

Protecting and improving the nation's health

Whole systems approach to obesity

A guide to support local approaches to promoting a healthy weight







About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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Pilot and test local authorities involved in the whole systems approach to obesity programme

Pilot local authorities









Test local authorities





















Foreword

Tackling obesity and helping people achieve or maintain a healthier weight is complex. Most of the adult population in England is living with overweight or obesity and whilst the majority of the younger generation remain a healthy weight, it is not the case for every child, and particularly so for those living in our more deprived areas. We all have a responsibility to act now to support these families and children and to create local environments and places to promote a healthier weight.

The causes of obesity exist in the places where we live, work and play, where the food and built environment often makes it difficult to make healthier lifestyle choices. Individuals and families live in local communities and this gives local government the opportunity to work with communities and partners to help tackle and prevent the causes of obesity, complementing work at a national level. We know there is no one single solution. We can only tackle obesity if it becomes everybody's business and is prioritised and embedded in everything we do.

A growing body of evidence, including from the Government Office for Science's Foresight Tackling Obesities Future Choices – Project Report, suggests that whole systems approaches could help tackle complex problems like obesity. Systems science is an established academic field with a considerable body of literature and guidance available on systems theory, leadership, and techniques. But how do local authorities put whole systems working into practice? This question was addressed to Public Health England in 2013 by Local Authority Directors of Public Health.

In response, Public Health England, the Association of Directors of Public Health and the Local Government Association commissioned the whole systems approach to obesity programme. We have been working with local authorities over the past 4 years to co-produce the whole systems approach to obesity guide and resources. The guide provides a practical 'how to' process, which enables local authorities to start creating their own local whole systems approaches to tackling obesity and promoting a healthy weight, aligning with a 'Health in All Policies' approach. It is designed to support local authorities and their local systems partners, including the NHS, local businesses, communities and the voluntary sector. Translating aspects of systems science and learning from national and international experience, it can support local authorities whatever their starting point, to think about and act on how they connect and align, to strengthen action to tackle and prevent obesity.

The guide does not specify which specific policies, interventions or actions local areas should include in a whole systems approach. This is an important part of the approach, which needs to be agreed collectively by local stakeholders to reflect the local context.

Action planning can be supported by Public Health England's Promoting healthy weight in children, young people and families: a resource to support local authorities, which also makes the case for action by different stakeholders.

This is a new way of working for some local areas that requires commitment, energy, drive and importantly local political and senior level buy-in. Complex issues, like obesity, require sustained and systemic action and buy-in from systems leaders. This is essential to support implementation and enable local authorities to work differently and test new approaches. It also aligns with the recommendations in the framework developed to tackle public health issues: Quality in Public Health: A Shared Responsibility. There are different interpretations of what systems thinking is and different approaches to doing it. This is just the start of the journey and together, we need to continue to test, learn, adapt and evaluate systems approaches and share learning with the support of systems leaders.

Local authorities were pivotal in helping Leeds Beckett University to develop and test the whole systems approach to obesity guide and resources. Four original pilots coproduced the guide representing the different tiers of local government in England – County, Unitary, London Borough and District. Seven additional local authorities tested the guide and many others reviewed it and provided feedback. An advisory group provided expert support throughout the programme and the guide was peer reviewed by experts in the field (appendix 1). Our thanks go to all these partners who provided their time and expertise to support the development of the guide.

Q. Tedstone

Alison Tedstone

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Council

Executive summary

Obesity is a complex problem with multiple causes and significant implications for health and beyond. With the majority of adults in England overweight or obese, and a substantial number of children on the same trajectory, particularly those in the most deprived areas, national and local action is needed now. We know that there is no one single solution. Tackling such an ingrained problem requires a long-term, system-wide approach that makes obesity everybody's business, is tailored to local needs and works across the life course.

Many local authorities across the country are testing systems working, to address obesity and other complex public health issues. Others are keen to get started though find the concepts daunting and confusing. The guide aims to help address this. It has been developed iteratively over 4 years: co-produced with 4 pilot local authorities, tested by another 7 and reviewed by many more, to ensure it reflects local practice and context. It is designed to enable local areas to start their journey of systems working – it can also support those local areas who are already making progress.

The guide includes an introduction, which explains some of the key elements and concepts of systems thinking. It then takes local authorities through a 6-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 in the main guide, with supplementary resources available to support each phase, including systems science tools and techniques.

The guide is intended to enable local areas to deliver the key principles outlined in What Good Healthy Weight for all ages Looks Like through supporting them to embed systems approaches. The identification and development of actions, and the alignment of these actions, is a key part of the whole systems process. This is done collectively with stakeholders to build shared ownership and enable stakeholders to see their place in the system. The guide intentionally does not specify which actions should be included as part of a whole systems approach – this needs to be agreed locally and reflect the local context. This can be supported by Public Health England's Promoting healthy weight in children, young people and families: a resource to support local authorities, which also makes the case for action by different stakeholders.

Whole systems working requires a long-term commitment, with actions across the short-, medium- and long-term. The local authorities involved in the programme, and many others across the country, are at differing points in their journey of implementing a whole systems approach. It is through their experience and continued testing of these

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approaches, that we will have an opportunity to evaluate, inform the evidence base and share learning.

About the guide and resources

This guide, supporting resources and tools have been developed for local authorities and their public health teams to help them set up the process to implement a whole systems approach to tackling obesity in their local area with local stakeholders and communities. There are different views on what systems thinking is and how to do it in practice. The approach described in this guide does not aim to change the system in one go, rather it helps local authorities prioritise where to intervene in the local system, to leverage the greatest impact, align effort and bring about change. Language used in this guide relating to obesity will need to be adapted to ensure it resonates with local communities.

