minds to get local action plans drawn up in time to bid for funding before the original end of the national programme (March 2022).

Another factor in why these are the only two areas to complete action plans could be related to place. Both areas focused their WSA on one small town where it was relatively easy to identify stakeholders and mobilise them around the needs of the local community. Indeed, in Aberdeenshire, where the WSA has had a region-wide focus, some reflections are made that seeking to cover the whole of a large local authority area through a single WSA may have been overambitious.

3.2. The whole systems model followed

All seven of the local areas evaluated have followed the model of whole systems working developed by Public Health England (PHE) (see below). This was identified by the national partners as the preferred approach. The early adopters also sought to demonstrate the nine core characteristics developed by Public Health Reform. Drawing on established models, these characteristics were developed and refined through extensive national engagement to reflect a whole systems approach (Figure 1). A fuller description of the characteristics is set out in **Appendix 2**.

Figure 1: Characteristics of a WSA[2]

A WSA has many similarities to effective partnership working. However, what potentially sets it apart and adds value is the adoption and application of complex systems thinking, methods and practice to understand the problem and to support identification and testing of actions to address it. These actions focus on addressing the upstream determinants of health. It also embeds an ongoing and reflective cycle

of learning, recognising that system change is a long-term endeavour, often delivered through incremental steps and made collaboratively with many partners.

While many tools and methods have been developed to support WSAs, the process can be simplified into three phases[14]:

- Collectively forming an understanding of the issue, context and wider system.
- Creating a plan for action collaboratively, with actions aligned and jointly prioritised.
- Learning and refining as you go (as action plans are implemented).

The model that the WSAs initially followed sought to cover the first two phases across two WSA workshop events (discussed below).

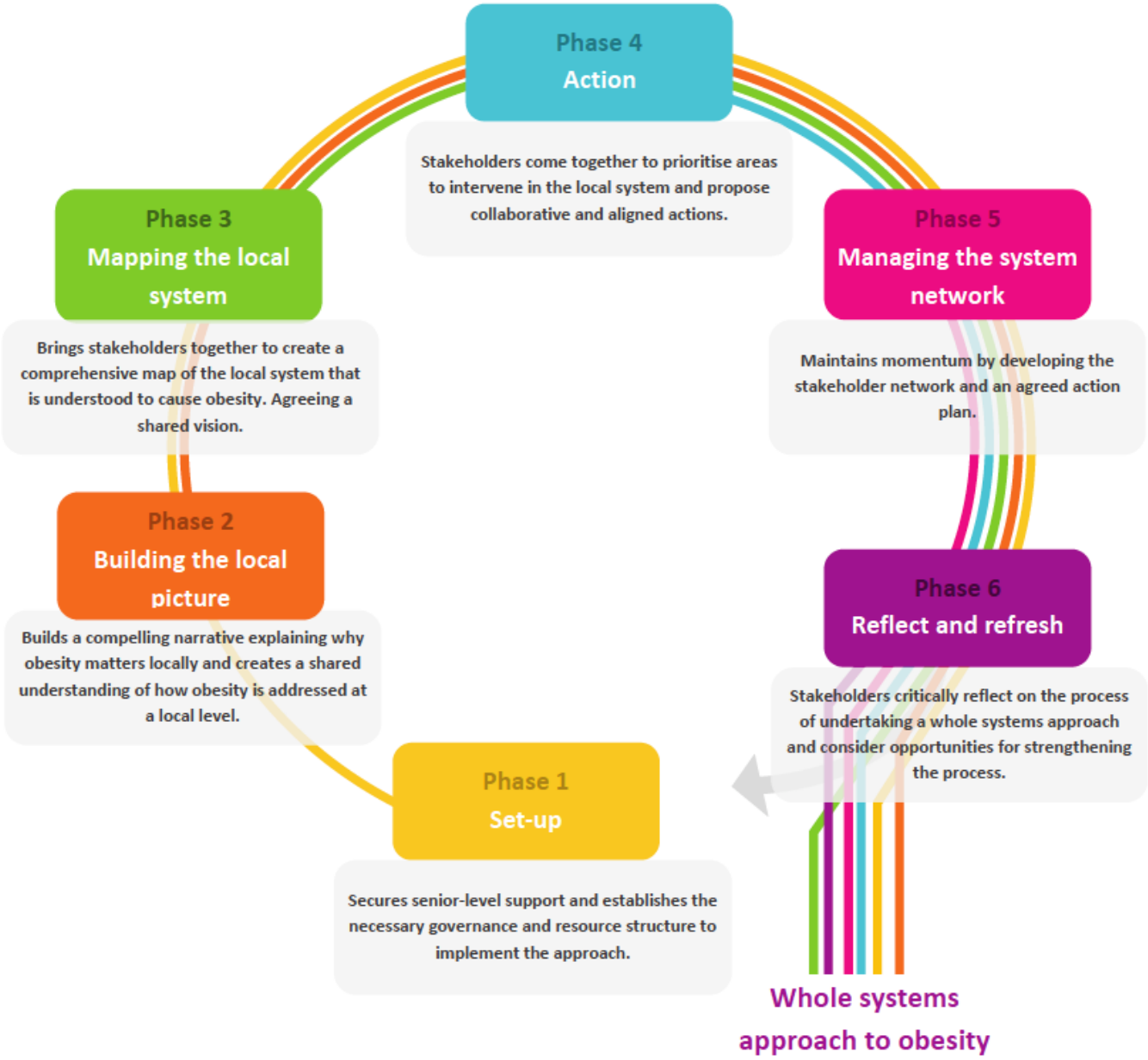
The early adopters also relied heavily on a guide devised by PHE, in partnership with LBU, that provides a set of resources designed to support local authorities with implementing a whole systems approach to address obesity and promote a healthy weight.[1] The PHE guide provides a practical 'how to' process, enabling project teams to start creating their own local whole systems approaches to addressing obesity, poor diet and supporting healthy weight.

The guide does not specify which specific policies, interventions or actions local areas should include in a WSA. It is expected that this will be agreed collectively by local stakeholders to reflect the local context. The guide explains some of the key elements and concepts of systems thinking, then takes users through a six phase 'how to' process from engaging senior leaders and wider stakeholders, to conducting system mapping and action planning workshops, to reviewing and adapting the approach. The process, and how to implement it, is explained with resources available to support each phase, including systems science tools and techniques. It is intended that the six-phase process is used flexibly, considering existing structures, relationships and actions that are already in place to tackle poor diet and obesity.

All the WSA areas (including Aberdeenshire) made good use of the PHE guide as they progressed their WSA process. The WSAs that were part of the national

programme received training from LBU staff in how to use the guide in advance of the WSA workshops. During the WSA process, local leads referred to the guide frequently to check that they were on track and to share the guidance provided with participating stakeholders, drawing on (and sometimes adapting) templates in the guide during the workshop process.

Figure 2: Model process for a WSA (PHE)[1]



The Scottish WSAs initially set out to follow the PHE guide. The local leads and other key facilitators involved in the early adopters underwent five days of intensive training by LBU staff on how to apply the model, guide and resources. It is notable that the

Aberdeenshire team did not undergo any similar training but believe they have succeeded in making good progress with their WSA. They were essentially self-taught, using the written guidance material. Aberdeenshire settled on the PHE model of whole systems working after researching other options available.

The LBU training prepared local leads and other facilitators to deliver two WSA workshops. These workshops were seen at the outset to be key elements in how the WSA would be delivered in each area, focusing on phases 3 and 4 of the above model:

- Workshop 1: to bring stakeholders together to create a comprehensive 'map' of the local system understood to cause obesity and to begin to create a shared vision.

- Workshop 2: to enable participants to review the causal map, prioritise areas of action and develop specific areas for action (leading to a local action plan).

The LBU team trained the early adopters during the Autumn of 2019, enabling local leads and other stakeholders to prepare for the WSA workshop programme, putting the necessary governance and resource structures in place and building a dialogue with stakeholders across the system about the WSA. But progress did not move forward as had been hoped, a situation wholly due to the COVID-19 pandemic (discussed below).

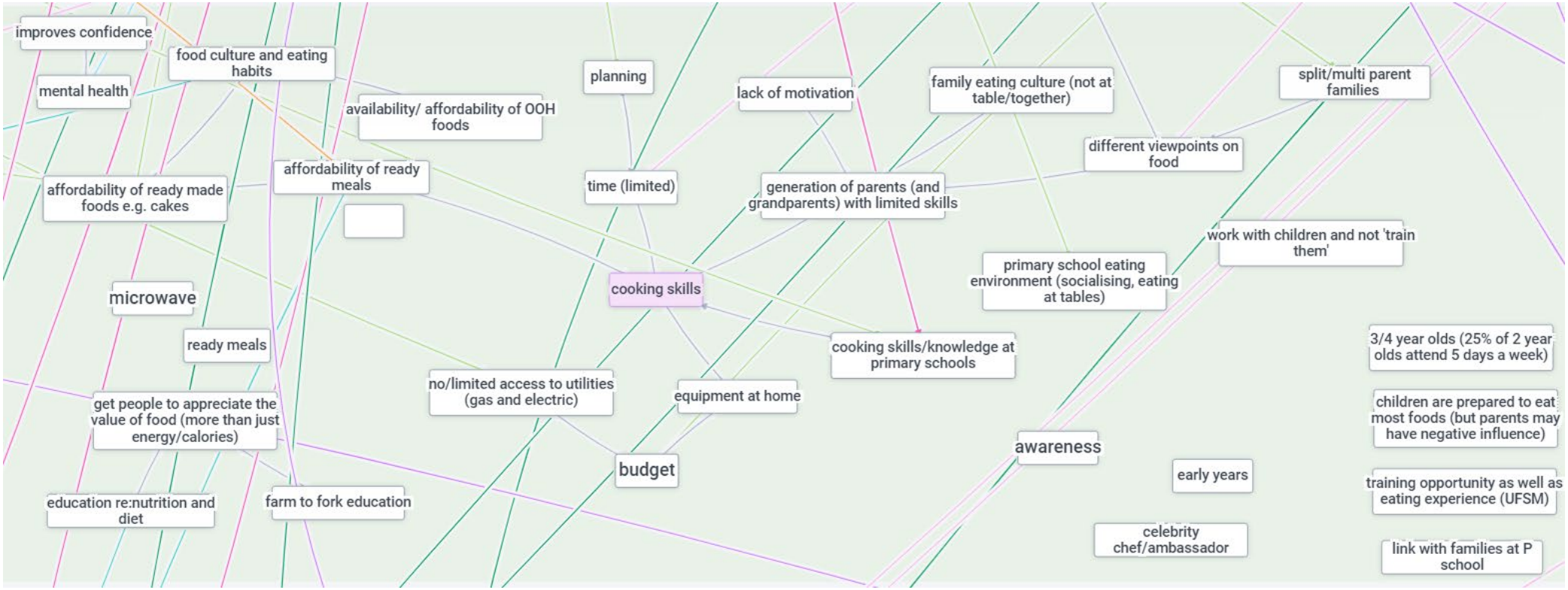
Two of the early adopters (Dumfries and Galloway and North Ayrshire) were able to run their first WSA workshop before the first COVID-19 lockdown in March 2020 halted progress with the national WSA programme across the board. However, two years later, these were also the only two areas that had not recommenced their WSAs. While this is partly tied to the lengthy, continued disruption created by COVID-19, it also reflects the positive experience both had with running the first WSA workshop as a face-to-face event (as the model and guide intends) and a reluctance (certainly in North Ayrshire) to proceed online, which was perceived to be an inferior methodology to a large, interactive in-person event.

The other WSA areas covered by this evaluation have held both WSA workshops in an online format. An example of the output generated by the workshop mapping activities is shown in Figure 3.

It presents some of the output generated by the first WSA in Dundee, where participants worked in breakout rooms to identify key local causes of childhood obesity. This generated a total of nine causal maps, as seen in 3a and 3b, that were then brought together to form a collated systems map, shown in 3c. This allowed the participants to start to think about a vision statement and, in the second workshop, to review the collated systems map and begin the process of prioritisation and action planning.

Figure 3: Examples of causal mapping output from Dundee workshop – selected individual causal maps and a combined causal map[15]

3a: Theme: cooking skills



3b: Theme: poverty

3c: Combined causal map

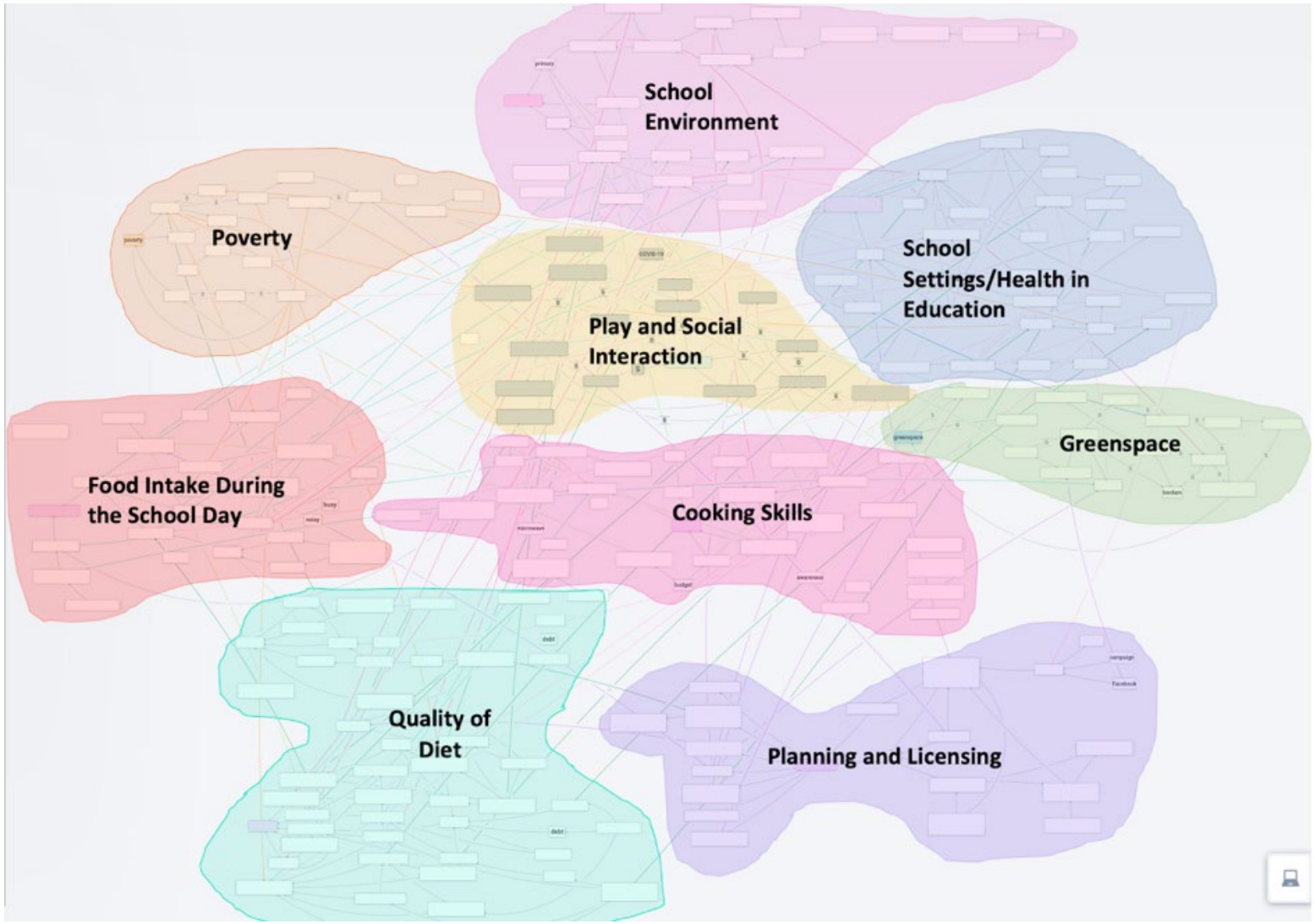


Table 2 shows the attendance at each workshop event held by the early adopters. Prior to workshop activity, there had been substantial engagement work over several weeks in each area by the local leads, for example drawing up lists of relevant stakeholders, communications activity to warm them up to the WSA process, informal meetings and generally build up people's expectations and excitement about what was about to happen.

In North Ayrshire, for example, a half-day WSA launch session attracted around 40 participants (in person). This allowed senior staff to demonstrate their buy-in to the WSA and advanced some early mapping work to give stakeholders a taste of what was to come. In Aberdeenshire, an early step was a workshop organised with CPP partners to garner support for following a WSA model, although at this point the LBU model had not been chosen as the preferred one.

Table 2: Workshop attendance across the WSA early adopters[16]

WSA workshops	Scottish Borders	Dundee	East Lothian	Fife	Dumfries and Galloway	North Ayrshire
Workshop 1	42	60	31	41	20	40
Workshop 2	23	50	32	25	Not held	Not held

Pre-workshop promotional activity of this kind is widely seen to have been important to build up both understanding of the WSA and in generating momentum for the formal process to be embarked on. It is reflected in what local leads perceive as healthy turnouts across the first WSA workshops, which ranged between 60 in Dundee to 20 in Dumfries and Galloway. In Aberdeenshire in particular, the initial work was instrumental in helping to embed the WSA within established community planning structures.