The guide has been designed to support all types of local authorities: Unitary Authorities, County Councils, District Councils, London Boroughs, Metropolitan Districts and Combined Authorities. A separate briefing for elected members to accompany the guide will be published by the Local Government Association.

The initial sections of the guide make the case for why local areas should take a whole systems approach (introduction), explain what a whole systems approach is (what is a whole systems approach?), provide a visual summary of the 6-phase process in the guide (overview of the whole systems approach) and explains how the guide can be used and what resources are required (things to consider before starting).

The "how to" part of the guide describes a practical process to create a local whole systems approach to tackling obesity. This process consists of 6 phases. Local authorities using the guide can draw on the supplementary resources when needed, which are listed in table 1. The resources can be found here, and will be linked to from the whole systems approach to obesity page on the Gov.uk website. There are also local authority insights throughout the guide which provide reflections on the process, from individual local authorities.

Table 1: List of resources (linked throughout the guide)

Introduction and	Associated resources		
phases			
Introduction	A: Community engagement and asset mapping		
Phase 1	B: Summary of local authority key policy		
Phase 2	C: Example consequence presentation		
	D: Action mapping tool		
	E: Action mapping guide		
	F: Network analysis tool – supporting guide		
	G: Network analysis email template		
	H: Network analysis data collection template		
	I: Network analysis data analysis template		
Phase 3	J: Example workshop invitation		
	K: Workshop 1 presentation		
	L: Workshop 1 set up		
	M: Facilitation tips		
	N: Workshop 1 presentation notes		
	O: Workshop 1 agenda		
Phase 4	P: Action scales model		
	Q: Workshop 2 presentation notes		
	R: Preparing for workshop 2		
	S: Workshop 2 presentation		
	T: Workshop 2 agenda		
	U: Action register		
	V: Summary of workshop 2 activity		
	W: Developing draft whole systems action plan		
	X: Action plan template (Word document)		
	Y: Action plan template (Excel document)		
Phase 5	No associated resource		
Phase 6	Z: Stakeholder survey		

The guide has been informed by academic work in the field of systems science and is designed to be accessible to all. Local authorities will have existing strategies in place to tackle obesity and promote a healthy weight. The guide can support local authorities reflect and refresh what they have in place, consider the local drivers, the breadth of existing actions, extend their stakeholder network and create a systems approach to reflect their local needs and context.

The systems terms used in this guide are explained in a glossary in appendix 2. Specific references have been included in the guide where appropriate. References to literature that informed the development of the process, guide and the resources more

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broadly, and further reading on systems theory, techniques and local and international practice, are included in appendix 3.

Introduction

Why should local authorities take a whole systems approach to tackling obesity?

Obesity is a complex issue, with many contributing factors, including the "obesogenic" environment, which can lead to excess calorie consumption and physical inactivity (1). There is no one solution to tackle such an ingrained problem and local action to promote healthy weight across the life course requires a coordinated collaborative approach to support change. The disproportionate impact on individuals and families living in more deprived areas means that the status quo on obesity is no longer acceptable. It is a priority and requires alignment across agendas and organisational boundaries to make it everybody's business.

Local authorities are in a uniquely influential position to lead their communities and local partners to tackle obesity including through working with local NHS organisations and work through integrated care systems. At a national level, there has been increased government commitment, since 2016, to preventing and tackling obesity through the Childhood Obesity Plan (2). At a local level, there is the opportunity to build on this momentum, to tackle key local environmental drivers of obesity and support people living with obesity, aligning with actions at a national level.

An increasing number of local areas across the UK are testing and embedding a systems way of working. There is growing recognition that a whole systems approach, involving stakeholders from across the local system, will help tackle obesity (1, 3). Evidence is also emerging from municipality and community work in the Netherlands (4) and Australia (5), which supports the benefits of whole systems working. It may also provide a more sustainable approach to tackling obesity – evidence to support this is still emerging.

Systems science is an established and evolving academic field that has been around for decades. There are different interpretations of what systems working is and different approaches to doing it (6, 7). Although much of the literature is based on theory rather than practical application (8), various websites now provide practical advice, particularly around system mapping (9-12). Despite this, for some, systems thinking concepts are still daunting and it is difficult to know where or how to start. The guide aims to help address this.

A whole systems approach to obesity epitomises a 'Health in All Policies' approach, drawing on local authorities strengths, supporting their key priorities and recognising that they can create their local approaches better and more effectively by engaging with their community and local assets (13). Having the sustained, visible and active support

of elected members, the chief executive and senior leaders sends a clear signal that tackling obesity is a priority for the whole local authority, not just public health.

Benefits of a whole systems approach

Actions to tackle obesity at a local level do not just benefit people's health. They can have positive impacts on other local agendas including employability and productivity of local populations, and could reduce the demand for social care (14, 15). It is important to understand these benefits to engage different stakeholders in the whole systems approach.

Most local areas interested in setting up a localised whole systems approach will have strategies and programmes of work in place to tackle obesity. A whole systems approach can add value by providing the opportunity to engage stakeholders across the wider system to develop a shared vision and actions that tackle the more upstream drivers of obesity, that are outside the realms of public health.

Taking a whole systems approach can provide additional benefits, over and above the benefits of tackling obesity in general. These are outlined in table 2. Table 3 provides quotes from local authorities to support taking a whole systems approach.

Table 2: Benefits of a whole systems approach

- effect of collective actions is greater than the sum of the individual actions – identifies, implements and aligns actions that have wider impact across the local system
- reflects the local leadership role of local authorities enables reach and penetration into local places, working with and through an extensive range of stakeholders, including communities
- aligns with a 'Health in All Policies' approach recognises the range and complexity of causes of obesity, supporting a system-wide approach to understand and address health inequalities
- maximises all the assets in the local area, including community assets – recognising and identifying local assets can help build on the particular strengths of communities
- supports a community centred approach to tackling health inequalities – involving local communities, in particular disadvantaged groups, can better reflect the local realities, help improve health and wellbeing and reduce health inequalities
- develops transferable workforce skills and capacity relevant and applicable for other complex issues

recognises the potential of all partners to contribute – NHS
organisations, local authority departments and the education, business
and voluntary sectors all have a significant role to play in improving the
population's health

Table 3: Why a whole systems approach? - what local authorities say

Jim McManus, Chair of the whole systems approach to obesity Advisory Group, Director of Public Health, Hertfordshire County Council

"This is an exciting step forward that could really help us make a step change in the way we tackle obesity. It is clear that focusing on individual choices alone will not reduce levels of obesity – we need the whole system working together to make a significant difference."

Sarah Scott, Director of Public Health, Gloucestershire County Council

"Previous efforts to address obesity levels at a local level have been ineffective – a different approach is needed. We are all aware of the need to take a whole systems approach to tackling complex issues like obesity but didn't know how to do this in practice. Having a structured process to follow has been invaluable."

Rose Dunlop, Public Health Consultant, City of Bradford Metropolitan District Council

"Implementing the whole systems route map has given a new sense of direction to our work and provided a dynamic framework to engage partners and deepen their understanding and role around obesity."

Simon D'Vali, Principal Traffic and Highways Engineer, City of Bradford Metropolitan District Council

"I have found that the whole systems approach to obesity has identified links between departments and external agencies that were not immediately obvious in the first instance. This connectivity makes it easier to align priorities and resources."

A logic model (appendix 4) has been developed to demonstrate the outcomes local areas could see if implementing a whole systems approach, recognising that change in the prevalence of obesity is a long-term outcome. The model can be used to facilitate stakeholder engagement and support evaluation. Local areas are encouraged to develop their own logic model to align with the local context and priorities.

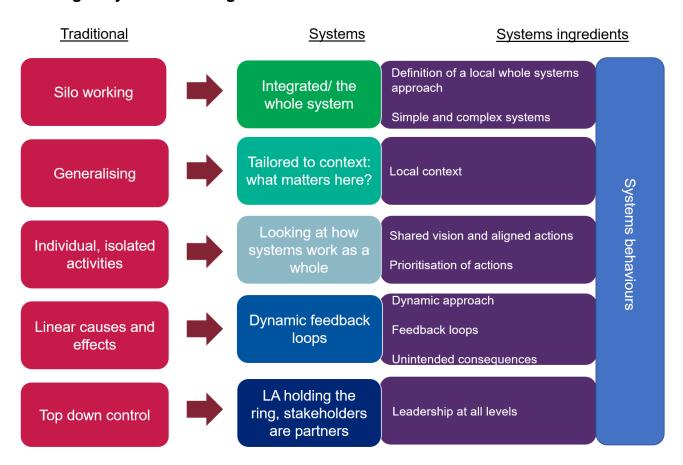
What is a whole systems approach?

This section provides an overview of some of the whole systems approach concepts and behaviours, which have been adapted to focus on implementation at a local level. Colleagues who are leading this process should familiarise themselves with these concepts and behaviours as they are fundamental to the approach.

Figure 1 illustrates the changes local authorities might expect to see when moving from traditional working (column 1) to systems working (column 2). The specific concepts and behaviours related to systems working, which are described in the following section, are summarised as systems ingredients, in columns 3 and 4.

The systems terms used in this guide are explained in a glossary in appendix 2. Links to a selection of publications and websites, which provide a more in-depth explanation of systems thinking and tools, are included in appendix 3.

Figure 1: Changes expected to happen in a local place when shifting from traditional working to systems working



Definition of a local whole systems approach

There are many different perspectives on what a whole systems approach is. The programme has developed its own definition, informed by academic thinking and learning from local authorities.

"A local whole systems approach responds to complexity through an ongoing, dynamic and flexible way of working. It enables local stakeholders, including communities, to come together, share an understanding of the reality of the challenge, consider how the local system is operating and where there are the greatest opportunities for change. Stakeholders agree actions and decide as a network how to work together in an integrated way to bring about sustainable, long-term systems change".

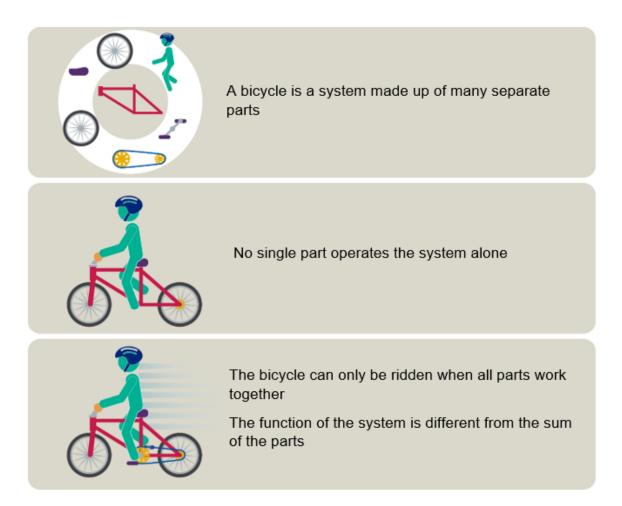
Simple and complex systems

To embrace whole systems working, it is important to understand how systems function, particularly obesity systems.