Of the four early adopters that held their second WSA workshop, three experienced a significant fall in participant numbers. There are several reasons for this, which are discussed more fully below, and they include lengthy gaps in time between the

two workshop events and stakeholder involvement being impacted by the COVID-19 pandemic.

Only in East Lothian did participant numbers hold up over the two workshops: attendance rose by one. It is notable that the gap in time between the first and second WSA workshops in Musselburgh was only a matter of weeks and was preceded by a lot of engagement work by the local lead over the summer–autumn. Once the workshop process commenced, momentum was maintained, with the first workshop held in November 2021 and the second in December. Things moved quickly after that and, by February 2022, an action plan was complete and a bid for implementation funding from East Region submitted.

4. Impact of the COVID-19 pandemic on the whole systems approach process

The story of Scotland's WSA early adopters, in terms of how things were done, when they were done and the progress made, is closely tied up with COVID-19. Had the country not experienced the pandemic, the WSAs would most probably have progressed steadily following the LBU training in late 2019 and reached a more advanced stage than they have in terms of delivering actions supported by local systems networks.

It is fair to say that all the local WSAs (including Aberdeenshire) remain 'works in progress'. Only two areas, Scottish Borders and East Lothian, had concluded their action planning stage when the process evaluation fieldwork was completed late 2021 and early 2022 respectively. In the others, the position, as of May 2022, was as follows:

- In Dundee, action planning had still to be completed. It was not clear how actions that were being developed would be funded nor how the subsequent management of the system network around delivery would be handled in 2022 and beyond.

- In Fife, progress made during the workshop process in identifying priorities for action was being shared with wider stakeholders, networks and partnerships, with the view to developing an action plan that could be supported by the regional governance group.

- Both Dumfries and Galloway and North Ayrshire WSAs had not yet restarted, although both had plans to do so.

- In Aberdeenshire, while action planning workshop activity had identified themes and possible actions, the process of refining actions was ongoing and a new phase of community engagement was due to start.

A major impact of COVID-19, therefore, is that the national WSA early adopters programme has not been able to make as much visible change on the ground in

terms of actions being delivered by the whole system working better, as had been hoped for at the outset. There is further discussion below on this issue (**Appendix 3**).

The onset of the pandemic stalled progress across the board and threatened to undermine the programme. Planned workshops were cancelled. Staff leading the process locally were redeployed to respond to the COVID-19 pandemic as were stakeholders who would have been active members of local working groups. Across the four early adopters that had not already held Workshop 1 by March 2020, the workshop process was paused and did not restart for several months. Scottish Borders and Fife held their first WSA workshops in March 2021, in Aberdeenshire it was September 2021 and in East Lothian it was November 2021.

Although things were largely on hold, local leads in most of the areas did continue to engage and communicate, keeping the many stakeholders already identified in the loop, and looking to restart when the opportunity presented itself. In Dundee, for example, being integral to the development of the Tayside Child Healthy Weight Strategy, allowed the leads to keep a spotlight on the WSA as key to how the strategy would be delivered. Indeed, the healthy turnout achieved across all the first WSA workshops in Dundee is evidence of both the early enthusiasm built up around the WSA and of the efforts of local leads to keep stakeholder interest alive when they were experiencing many other demands stemming from the pandemic.

While the pandemic had a hugely disruptive impact on the early adopter programme, it has also been a positive for general awareness of the importance of whole systems working. During the fieldwork for this evaluation, it was common to hear interviewees remark that ‘everyone is now talking about the WSA’. Indeed, the two areas that have had their WSAs on hold since March 2020 highlight how the context may have shifted over the pandemic in favour of whole systems working.

In North Ayrshire pandemic responses identified new players and services that can further improve future WSA developments. While local leads had initially engaged one food bank through COVID-19 responses, a wider Fairer Food Network has been identified including larders, community fridges and growing projects. These services will be added into future network analysis and mapping when the WSA restarts,

demonstrating how, alongside the more negative impacts, COVID-19 has generated learning that will positively shape future developments.

In Dumfries and Galloway, perhaps the most important and different learning from the experience is the way local partners have used the period of enforced lockdown to fundamentally reshape their future approach to a WSA (which from the outset has been focused on physical activity). During the pandemic, it was recognised that the WSA needed to be better connected to community planning and other structures. Therefore, when the WSA restarts, the new approach will be premised on linking and embedding the WSA within a wider set of local strategic developments to ensure it both influences and maximises its value to these.

The other four early adopters recommenced their WSA workshop process during 2021. Because of the pandemic restrictions, this had to be done online, not face-to-face as planned. While working in an online environment was not totally new to most given the enforced shift to remote working, participating in workshop events with the complexity that was required to interactively map local systems and collaboratively plan actions was more challenging.

For these four WSAs, a key development that unblocked the stalled progress was a further wave of training for local leads and facilitators, organised by the national coordinator and delivered by the Democratic Society. The training introduced new tools that were used to enable participants to engage in causal mapping, action planning and other activities in a virtual environment. The value of this training is generally highly perceived and enabled the successful delivery of the WSA workshops online. Those involved do not feel it would have been possible to do so without it. The online workshops lasted between 1.5 and 3 hours.

5. Assessing the process: what worked well

5.1. Strategic positioning and alignment

In different ways, the areas have sought to position their WSAs to connect with local strategies and structures. The benefits of this are multiple: it gave the WSAs a status and gravitas that fed into support for the working group; it encouraged and helped sustain stakeholder engagement; and, more generally, it improved the chances that whole systems working will build and continue into the future.

The early adopters had senior sponsorship from lead partners at the outset. Supported by the growing general awareness around whole systems working, local leads have successfully built upon this backing in ways that benefit their WSAs. Examples of this are as follows.

In Dundee, the WSA has secured a central role in delivering the Tayside Child Healthy Weight Strategy. Ongoing strategic-level contact between the working group and other stakeholders has also strengthened alignment between child healthy weight and other key policy areas and strategies. One instance of this was a Tayside Regional Improvement Collaborative event where the working group ensured that the issue of child healthy weight was recognised as being aligned with the **Children and Young People's Emotional Health and Wellbeing Strategy 2021–2026**.

Those leading the WSA in Fife demonstrate a good understanding of securing sustainable change through embedding the learning and intelligence generated by the process within wider local strategies and plans. Here the aim is to ensure that WSA thinking, and the intelligence generated by the process, is reflected within key delivery focused mechanisms, such as post COVID-19 recovery plans, health and wellbeing delivery plans and the LOIP.

In Aberdeenshire, from the outset clear and strong links were established with the CPP. This was reported as being relatively easy to achieve given the widespread concern across key partners about the problem of poor diet and obesity prevalence. In addition, the formal inclusion of the WSA within the LOIP (which runs to 2027)

gives the approach further gravitas and recognises it as a longer-term, ongoing approach that will be reporting into the CPP on a regular basis.

5.2. Stakeholder engagement and participation

Across the WSAs, a broad base of stakeholder interest has been created and sustained around the WSA. Although often demanding on staff time, the early promotional and marketing activity carried out by the local leads and others was very significant, identifying a pool of players from across the system to involve in the WSA process. As already noted, turnout at the first WSA workshops was regarded as high and the engagement process has been carried forward with a good mix of stakeholders coming from different bodies and with different remits actively involved.

A loose hierarchy of stakeholder involvement can be identified across the early adopters. This ranges across leadership roles; engagement in local governance and working group structures; participation in formal WSA workshop activity; involvement in group-based activities outside of the formal WSA workshops (such as focus group discussions to consider output from the workshops and sub-groups to develop specific actions); and, in the case of the Scottish Borders, system network meetings to oversee the implementation of the local action plan developed. Some stakeholders are involved in all or most of these tiers of engagement activity, which represents a very considerable time input.

The extent of stakeholder engagement built up was helped by both the existence of previous partnership working in the localities and by having local leads that were already very well connected and who could draw on these networks to assemble stakeholder contact lists. But it has also required sustained hard work by local leads who, in several cases, have used communications tools and tactics innovatively and effectively.