A system is a collection of interdependent parts (16). If something happens to one part of the system, other parts of the system will be affected. It is the relationships between the parts that create the system's function with the whole being greater than, and different from, the sum of its parts (16).

Figure 2 depicts a simple system. Systems are defined as simple when there is a clear cause and effect relationship between the function of the parts and the outcome. Although simple systems can still be complicated, as they are made up of many interacting parts, if individual parts are changed, the likely effect is still predictable (17).

Figure 2: Using a bicycle to understand systems



Conversely, obesity systems are complex with many changing interrelationships. This can be clearly seen in the Foresight Tackling Obesities Future Choices – Project Report systems map (1) which is made up of a series of interconnected 'sub-systems': societal and cultural influences, food production, food consumption, biological factors, individual psychology, individual activity and environmental factors. This type of system is a social system because people are involved in, and influence, all aspects of the system. Social systems are always complex and largely unpredictable.

Complex issues such as obesity, tend to require long-term, systemic approaches. Senior leader buy-in and a change of mindset may be required to support this new long-term way of working.

Local context

Collecting data on local obesity prevalence and trends and understanding the connections between obesity and health inequalities and other local priorities, is essential to ensure robust foundations are in place to strengthen the approach. Understanding the viewpoint of local communities will prove helpful when engaging

community leaders and considering the desirability of actions. This will in turn support the development of local obesity maps and the prioritisation of actions that address local needs.

Shared vision and aligned actions

Developing a shared vision will unite stakeholders with different backgrounds and agendas, to form a common aspiration (18). A clear vision allows stakeholders to stay focused and move forward in the same direction and helps everyone to see how their work fits in.

A whole systems approach enables collective efforts and alignment of actions. Stakeholders consider the range of required actions to address obesity and promote a healthy weight together rather than considering individual actions in isolation. This enables different parts of the system to move forward together, maximising synergies and creating a more impactful approach.

For example, a public health team may have services in place to increase the uptake of active travel in the local area. At the same time, other teams in the local authority may be working towards reducing air pollution by limiting car use in town centres. As both actions are mutually reinforcing, it is important that stakeholders working in the system align effort and look to work in tandem wherever possible to maximise impact.

While individual actions and interventions (for example weight management services or school/community-based programmes) can still be considered independently, they should also be considered in a holistic way when attempting to implement changes in the system. It is the effectiveness of the entire system that is important to tackling obesity at a population level, rather than individual components.

Prioritisation of actions

Simultaneously addressing all the local issues driving obesity is challenging. The approach in this guide aims to support local authorities prioritise where to intervene in the local system to leverage the greatest impact, align effort and bring about change. It does not set out to change the whole system in a single go. This is a long-term approach and stakeholders are encouraged to develop an action plan that includes short, medium and long-term actions. Changing the system will require more time than a political or commissioning cycle. While some system changes may happen relatively quickly, others will take a longer continued effort.

Dynamic approach

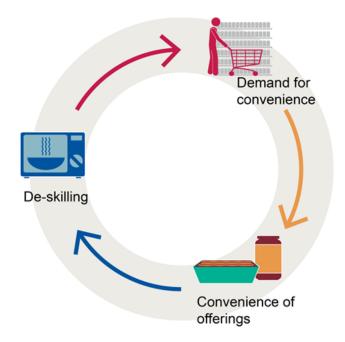
The local system driving obesity is dynamic. Changes in one part of the system will affect other parts (19), which can impact the effectiveness of actions. It is necessary to regularly monitor and evaluate the factors that influence obesity in the local area and to adapt actions to address any environmental or other changes in the system.

Actions in the wider system outside the immediate control of local authorities also influence what happens locally. Examples of this could include national actions relating to planning guidance or industry response to the national calorie and sugar reduction and reformulation programmes (20, 21).

Feedback loops

Feedback loops are a feature of complex systems. These involve a process of influence, whereby the outcome of an event or action reinforces itself through a chain of cause and effect (19). Figure 3 provides an example of this. Being able to recognise feedback loops helps to identify potential places to intervene in a system. To gain a deeper understanding and for further detail on the different features of feedback loops please see references in appendix 3.

Figure 3: Example of a feedback loop



Example: people buy readymade meals to save time or because they have limited cooking skills. The availability of readymade meals has increased in response to this

trend. This may lead to a further downturn in the cooking skills of the general population.

Unintended consequences

Action can lead to unintended consequences. These are unforeseen or unanticipated outcomes or effects, which, can be positive or negative (19). It is important to consider these when developing actions and monitoring progress.

Examples

Rooftop gardening was trialled to improve local access to fresh vegetables for vulnerable families in a Chicago neighbourhood. Whilst the gardens did not bring about the anticipated improvements in fruit and vegetable intake, the trial did lead to the widespread adoption of rooftop gardens because landlords discovered that they improved the insulation of older apartment buildings. The tenants also enjoyed getting to know each other while tending the gardens.

Many local authorities are looking at sustainable transport options which enable residents to easily access town and city centres. If these transport links are routed through areas of deprivation, there are also opportunities to reduce health inequalities, as these links have been shown to increase access to employment and healthcare

To improve efficiency, some GP practices have tested online consultation platforms. These platforms can enable patients to access self-help information, order repeat prescriptions, and electronically submit signs and symptoms to their GP. Whilst this service was convenient and accessible to patients, in some cases the platform increased GP workload because the online platform did not link with GP records. This meant that GPs had to read both the patient notes (held by the practice) and the symptom notes submitted online.

Leadership at all levels

A systems approach encourages distributed leadership within a local authority (8). Leaders should be skilled in bringing people together, facilitating discussions, making sure differences are considered and that everyone is heard (22, 23). This leadership style generates buy-in from a wide range of partners, enables understanding and can lead to better use of local assets and resources through aligning actions. It also enables flexibility and helps maintain momentum to sustain the project.

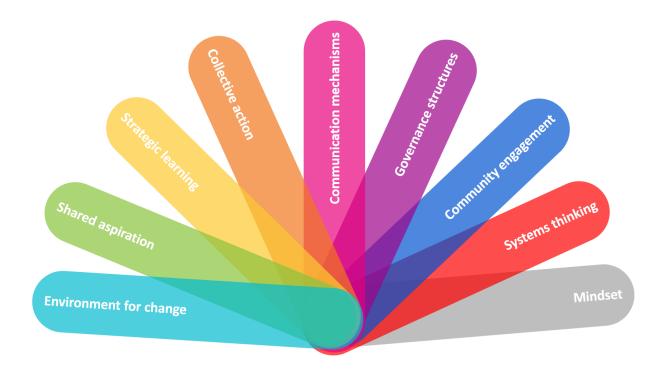
Senior leadership support within the local authority demonstrates a willingness to lead by example, which can encourage local stakeholders to reciprocate, engage and get involved with delivery and identify others.

Systems working behaviours

A range of behaviours underpin whole systems working at a local level as seen in figure 4. The behaviours that follow (in colour-coded boxes) draw on systems science and have been compiled from working with local authorities to develop a whole systems approach.

The behaviours are intended to support local areas with reviewing and evaluating their own transition towards systems working. Putting these behaviours into practice is an ongoing and nonsequential process. The behaviours are intended to promote inclusivity, so that all stakeholders understand and can demonstrate the local "values" to achieve a whole systems approach.

Figure 4: Systems behaviours



Creating an environment for change

- demonstrate responsibility and sustained support for the design and delivery of our local whole systems approach to obesity. Articulate a shared vision and describe how my role fits within the local systems approach
- engage and continuously seek to connect with and develop the system network
- ensure that all stakeholders have a shared understanding of the local situation and understand how they can help alter the system driving obesity
- draw on the strengths of our local assets and available resources
- co-create our whole systems approach so it aligns and delivers local priorities
- learn about our differing viewpoints and priorities and describe the interconnectedness across the breadth of our stakeholder network
- ensure a health equity lens is employed to understand the relationship between obesity and health inequalities locally

Developing a shared aspiration and vision

- create a culture that promotes relationships, trust and respect
- develop a clear and aspirational vision with stakeholders and communities for what our whole systems approach is trying to achieve
- design our whole systems approach to enable all stakeholders and communities to share common ground and purpose
- create an engaging, open and honest conversation within our system network (a wide range of stakeholders including communities)
- engage widely, and acknowledge that different people have different values, interests and perspectives

Employing strategic learning

- promote a culture and environment that encourages continuous learning
- share insights, learn from each other and look to communicate about what is happening locally
- co-design strategies/methods, with stakeholders and communities, to collect and monitor information to help evaluate our progress
- co-create ways in which our network of stakeholders (and communities) can demonstrate and assess their contribution
- connect with other local places on how they are delivering a whole systems approach and draw upon experience of a wider network, including academia and national policymakers
- create and prioritise space to communicate and share learning about methods of practice, experience and outcomes of implementation

Undertaking collective action

- identify alignment between actions, at differing levels and across sectors
- employ a health equity lens to review actions and understand the impact and effects on health inequalities locally
- influence and facilitate stakeholders, across the system, to take responsibility and own or co-own actions
- create consensus amongst stakeholders on how to align and make our resources and assets work more effectively
- drive innovative and collaborative working to move beyond the outcomes of individual actions and efforts to deliver the conditions for sustained change

Establishing effective communication mechanisms

- design a communications strategy, which celebrates actions and encourages engagement of new stakeholders (including local communities) in the system-wide approach
- create effective approaches to communicate. Share insights and data to support system-wide action
- collaborate with stakeholders (including local communities) to assimilate and evaluate information and develop effective communications and stories

Implementing appropriate governance structures

- create organisational capability through creating the space to bring people together, for example through the core working team and a system network of wider stakeholders (including local communities)
- design approaches to secure and maintain stakeholder accountability.
 This may mean building on what is already in place and working
- create the space and conditions to sustain collaboration, trust and monitor action plans
- adopt a facilitative and adaptive style of leadership

Engaging communities in a whole systems approach

- involve communities in every aspect of whole systems work to benefit from their expertise in what people in the community want, what they consider to be their assets and how efforts to intervene might be made more effective
- allocate sufficient time, energy and resource to build strong, longlasting relationships with community members and organisations
- choose from the family of community engagement approaches at each stage and engage at a level that is appropriate to the task, the history of community engagement in your area and the expertise available to the local authority and our partners (resource A)
- engage with communities to seek their support for emerging priorities.
 Listen to the views of your local communities and learn from them to help find common priorities to take forward

Using systems thinking

- stimulate and lead discussion on delivering collective and aligned system-change strategies
- communicate clearly the need to move from silo working to collective and coordinated action, and lead by example
- create the space for stakeholders to review actions and identify where there are shared objectives, to reinforce efforts
- monitor progress and adapt our collective efforts in response to observed changes
- share a common understanding on how our actions relate to differing parts of the system and appreciate the implications our actions have for local people and differing sectors
- create opportunity to identify and address unplanned consequences of our actions, for example, on health inequalities
- prioritise regular reflection and debate on the bigger picture and examine how the system is changing
- understand the different perspectives and priorities of those working across the system