In Dundee a dedicated WSA website resource[15] was created to provide: introductory content on the WSA; information on activities involved in the process to date; video recordings of the WSA workshops (including break out group activity); and copies of the material (such as causal maps) generated by the workshops. This enabled stakeholders who had missed earlier activities and wished to catch up to do so. It

also stands as a useful summary of how the WSA has been approached in Dundee for others who wish to learn from it. In addition, the Dundee team produced four editions of a WSA newsletter (distributed to around 160 stakeholders), keeping them up to speed with developments and the WSA's role in the Tayside Child Healthy Weight Strategy. A good communications infrastructure and ongoing efforts by the leads has been particularly important for stakeholder engagement in Dundee given the eight-month gap between the first and second WSA workshops.

In Fife, communications to support stakeholder engagement have also been strong and innovative. In addition to a website resource,[17] a mix of videos and animations using cartoons and infographics have been developed. Short, engaging videos ('talking heads') featured Fife's Director of Public Health and the Director of the HSCP. Topics covered included: 'What is a WSA?'; 'A guide to causal mapping'; 'Fife Obesity Stats'; and 'Young people's voices'. Materials were distributed before the WSA workshop sessions, stimulating stakeholder interest and enabling them to come to the sessions better prepared to engage. Fife's communication materials have been shared on request with other early adopters and stand as an example of good practice in this aspect of the process.

5.3. WSA model and guide

The WSAs followed the approach set out by the PHE guide. There is close to a consensus about both the strengths and limitations of the model across the WSA areas. The overall academic rigour and logic of the model was recognised and appreciated. Not starting with specific outcomes was seen as refreshing and challenging and signalled that a WSA was different and should go beyond previous partnership working approaches that participants would be familiar with.

The upfront training that local leads and facilitators received from LBU enabled them to develop a good working understanding of the approach before going into the workshops. Also, some early adopter areas secured funding from local sources for LBU staff to attend, present and facilitate their workshops. This was not funded by national partners and was not done across all early adopter areas. Where LBU

representatives attended the workshop session, this provided further welcome support and reassurance to leads and facilitators.

The PHE guide is regarded as having helped to get the WSAs off to a good start. It offers a logical structure and path that can be followed, one that can engage participants in a well-structured, collaborative and purposeful process. Importantly, the model demands a common focus from a wide mix of participants from different backgrounds and supports the development of a shared understanding and vision. It also enables a more in-depth, collaborative analysis of the problems and challenges than stakeholders were used to.

The PHE guide called on participants to engage in activities, like mapping the multiple causes of childhood obesity, which was a first for most of them. These mapping activities are widely seen as having generated important and useful information. The tools covered by the guide also encouraged and challenged participants to think differently about how the actions of a wide range of organisations contribute both positively and negatively to obesity.

Resources from the guide were highly valued (the Action Scales Model and the Network Mapping Analysis Tool for instance). These helped participants to work together to better understand the complex causes of obesity and highlighted that many actions have a superficial effect and fail to impact root causes. In its training, the Democratic Society introduced Miro mapping software to support online delivery of the model. This worked well and enabled the desired interaction between participants.

A real strength of the PHE guide is seen to be the structure and direction it gives to get the WSA process started and to move it forward. The dominant view of the model, and one shared across leads and other stakeholders, is that it provided a very useful framework, backed by helpful guidance, rather than being a road map or blueprint for how to do a WSA. This flags some perceived limitations that are discussed below. It is worth noting that Aberdeenshire settled on the PHE model after desk research on different approaches to whole systems working, taking the view that the PHE model offered the best one available.

5.4. Workshop experience

Many positives were identified when leads, facilitators and other participants talked about their workshop experience. Positive feedback was forthcoming from all WSAs, including the two that had held face-to-face events (Dumfries and Galloway and North Ayrshire), indicating that the PHE model and guide had delivered when used both in-person and in the virtual environment.

Participants found the workshops to be highly collaborative, high-energy events that were thoughtfully planned and designed. They welcomed what they described as an open and inclusive style. In part, this reflected the leads and facilitators taking time to ensure that participants understood whole systems concepts, that ideas were expressed in accessible ways and that everyone's view was welcomed. It also reflected the value of pre-workshop communications, where material (like short videos) had been circulated in advance for participants to watch, enabling them to be more able to engage in the workshop itself. Participants also talked of everyone being able to have their say, with no-one dominating the proceedings.

While many participants described the sessions as being excellent examples of partnership working, some felt them to be 'more than' or 'different from' this. There was a recognition that, in the workshop activities, people were going beyond good partnership working. They were starting to work differently. This is strongly attributed to participants being encouraged to challenge their previous ways of working, embrace the messiness of the process, not to follow a straight line, be prepared to work through activities that could initially feel confusing and chaotic and to take ownership of the issues and possible actions.

There were some important, specific lightbulb moments during the workshops that drove home the message that a WSA is more than good partnership working. These were points in the process when participants were being asked to step outside of their normal remits and silos, to see things through a different lens and to recognise that current and planned activities fell well short of what would be needed to change the obesogenic system and to promote healthy weight environments.

The Action Scales Model was particularly impactful in this respect, highlighting that while most activities and interventions fall within the category of 'events', to really impact an obesogenic system, much more needs to be done at the levels of system 'structures', 'goals' and 'beliefs'. In Aberdeenshire, for example, the plastic bag analogy was used effectively to emphasise that a WSA needed action at all four of these levels if the obesogenic system was to be changed.

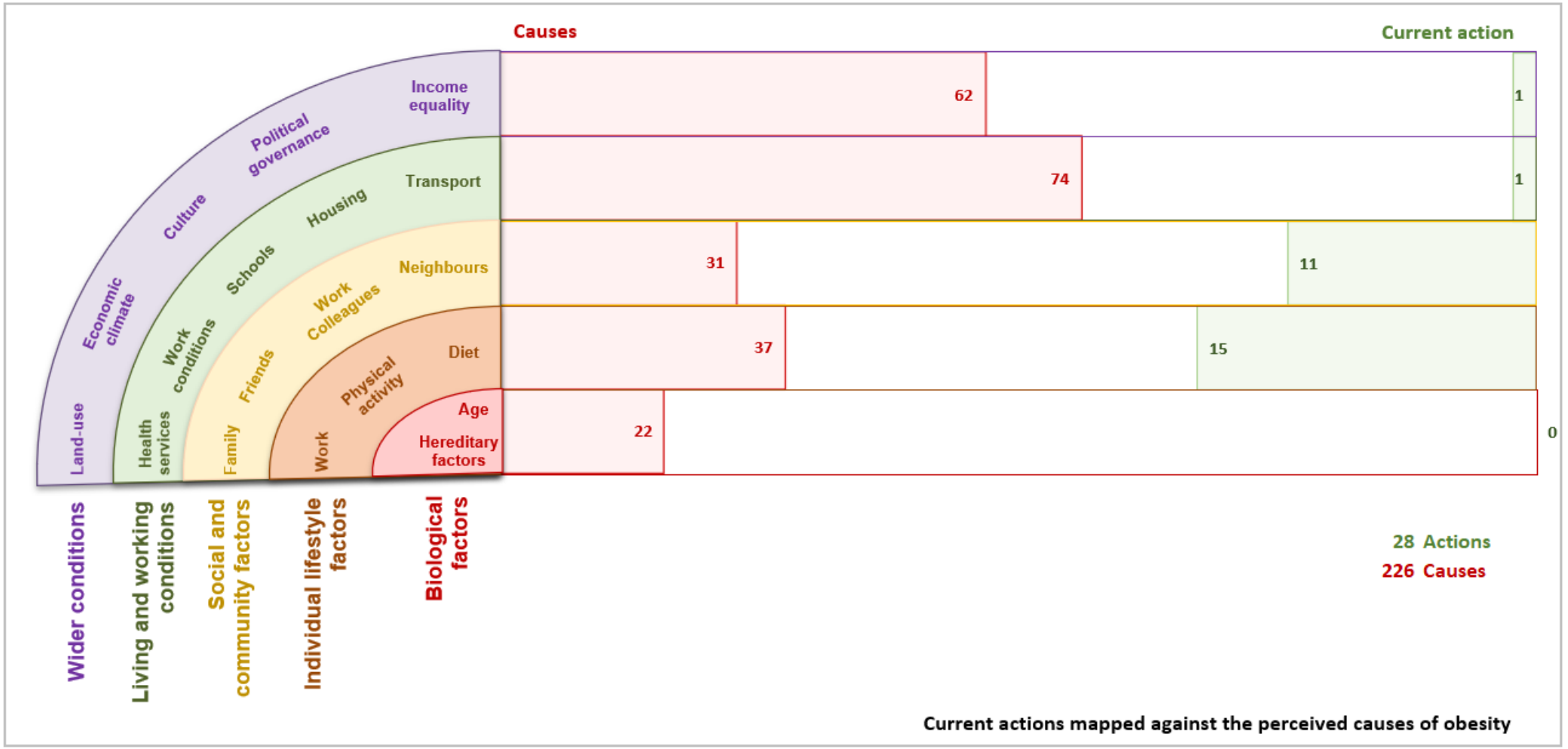
Example of the Action Scales Model[1]

Keeping it simple – the plastic bag analogy

- **Event:** government launching campaign to restrict use of plastic bags.
- **System structures:** imposition of plastic bag charges in shops.
- **System goals:** targets set on reduced number of plastic bags to landfill.
- **Beliefs:** attitudes and beliefs permanently changed on using plastic bags.