Having an appropriate mindset

- encourage and promote open discussion amongst stakeholders on the aspirations and challenges of taking a whole systems approach
- communicate the benefits of challenging the status quo and create consensus on collective and system-wide action
- encourage innovative approaches and create the space to test out new thinking
- promote trust and respect across the stakeholder network, creating an understanding of the varied and different perspectives of stakeholders
- create a consensus towards collective gain rather than individual benefit
- lead by example setting aside personal and institutional objectives and agendas
- create common ground between stakeholders, including local communities and work collectively towards a shared aspiration

Overview of the whole systems approach

Figure 5 and 6 provide a diagrammatic outline of the step-by-step process for implementing a whole systems approach. The process is cyclical. Figure 6 presents it linearly to accommodate the key steps.

Figure 5: Process for implementing whole systems approach

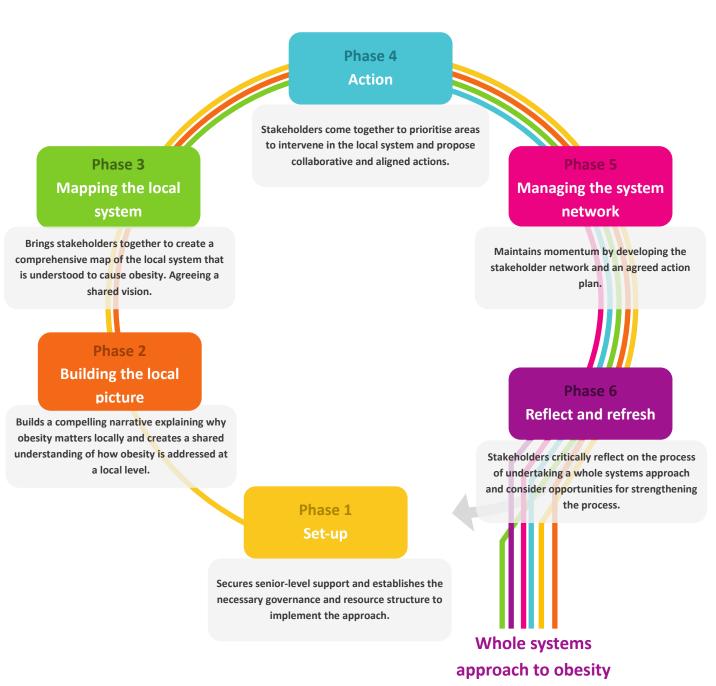


Figure 6: Aim and steps of whole systems approach to obesity

Phase Aim Key steps

Phase 1 Set-up Secures senior-level support and establishes the necessary governance and resource structure to implement the approach.

- 1. Engage with senior leaders to obtain their support
- 2. Set-up a core working team to undertake the day-to-day operations and coordinate the approach
- 3. Establish resources to support the process
- Secure the accountability, advice and support of a group of senior stakeholders offering a broad range of expertise to ensure the approach has sufficient challenge, governance and resource

Phase 2
Building the local picture

Builds a compelling narrative explaining why obesity matters locally and creates a shared understanding of how obesity is addressed at a local level.

- 1. Collate key information about obesity locally
- 2. Start to understand the local assets including community capacity and interest
- 3. Establish a comprehensive overview of current actions
- Identify the departments, local organisations and individuals currently engaged in supporting work around obesity

Phase 3
Mapping the local system

Brings stakeholders together to create a comprehensive map of the local system that is understood to cause obesity. Agreeing a shared vision.

- 1. Prepare for workshop 1:
 - Identify and engage wider stakeholders
 - Prepare presentation slides and add local information
 - Prepare facilitators to undertake system mapping
- 2. Deliver workshop 1: system mapping
- 3. Begin to develop a shared vision

Phase 4
Action

Stakeholders come together to prioritise areas to intervene in the local system and propose collaborative and aligned actions.

- 1. Prepare for workshop 2:
 - Create a comprehensive local system map
 - Prepare presentation slides and add local information
 - Prepare facilitators to support action mapping
 - Refine a draft shared vision
- 2. Deliver workshop 2: action planning
- 3. Develop a draft whole systems action plan
- 4. Refine the shared vision

Phase 5
Managing
the system
network

Maintains momentum by developing the stakeholder network and an agreed action plan.

- 1.Develop the structure of the system network
- 2. Undertake the first system network meeting
- 3. Present the finalised shared vision
- 4.Agree the action plan

Phase 6
Reflect and refresh

Stakeholders critically reflect on the process of undertaking a whole systems approach and consider opportunities for strengthening the process.

- 1. Monitor and evaluate actions
- 2. Maintain momentum through regular meetings
- 3.Reflect and identify areas for strengthening
- 4.Monitor progress of the whole systems approach and adapt to reflect how the system changes over time

Things to consider before starting

How to use the guide

The 6-phase process described in the guide can be used flexibly by local authorities, taking into account existing structures, relationships and actions that are already in place to tackle obesity. As part of this existing work, some elements of the initial phases in the guide may already be in place. Local authorities are encouraged to review these phases to ensure the approach is comprehensive and elements such as the narrative about obesity reflect the current local picture.

Learning from local authorities involved in co-producing the guide indicates that activities undertaken in the early stages are important to lay the foundations for the approach and directly support the later stages of the approach. Phases of the guide can be revisited or repeated as part of an iterative process linked to reflecting and refreshing the approach, which is outlined in phase 6 (for example, re-map the local system and refresh the local picture).