Similarly, the Determinants of Health Model[1] was used very effectively. Also referred to as the Rainbow Banner model, it was employed to show that, while the causes of obesity are more frequently associated with people's living and working conditions than lifestyle factors, current and planned actions tend to focus on lifestyle choices with comparatively very little action being targeted on the main causes of obesity. Some participants highlighted points like these in workshops when, for example, 'the penny dropped'. These were key moments when the limitations of action targeting only individual decision-making, and the need for more actions to address upstream drivers and determinants of health that are outside of an individual's control, became very clear. In turn, many recognised the need for more joined-up, concerted action across the system, better aligning the priorities and actions of partners.

Figure 4: Use of the Determinants of the Health Model[15]



5.5. Tailoring to the local context

The whole systems model that was followed has proved capable of being adapted and tailored to suit local needs. While, for example in early adopters such as the Scottish Borders and East Lothian, the local leads largely stuck quite closely to the LBU model process, other WSAs felt the need to adapt and have done so.

In Dundee, for example, the working group identified a need to build on what was achieved at the WSA workshops by continuing engagement with stakeholders in focus group discussions. These group sessions, coupled with other meetings with stakeholders, extended the discussion beyond what was achieved at the WSA workshops about how priority themes could be developed further and moved on into specific actions.

These adaptations to the process – agreed and advised by OAS and LBU colleagues, and informed through discussion with other early adopters – have been important for the process in Dundee. The additional engagement involved stakeholders who had not been involved in the WSA workshops, for example children and young people. It also provided opportunity to involve stakeholders who could play a key role in developing actions linked to the priority themes. One example is the organisation responsible for providing food to schools, Tayside Contracts, which participated in focus group discussion (but not the main WSA workshops) and is expected to be a key stakeholder when improving the lunchtime experience in schools.

In Fife, the WSA has demonstrated a strong commitment to ongoing review and reflection, based on projected thinking on ‘what works?’ This has led to modifications in progressing the WSA as it moves beyond the WSA workshops. It has not, for example, moved directly to progress action planning as some other WSAs have done. Central to Fife’s approach are aspirations to embed WSA learning into the local processes that are best placed to drive action and change. Close links with community planning, LOIPs and local COVID-19 recovery plans are part of this, as is seeking to influence the new **Local Transport Strategy for Fife**.

How the above will be done in Fife is important. Rather than further internal WSA activities and workshops to develop a local action plan, future whole systems work will be more focused on reaching out and taking key messages generated by the workshops to other forums and structures. This includes advocacy and the WSA in effect becoming an intelligence resource to influence wider future developments. Dissemination and promotion of these messages will, consequently, be a major future theme of work. This modified approach is viewed as strengthening WSA sustainability aspirations. It is too early to judge its effectiveness, but positive signs are emerging.

5.6. Support from national partners

Local working groups received valuable help over the process from two national partners, OAS and PHS. Both supported the working groups to prepare for and deliver the WSA workshops, assisting with the facilitation of breakout groups. In addition, OAS brought in the Democratic Society, equipped with a new set of tools, that enabled the WSA process to proceed online. Working groups have also benefited from skills share sessions organised by OAS, workshops providing a forum for WSA leads from each area to get together and share experiences and learnings. These sessions have been valuable, allowing the working groups to hear first-hand from other early adopter areas.

6. Assessing the process: difficulties and challenges

6.1. Capacity of local leads and other stakeholders

Staff capacity to deliver the process has been a challenge across the programme. The time demands associated with delivering the early adopters that went ahead during the COVID-19 pandemic were heavy, particularly on local leads and the administrative support, but also on working group members and other stakeholders actively involved in developing actions around key themes within the framework of local action plans.

Certainly, across all the early adopters a heavy burden has been carried by a relatively small number of people. Across the four early adopters that progressed their WSA process, demands exceeded what local leads had expected. Demands on them were exacerbated, partly by moving the process online as this required additional training and preparation time, and also by situations where they felt the need to engage in meetings and group discussions outside of the formal workshop elements (for example in Dundee and Fife) to engage more widely with the local system.

Pressures on the leads were intense in the run up to workshop events, particularly when these were being done online for the first time and the leads were working remotely with little support. Those leading the process, and others involved, found the approach very challenging to fit in alongside their other responsibilities. Some had to regularly attend several meetings a week, which was only possible because line managers had asked them to prioritise the WSA work.

In some cases, the pressures on those leading the process would have been eased had they been able to secure more input from stakeholders to local working groups (discussed more fully below). In several cases, the working groups struggled to secure and maintain commitment from stakeholders that would have enhanced the group's work and eased the pressure on local leads.

In Dundee, for example, one challenge was how to explain to stakeholders what would be expected of them if they joined the working group. Despite general awareness of the idea of whole systems working, it proved difficult for stakeholders to see how closer involvement would fit with their normal remit. Such difficulties are linked to both the initial set-up of the WSA, which was not based on getting a wider set of senior staff actively engaged in the working group from the outset, and the general difficulty that stakeholders have stepping outside of their specific remits: silo working is hard to break down. While the Dundee WSA had the Executive Director of Children and Families Service at Dundee City Council as lead sponsor, if additional senior co-sponsors representing other key services or organisations had been involved, it may have been easier to establish a stronger working group.

6.2. Stakeholder engagement and participation

While there was a lot of early interest in whole systems working and healthy turnouts at the first WSA workshops (both of which are seen as positive features of the WSA experience), stakeholder engagement and participation proved to be, and remains to be, a challenge – one that is manifest in several ways.

While wide-ranging stakeholder participation is evident across the WSAs, in all cases potentially important players have not been actively involved. Despite the efforts of the local leads, it has proved difficult to secure the engagement of some key parts of the system.

The picture varies across the WSAs, but services such as leisure and culture, community learning, transport and planning and education and schools have been missing from the process in some of the areas. More direct input from local systems would have been preferable, for example to enhance the definition of the problem, prioritise key themes, map existing policies and interventions and build other stakeholders' confidence in the quality of outputs generated.

Continuity of stakeholder involvement has been another challenge. As noted above, in three of the four early adopters that did proceed with their WSAs, there was a noticeable fall in attendance at the second WSA workshops compared to the first workshops.

Various reasons can be advanced for both the levels and fluctuating continuity of stakeholder involvement. These include: the demands associated with COVID-19; limited capacity of local leads to devote time to engage stakeholders; difficulties encouraging and convincing parts of the system to recognise their role and influence; the time required for stakeholders to commit to participating in the workshops; the times of day that these were held; and stakeholder fatigue given the number of meetings that stakeholders in some of the WSAs were being asked to attend.

Furthermore, despite good general awareness of the idea of whole systems working, in the absence of a more detailed understanding of what the WSA involves and/or a set of clear actions to implement, it proved difficult for stakeholders to see an immediate fit with their normal service remit.

6.3. Engagement of local communities

Many interviewees talked about the difficulties faced in relation to engaging local communities. While it is referenced in the PHE guide, the process in most of the WSAs has not significantly engaged local people with lived experience of the issues addressed. The community view has been largely inputted by proxy, by locally based practitioners who know their communities well. The limited degree to which local communities have been directly engaged is widely (though not universally) seen as one of the main limitations and failings of the process to date. It is also an area that some WSAs have sought to address in a mix of ways.

Participation at the WSA workshops was dominated by practitioners and professionals, and this was true of both the face-to-face workshops and those facilitated online. In the main, the workshops were planned in this way with little effort going into getting community representatives directly engaged in the workshop process.

The small town of Eyemouth (Scottish Borders) is possibly the exception. Here, there is feeling that, had the workshops been held in the local community centre as originally planned, then some residents may have participated. Indeed, from the outset the intended approach was to progress with residents directly involved, and efforts were made to engage active parts of the local community, such as local

mothers, in the online workshops, but with no success. Several reasons were offered for this, including illness of a key local link worker and a sense that residents may not have felt that their views were important enough to get involved. The working group, therefore, actively listened to what the locally based practitioners had to say about the community's views and wishes and fed this into the workshop deliberations.