Throughout this guide there will be reference to supplementary resources (such as tools and slide sets) to help support local authorities undertaking the process. These are shown in table 1 and are available here.

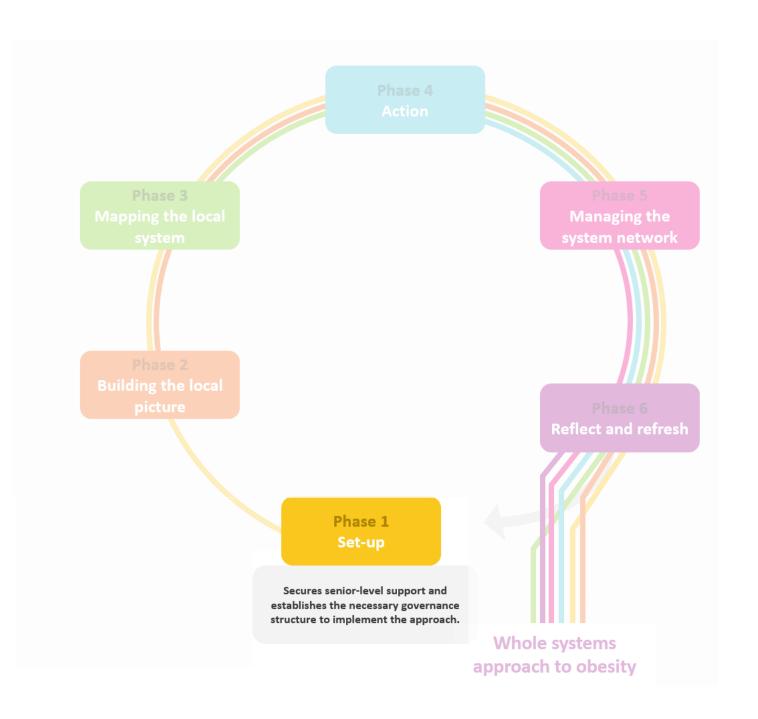
Resource requirement

Having a senior representative, such as a senior officer or an elected member, to champion the whole systems approach is recommended to ensure that time, resource and commitment continues. The approach will also benefit from the commitment and strategic oversight of a local authority sector lead/manager who has experience of managing a programme area. It will require administrative resource on an ongoing basis to maintain momentum and facilitation support at stakeholder events.

Phase 1: Set-up

Figure 7 highlights phase 1 in the whole systems process and the associated key steps. Figure 8 identifies the behaviours that are demonstrated in this phase.

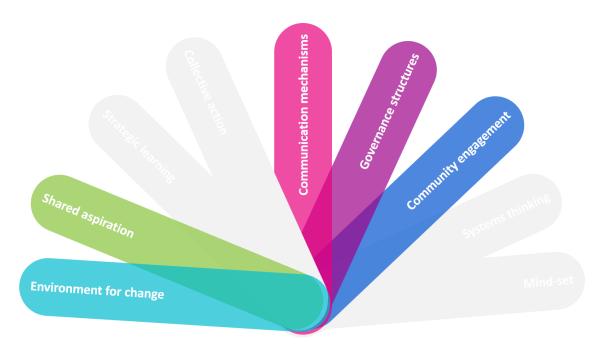
Figure 7: Phase 1 of the whole systems process and key steps



Key steps

- 1. Engage with senior leaders to obtain their support.
- 2. Set-up a core working team to undertake the day-to-day operations and coordinate the approach.
- 3. Establish resources to support the process.
- Secure the accountability, advice and support of a group of senior stakeholders
 offering a broad range of expertise to ensure the approach has sufficient
 challenge, governance and resource.

Figure 8: Key behaviours demonstrated in phase 1



Aim

The aim of this phase is to establish the governance structures and support required to effectively implement a local whole systems approach to tackling obesity. Effective communication and implementation of appropriate governance structures will help stakeholders understand and embrace a whole systems approach. This will facilitate collective action and enables the use of valuable assets in the local system to align actions and achieve a shared aspiration.

The approach has been designed to be used across the whole local authority, be that a County, Unitary, District or London Borough. Another approach which some local authorities have adopted - both pilots on the whole systems obesity programme and others involved in whole systems working – is to test the approach in a specific

community (for example where there is greater prevalence of childhood obesity) before rolling it out more widely across the local authority.

Senior leadership support

Support from senior leadership is integral to the successful implementation of a whole systems approach (24, 25). Securing this support will facilitate wider stakeholder engagement and help embed the approach within and across organisations.

Senior leadership support:

- provides visible endorsement of whole systems working
- demonstrates the importance of addressing obesity
- opens doors to help engage with stakeholders within and outside the local authority (including local communities)
- provides advice and support and helps drive accountability
- brings people together towards a shared vision
- provides important insights into where the approach for obesity might align to other strategic objectives and support addressing health inequalities locally
- provides leverage to mobilise resources and builds capacity to deliver whole systems working

It is "crucial to have this backing in order to involve and approach elected members and bring other departments in on the project" (Halton Borough Council)

"...we were conscious that we knew we had to have the green light from the right people, or at least let them know what was happening before we kicked it off" (Hertfordshire County Council)

Ways to engage senior leaders

Here are some approaches that can be helpful when seeking senior leadership support.

Recruit a champion

Recruit a key opinion leader (who holds a senior position in the organisation) to be a champion for the process. A leader who understands the process and can encourage others to support the work at a senior level is crucial to help to maintain its momentum and visibility. The Cabinet Lead for Health and Wellbeing would be a good political champion to support the process, engage other leaders and represent the local community.