A widespread view was that the PHE model does not readily lend itself to meaningful community engagement. This is because the model is seen as complicated, more suited to professional staff and that more accessible methods are required to engage people across local communities. Consequently, some interviewees did not view the absence of direct community engagement as a mistake or a failing of the WSA process, and the switch to online workshops (which they felt would have been even more challenging for residents) tended to strengthen this analysis.

Across all the WSAs, other activity, outside of the WSA workshops, was mounted or planned to engage communities in the WSA process. These steps include: focus group discussions with young people; making a video of 'young people's voices'; dedicated surveys; and bespoke community events. However, much of this was being introduced at a relatively advanced stage of the process, after discussion about priorities and possible actions had commenced.

In Fife, for example, consideration has been given to using East Region Partnership funding to advance a more comprehensive community engagement exercise. In Aberdeenshire, it was recognised that community engagement work had lagged behind other parts of the WSA process and that this needed to be addressed. At the time the case study was carried out, community engagement was being rapidly progressed, with dedicated resource, to ensure that the final action plan will not move ahead without fully reflecting on the results of the community engagement work.

In Aberdeenshire, after a slower start than was hoped for, the WSA has now advanced the most extensive dedicated direct community engagement process across all the WSAs. This is supported by an annual part-time secondment of a Community Learning and Development Officer. Phase 1 of this involved a wide range of events and activities across the authority area that has now generated very good intelligence to advance the WSA. A second phase of community engagement work –

targeted on particularly disadvantaged groups – is now underway. This will begin to more clearly identify the synergy or otherwise of community and practitioner workshop views and is seen as a key part of the future process.

6.4. PHE model and guide

Despite the helpful framework provided by the model and supporting guide, the training provided in advance of the WSA workshops and the support received from national partners and LBU, the model still presented challenges for most local leads. For several, it all felt overly academic and unnecessarily complex. Using it was a steep learning curve – a case of learning as they went and trying not to be overwhelmed. As one lead said:

> 'The model had to land with us before we could translate the academic language and jargon for the stakeholders. This was quite a challenge as we had to learn how to steer the ship and navigate at the same time – that is learning a new concept and then trying different ways to get it across.'

Alongside the strengths of the model previously covered, there were some critical reflections. As discussed, the model does not adequately cover how to involve the local community. Other criticisms centred on it being overly theoretical and inaccessible at points. Certain concepts were time consuming and difficult to grasp, one example being the idea of 'same and opposite'. Similarly, the spreadsheet on causes required to complete the Rainbow Banner model was felt to be particularly challenging. For some participants, adhering tightly to complex tasks and activities set out within the PHE model felt like it was holding them back from moving on to address more relevant, interesting and important issues.

In response to perceived challenges and limitations like these, most WSAs chose to adapt the model, make some of the activities simpler for participants and do other things that they felt were required, such as engaging the community. In the first WSA workshop, for example, there was a general adherence to the model, but by the second WSA workshop most WSAs had moved away to a degree from the core model and made changes to better suit their needs.

An example is Fife, where the WSA model strongly influenced the early stages of the WSA process before it became apparent it needed to be significantly adapted. After the first workshop, applying the full model was viewed as unrealistic and steps were taken to ensure the next stages of the process were more feasible and engaging. Moving straight from the first WSA workshop findings to the expectations of the second workshop was felt to be overambitious – the partners needed more time to reflect on existing service activities. Activities were simplified, such as the process of compiling data to complete the Rainbow Banner model, and they appeared to produce a similar outcome with less complexity.

The working group in Dundee also deviated from the PHE model, in this case to engage more stakeholders to devote more time to developing priorities and actions. The two WSA workshops had lasted 3 hours and 1.5 hours respectively and this was not felt to be enough time to make the desired progress. Also, it was felt that a wider mix of stakeholders needed to be consulted. This resulted in a lot of additional contact and consultation with stakeholders, including young people, outside of the two WSA workshops.

Given this mixed experience with the PHE model, some interesting issues are raised for future WSA work. On the one hand, over diluting the WSA model may lose some of its core strengths in going beyond good partnership working. But, set against this, WSAs need to be accessible and practical and retain sufficient interest amongst a significant group of stakeholders.

A balance may be needed, suggesting the option of developing a future hybrid Scottish approach: possibly the adaptation of the PHE model with clear guidance on how to engage and work with communities. Linked to this is the need to clearly articulate ‘who needs to know what’ about WSA theory. In practice, if someone or a small group driving the process have a full understanding of WSA theory, it may not be necessary for wider stakeholders to fully understand and engage with more than the basic concepts and activities.

6.5. Workshop experience

Several challenges or difficulties were highlighted when participants fed back on their experience of the WSA workshops. Some reflected practical issues linked to content and structure, while others touched on more fundamental concerns about their trust in the process and its outcomes.

Criticisms of a more practical nature, some of which echoed points made above in relation to the PHE model, included things like:

- A loss of interest and momentum in the interim period between the two main WSA workshops, when concerns related to the pandemic diverted stakeholder attention. This was more of an issue in Dundee where the period between the workshops had extended to many months.

- Too much time being devoted to presentations and not enough to working together in smaller groups to develop priorities and actions. This was more of an issue with the second WSA workshop, when facilitators were allocating time to remind participants about what had gone before, partly to ensure that participants who had not attended the first WSA workshop were up to speed.

- A few participants felt a bit overwhelmed by the level and complexity of some of the mapping activities. Keeping up with the proceedings was a struggle, though the helpful style of the facilitators generally stopped this becoming a major problem.

- Particularly among participants who were not convinced by the need for some of the more complex workshop activities, they would have preferred to move more quickly to discussions about what could or would be done.

- With some of the second WSA workshops being reduced from 3 to 1.5 hours, several participants expressed a sense of being rushed once the breakout rooms reconvened for the plenary discussion. These participants felt they did not have enough time to reflect and comment on the feedback from the breakout rooms they had not been in.

- At times stakeholders struggled to prioritise themes and to visualise specific actions that might emerge from them. In the Scottish Borders, this proved to be challenging, with stakeholders struggling to see where they fitted in or what they could bring to the table. However, once actions started to firm up, it was easier for them to see where they could contribute and what resource (skills and capacity) they could bring.

More fundamental areas of concern expressed about the workshop process relate to the level of seniority reflected among those participating and how broadly the local system was represented. There was a perception among some that the stakeholders attending were not sufficiently senior to make decisions on the priorities and actions being discussed and would need to report back or defer to more senior decision-makers. This, coupled with the lack of dedicated resources to implement actions developed (outside of the East Region), led some participants to question whether the commitment and backing from the top would be there to implement action planning output.

Another concern was that the output of the workshops was over-dependent on the people attending on the day and that workshop activities like mapping and deciding priority areas and actions are very dependent on the mix of people in the room. This was a serious concern for some participants who pointed out that if more or different stakeholders had been involved in a WSA workshop, then it might have changed the mapping, prioritisation and actions developed. Also, not having key parts of the system involved in the WSA workshops makes it more difficult to define the problem and align policies to address it.

While the above point is linked to both challenges around stakeholder engagement and fluctuating levels of participation at events, it also serves to undermine the confidence that some participants have in workshop outputs. One stakeholder highlighted what is seen as a very important point, and one reflected by others:

> ‘Priorities are shaped by who is at the meeting and whose voice is the loudest. If you had different voices on a different day, you would

probably get different outcomes, so I wasn't sure we were really getting to the right priorities.'

Certainly, had the WSA workshops attracted a broader base of senior participation from across the local system, then such concerns would have been reduced.

7. Progress against desired short-term outcomes

A summary of progress to date can now be given against each of the desired outcomes for the WSA early adopter programme. While by early 2022, none of the WSAs had made as much progress as had been originally hoped (most remained 'works in progress' at different points in their journey) positive observations can be made against each desired outcome.

Outcome 1: Communities are engaged in the approach

Communities have not been centrally involved in the WSA workshop process, although in some cases young people and other residents have been consulted outside of formal WSA workshop settings. That said, there is wide recognition that more needs to be done to find ways to engage people with lived experience in deliberations about causes and potential actions. A future model of whole systems working needs to find ways to engage communities more effectively than has been done to date.

While community engagement has been limited in the WSA process so far, things are changing. Some WSAs have given a new urgency to community engagement in advance of finalising and implementing action plans, and the Aberdeenshire experience now highlights a more extensive approach with much valuable learning. It is also notable that, in the WSA that was at the most advanced stage in the model process (Scottish Borders), community engagement was flourishing. Here, following the launch of a new community magazine, visibility of the WSA had spread and the working group was reporting more and more local people coming forward with ideas and suggestions to make a difference. There was said to be a new awareness among residents that services care, want to work with them and that they realise they are a valued part of process.

Outcome 2: Action is taken to address the upstream drivers and determinants of health

While at the outset some of the national partners felt that progress against this outcome may lag behind others, some progress can be seen. In the WSA workshops, by thinking about the wider and social determinants of health and how current actions map against these factors, participant awareness of the relative lack of action to address upstream drivers and determinants developed and matured. Among the priorities and specific actions that have subsequently been developed, several actions that operate at this level are evidenced. This suggests that the process stakeholders have engaged in has encouraged people to think beyond the more obvious, and common, interventions that address unhealthy lifestyles by trying only to lever individuals' decisions.

Appendix 3 shows the priority themes and actions that have been identified by five of the WSAs. While some of the actions that are emerging are projects that support lifestyle changes, others operate at a more upstream level. For example, we can see consideration being given to:

- Supporting teachers in primary schools in ways that will hopefully improve life-long physical activity levels in children.
- The home cooking environment, including food culture at home, equipment and space to cook and eat, time available for cooking, and how parental employment and shifts impact.
- Changing the built environment in ways that will offer a wider range of opportunities and choices for people to live more active and healthier lives.
- Improving communications infrastructure in communities in ways that get good quality information about nutrition and healthy weight circulating. Disallow advertising of unhealthy fast food in the community magazine.

- Transportation measures that will support people to move around their local communities safely and become better connected using active travel, with a reduced reliance on cars.

- Looking at the out of home eating environment and doing something about reducing the ready availability of unhealthy food.

Outcome 3: Systems thinking practice is being integrated across the local partnership

The WSAs have coincided with, and contributed to, a growing general awareness of whole systems working and a recognition of the need for this approach. The work of the WSAs has boosted the momentum that is growing up around the WSA, so much so that in some of the localities the WSA is now commonly talked about at a strategic level and is filtering down through organisations to reach staff at operational levels. Certainly, the work of the WSAs has raised the profile of whole systems working, not only across stakeholders who have been actively involved in the approach, but with other partners in the system as well.

There are numerous examples of where this has been happening across the WSAs, often attributed to the conscious efforts of the local leadership to engage and make connections between the WSA and the work of other partnerships and strategies. Aberdeenshire, for example, could be a model example of how systems thinking practice can be integrated across a local partnership, with the WSA rooted within and reporting to the CPP and formally part of the LOIP. In other areas, leads have stepped outside their working groups and governance structures, working hard to establish new links and take systems thinking to other local processes and strategies. Overall, the picture on this outcome remains dynamic and a work in progress.

Outcome 4: Collaborative working across departments and organisations

In almost all the WSAs, this was already a strong feature of the local system, with good existing connections between the NHS and council partners, both of whom were able to bring their own rich network of links to the table. Indeed, the WSAs built on the strong connections that previously existed and the WSA has certainly further strengthened collaborative working across departments and organisations. A wide mix of participants from across the system have been brought together, many connections have been made and new relationships built.

With WSA workshops being a key phase of the process, participants have been engaged in highly collaborative and inclusive experiences. Even for many individuals familiar with collaborative partnership working, the experience was qualitatively different. Many recognised that they had been involved in a different way of working – collaboration around a common purpose that required them to think and work in ways that they were not familiar with, using activities and tools linked to the PHE model. It is quite possible that, as the WSAs move ahead with developing and implementing their action plans, the relationships established across departments and organisations will further strengthen as part of the local system networks.

Outcome 5: Actions are jointly prioritised and aligned across the local system to address diet and healthy weight and to reduce inequalities

The WSA process – engaging stakeholders from various parts of the system to work collaboratively to develop a common understanding of the issues, develop a shared vision and collectively agree priorities and how to address them – should jointly prioritise actions. The actions set out in **Appendix 3** reflect the outcome of this process and highlight those that have (to date) been jointly prioritised by the stakeholders involved.

However, as noted in earlier discussion, important parts of the system have not been actively involved in the WSA workshops and, as such, the priorities and actions collectively agreed by the stakeholders who participated reflect only the views of those parts of the system that they represent. This opens two important issues. One is the possibility that key parts of the system might have brought a different view about the issue at hand, and put forward different ideas and suggestions, had they been more closely involved in the process. The other is that, while the actions might well be aligned across the parts of the system that inputted, they are less likely to be so across other parts of the system that might be important for their implementation.

Across most of the WSAs, the issue of alignment of actions across the local system is very much a live one, and one that work is ongoing around. Indeed, in one of the WSAs it was described as 'at the heart of where we are now'. In early 2022, several locality areas were focusing a good deal of attention on this outcome area and, for example, were reaching out to other parts of the local system that had not been actively involved, sharing their priorities and proposed actions to strengthen links with what other structures are doing. Fife's commitment to engage with local CPPs and to build in the WSA work to the new LOIP and the **Plan for Fife 2021–24** is a good example of this.

Outcome 6: Learning is being captured and shared

This outcome has certainly been achieved across the early adopters. It is evidenced by how the WSAs have been led, with learning captured in a systematic way and used to improve the process. Project leads and working groups have used agile principles in learning and adjusted future actions based on this, for example changing and simplifying some of the more complex or overly academic elements of workshop activity and developing innovative communications activity to support the process (like the 'Talking Heads' videos in Fife).

A huge amount of learning has been captured across the WSAs that progressed their approach online during the COVID-19 pandemic. Learning has already been shared, both among stakeholders who participated in the process and beyond, and this continues to be the case. Skills sharing events, organised and hosted by OAS, have

been popular and have allowed WSAs to share learnings with one another. The websites developed by Dundee and Fife have recorded the process and its outputs as it unfolded, and Dundee's regular WSA Newsletter has been distributed widely across the local system.

There is now a solid body of learning and expertise amassed across these WSAs that could be very useful for other areas looking to commence a WSA. Indeed, a very clear message from this process evaluation is that there continues to be a strong appetite among the WSAs to continue to learn from other areas that have progressed a WSA approach.

8. Conclusion

Recognition of the need for a WSA to diet and healthy weight, and indeed across a wider policy context, has been accelerated by society's experience over the COVID-19 pandemic and as we move into recovery. While COVID-19 delayed and disrupted the WSA early adopters programme, interest and enthusiasm for a WSA is now stronger than ever.

In the two areas that had yet to restart their WSAs following a standstill of over two years, commitment to a WSA remains undimmed. Indeed, local ambitions about what needs to be done and what can be achieved by a WSA are probably greater than they were at the start of the national programme in 2019. The areas that did press ahead with their WSAs have made commendable progress despite numerous challenges and difficulties, with overstretched staff, the struggle to involve stakeholders and find ways to engage local communities, and dealing with issues associated with the specific WSA model followed.

The progress that has been made across the national programme provides a valuable body of learning that can support further work, both in the WSAs and in other localities interested in following this approach. There is now a very strong case to continue national support for the WSA and tap into the widespread positivity about whole systems working, which has been strengthened and increased in relevance by the COVID-19 experience.

9. Recommendations

This process evaluation concludes with some key recommendations on moving forward for national and local partners. Overall, they are based on combining: a) maintenance of the momentum generated by the early adopters, and other related WSA projects such as in Aberdeenshire; and b) further new enthusiasm and priority for the WSA concept leading from the COVID-19 experience. This suggests early actions to seize a potentially unique moment of opportunity to advance this way of working. Specific recommendations are:

1. Communication of the findings of this evaluation across partners at national and local levels, highlighting the potential transferability of the WSA across other areas and policy agendas.

2. Development of a bespoke Scottish WSA model that incorporates the recognised strengths of the PHE approach, whilst addressing the identified limitations of this from the practical experiences of the WSA areas. This should include:

    a. Adaptation and simplification of key concepts and supporting materials.

    b. Use of good and imaginative mechanisms to communicate WSA concepts and progress, presented in simple, ‘bite-sized’ chunks.

    c. Clearer articulation (with guidance and examples) of how and when direct community engagement activities to reflect the voice of ‘lived experience’ might be used in the WSA.

    d. Balancing work that requires to be advanced via workshop sessions and events, with offline research and less formal engagements.

    e. Offering blended options for participants balancing the positive gains of online experiences, with the value of traditional face-to-face work.

    f. Development of an appropriate suite of training activities and supporting materials (including pre-training for local leads and training

that enables the process to be followed online if this is the local preference).

3. Ensure this bespoke Scottish model incorporates guidance to reinforce key success features for an effective WSA highlighted by the local areas: the importance of comprehensive initial engagement activities; clearly articulated senior buy-in; getting a wider set of senior staff actively engaged in the working group from the outset; early connections to key wider local strategies and structures; appropriate resourcing to deliver the WSA based on realistic estimates of required time commitments from project leads and other key stakeholders; and targeted support from national partners.

4. To get round the issue of the output relying mainly (or solely) on who participates in workshop events, mechanisms should be found to ensure that more stakeholder voices and existing evidence are involved in the causal mapping and action development.

5. National partners should consider setting up a short life working group, with strong representation from local leads from the WSA areas that took part in the national WSA programme (including Aberdeenshire), with a remit to address what the scope and content of a new WSA methodology suited to the Scottish context could look like.

6. Consider and articulate respective responsibilities of national, regional and local levels in delivering a WSA, ensuring appropriate local flexibility and that key responsibility and ownership of the WSA is focused on the local level.

7. Further consider the appropriate geographic levels to establish a WSA based on reflecting on individual area approaches, which ranged from local authority-wide to a local community of only 3,500 people.

8. Quickly seek to establish WSAs as the future normal way of working, not an add on or optional extra. Recognise this requires investment locally and nationally on the basis that it will return much more in terms of wider effectiveness and value for money in public sector spending.

9. Recognise that measuring tangible impacts and outcomes of a WSA takes time, involving fundamental organisational behaviour change and the importance of balancing quick wins with processes, the benefits of which inevitably take longer to evidence.

Appendix 1: Local context of the whole systems approach areas

WSA	Description of context and locality
Scottish Borders	The WSA – Eyemouth: Gateway to Good health – has focused on a small coastal town in Berwickshire, located 8 km north of the English border, with a population of close to 3,500 people. Not the original location suggested for the WSA (Jedburgh being initially considered), the selection of Eyemouth was partly influenced by the progress that had already been made locally in partnership and community-led working. The council was attracted to the opportunity to be an early adopter area as it would give the community a real say in developing a local approach towards supporting a healthier, fitter population.
Dundee	The WSA – Growing up Healthy in Tayside – focused on the city of Dundee, Scotland's fourth largest urban area with a population of close to 150,000. Dundee (along with Angus and Perth and Kinross) is one of three council areas in NHS Tayside (population 400,000). Parts of Tayside, particularly in Dundee, include some of the most deprived areas in the country: many children and young people face the risk of underachievement and/or lifelong ill health because the circumstances in which they live make it difficult for them to eat well, drink well and be active. Dundee was selected as a WSA early adopter area as the development of a child healthy weight strategy was moving forward.
East Lothian	The WSA Loving Life was focused on the town of Musselburgh, the largest settlement in the local authority, with a population of just over 21,000. It was selected as the WSA area due to a combination scale, a recognition that much related activity was already underway and because it contains many of East Lothian's most deprived communities where obesity levels are far in excess of national averages The initial attraction of a WSA was its potential to comprehensively understand and tackle a complex and deep-seated issue impacting widely on the quality of life in Musselburgh.
Fife	In Fife, the third largest local authority in Scotland with a population of 368,060, 22,320 people have diabetes – 87.9% of whom have preventable Type 2 Diabetes. 22% of Primary 1 pupils are

WSA	Description of context and locality
	overweight or obese – above the Scottish average. There are very significant concerns on diet and unhealthy eating, and 22% of adults have very low levels of physical activity.[18] The WSA focused on the towns of Dunfermline (population 59,598) and Cowdenbeath (population 40,895). These areas were selected for WSA work due to the strong support and involvement of the respective local authority community managers for both areas.
North Ayrshire	NHS Ayrshire and Arran and the three Ayrshire local authorities decided to focus the WSA on one of three community planning partnership areas: North Ayrshire. North Ayrshire has a population of 135,280 and includes the main town of Irvine, other towns and villages, rural areas and the islands of Arran and Bute. In total, it covers 885.5 km^2. In 2017, 71% of adults were overweight, including 34% who were obese. Healthy weight in Primary 1 children is 73% – below the Scottish average of 76.6%.[19] Further analysis highlights inequalities across areas based on deprivation – 32% of adults in the most deprived areas are obese, compared with 20% of those in the least deprived areas.[20]
Dumfries and Galloway	Dumfries and Galloway is the third largest authority by area in Scotland, covering a total of 6,426 km^2. It has a population of 148,790 and includes the administrative capital and largest town of Dumfries, many other smaller towns and villages and large rural areas. Unlike the other areas, the WSA focused on physical activity rather than explicitly on poor diet and obesity, but cross WSA learning was anticipated from this different perspective. Prior to the WSA, partners in Dumfries and Galloway had worked together for several years on addressing inequalities and increasing levels of physical activity.
Aberdeenshire	The WSA project – advanced under the initiative Healthy Eating Active Living (HEAL) – has covered the whole of Aberdeenshire. By population, this is the sixth biggest local authority in Scotland, and the fourth largest by geographic area – covering 6,312 km^2 and incorporating a diverse range of small urban and large rural areas. The origins of HEAL arose from significant concerns on healthy weight. Although a comparatively prosperous local authority area, data highlighted a slightly higher unhealthy weight average than other parts of Scotland. This was also reflected in the critical Primary 1 age cohort.

Appendix 2: Key characteristics of a whole systems approach for public health (Public Health Reform)

1: System thinking

- Recognition that public health outcomes are influenced by a complex and adaptive system of interacting components, which will require the action of many partners to redesign the system to one that protects and promotes health.

2: Learning culture

- An ongoing process of reflecting, learning and adapting is adopted.
- Robust monitoring and evaluation are embedded and provide the foundation for learning, adaptation and ongoing improvement.

3: Collaborative leadership

- Leaders must: build and sustain collaborative relationships across the system; be committed to drive change over a longer period; empower leadership at all levels; be flexible; and champion, test and learn from new ways of working across organisational and professional boundaries.

4: Purposeful engagement

- Communities should be involved directly in decisions that affect them. Clear methods to enhance the ability of organisations and sectors to engage meaningfully with the communities who experience the system are needed.

5: Governance and resourcing

- To drive and sustain a WSA, clear and robust governance structures are required that enable shared accountability and align outcomes across organisations.

6: Sustainable collaborative working

- A WSA is a collaborative approach and is intended to reach beyond the partners we usually and comfortably work with. This will require flexibility and strong relationships, and a sustained commitment to collaborative working.

7: Shared commitment and outcomes

- Developing a shared vision and purpose that identifies, connects and aligns shared longer-term outcomes will help to engage partners beyond health and sustain collaboration.

8: Place is important

- Local context is important and will shape systems at a local level. All those responsible for providing services and looking after assets in a place need to work and plan together and with local communities to improve the lives of people, support inclusive growth and create more successful communities.

9: Creativity and innovation

- Understanding what works in a local context is important. This will require flexibility around ways of working to identify creative and innovative actions that best fit local needs. Leaders should encourage a culture that champions learning from what does and does not work.

Appendix 3: Themes, priorities and actions across the whole systems approach areas[21]

WSA	Themes and priorities	Actions planned or being implemented
Dundee	• Education setting and play. • Diet and cooking skills. • Physical activity and greenspace. • Planning and licensing.	• Community 'cook it' project. • Improving the lunchtime food experience in schools. • Improving physical activity levels in primary schools. • Developing safer greener streets.
Scottish Borders	• Communications. • Family participation and learning. • Outdoor activities.	• Eyemouth Living publication. • Play spaces. • Community lunch. • Virtual map. • Junior park run. • Cycling. • Outdoor activities and cooking.
East Lothian	• Community education. • Active lifestyle. • Built environment. • Food environment.	• Partnership working post COVID-19. • Permanent space for young people. • Umbrella voluntary society. • Better use of Musselburgh River (community arts work on bridge, mapped trail around Musselburgh). • Empowerment group, as gateway to joining other groups/activities. • Pump track. • Active travel hub. • Less formal children's play areas (e.g. open gym on path network). • Free pilot of activities. • Signposting of paths. • Community pantry.

WSA	Themes and priorities	Actions planned or being implemented
		• Licence control of hot food takeaway provision. • Community food classes. • Allotments.
Fife	–	Themes prioritised for next phase of WSA work: • Home environment: including food culture at home, equipment and space available to cook and eat at home, time available for cooking and the types of parental employment/shifts. • Transport: including safe transport links and connections in communities, transport costs and the volume of and reliance on cars in local areas. • Availability of unhealthy food: including causes such as the availability, quantity and variety of fast food in communities, the location of takeaway outlets and the ease of access to fast food in communities.
Aberdeenshire	• Physical activity. • Food accessibility. • Education and self-management. • Mental health and wellbeing.	• Initially 87 actions identified and allocated into these four thematic groups. The 87 actions reduced through editing and duplicate removal to 49. Process continues.

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