Making the case

The current environment of significant financial constraints dictates that, for many local authorities, local prosperity and statutory services such as adult social care, highways, refuse and litter may take priority. Highlighting the connections between obesity and these overarching priorities will assist in securing senior leadership support.

Promoting healthy weight in children, young people and families: A resource to support local authorities (26) includes valuable information to help build a business case and **resource B** – a summary of key local authority policies.

One-to-one meetings

Meeting senior leaders about their agendas, asking what they feel works well within their sector or organisation, how they feel obesity relates to their work, and explaining what the whole systems approach entails, may help tailor the approach to secure their support. Appreciative inquiry is an approach for generating positive change in people, groups and organisations, which focuses on what is working well (appreciative) by engaging people through asking questions and gathering stories (inquiry). Appreciative inquiry methods can help keep the conversation positive and focused on the strengths of the local authority, such as asking, "what matters to you?" and "what works well here and why?" as well as exploring "what would it take for us to achieve this style of working?" (27, 28)

"So I see that [one-to-one interviews] as almost a key part of the process – building relationships, building momentum, taking people with you, rather than just going into the first workshop cold." (Hertfordshire County Council)

Local authority insights

The Director of Public Health at Gloucestershire County Council approached other directors and senior business leaders directly and engaged them in discussion about why tackling obesity would benefit their work. The Director of Communities and Infrastructure opened and supported a workshop and the Chief Executive Officer of the Local enterprise partnership participated actively.

(Gloucestershire County Council)

Understanding communities

Local authorities should ensure community representation in their approach from the beginning (respecting the extent to which they would like to be involved). This will help ensure that the resulting programme of work takes account of the views, knowledge and priorities of the communities who are, ultimately, the beneficiaries of whole system efforts to address obesity. Community involvement is likely to evolve over time. One pragmatic approach would be to include voluntary and community sector organisations (with whom many local authorities have strong existing relationships) from the beginning and to identify additional community members and organisations as work develops.

Local authority insights

Community insight work carried out for a local authority by their local Healthwatch provider showed that families would not engage with the planned "Food and Health" project. Changing the name to "Food and Families" made the project more relevant to the community, improving engagement.

(Gloucestershire County Council)

Resource A – further information on community engagement

Working groups: roles and responsibilities

Core working team

At the start of the process the core working team (CWT) will need to be set-up to coordinate the approach. This requires a time commitment from a small number of individuals to coordinate the activity, undertake the day-to-day work, and provide administrative support (table 4). When setting up the CWT it may be most practical and realistic for this to be run by local authority colleagues. As the approach develops and the stakeholder base grows it may be beneficial to include stakeholders from across the wider system in the CWT.

Table 4: The core working team – key information

Purpose	To undertake the day-to-day operations and coordinate the approach	
Responsibilities	Organise stakeholdersMaintain momentumGenerate and collate key materials	 Feedback to senior leaders Operationalise workshops and the system network
Representation suggestions	Junior and senior officers who have strong connections internally and externally plus administrative support	
Number of members ¹	2 to 4	
Frequency of meetings ²	Weekly or fortnightly during phases 1 to 4 Fortnightly thereafter	

¹ For guidance only. ² Based on experience of the time required to undertake the necessary work and maintain momentum.

Accountability, advice and support for the CWT

Creating a whole systems approach requires sustained support from stakeholders with a range of expertise, from within and/or external to the local authority. It is essential they are passionate about improving the health, wellbeing and prosperity of the local population and can commit time on a regular basis.

The CWT may report to an existing leadership group or structure, or a new advisory group may be established, where members can offer positive challenge, advice, support and accountability for the work (table 5).

Table 5: Accountability, advice and support for the CWT – key information

Purpose	Accountability, advice and support. Enabling the whole systems approach to have long-term commitment from a wider range of stakeholders		
Responsibilities	 Oversee and advocate the approach Ensure momentum Build and identify relationships and local assets 	 Identify principles of communication Feedback on the development and implementation of the action plan Establish and support governance and monitoring 	
Representation suggestions	Senior officers/managers from across the system within and external to the local authority		

System network

The system network is formed of a broad set of stakeholders from the local area, both within and outside the local authority. This group will include participants from workshop 1 (phase 3) and workshop 2 (phase 4), alongside other identified stakeholders. The system network is responsible for the sustained implementation, adaptation and refinement of the whole systems approach and action plans. Its membership will evolve over time (table 6).

Table 6: The system network – key information

Purpose	Stakeholders from across the system who will contribute to this approach		
Responsibilities	 Participate in workshops and regular meetings Generate a common understanding of the local challenges 	Identify and facilitate actions in the systemIdentify other system stakeholders	
Representation suggestions	Stakeholders from across all local authority sectors, elected members, external organisations (public, private, and voluntary sector), community representatives		

Whole systems approach to obesity: A guide to support local approaches to promoting a healthy weight

Number of members	The network will evolve over time
Frequency of meetings	Quarterly

Further information on the ongoing responsibilities and functions of the system network can be found in phases 5 and 6, which include:

- creating a shared vision that is collectively developed and agreed by all system stakeholders
- identifying and engaging other system stakeholders, including community members
- local delivery, monitoring and evaluation of individual obesity actions within their own organisation or local authority function
- collective ownership of actions and the approach which requires regular reflection and evaluation of how the whole systems approach and its actions are progressing to maintain momentum and ensure the approach adapts and evolves in response to changes in the system

Additional preparation

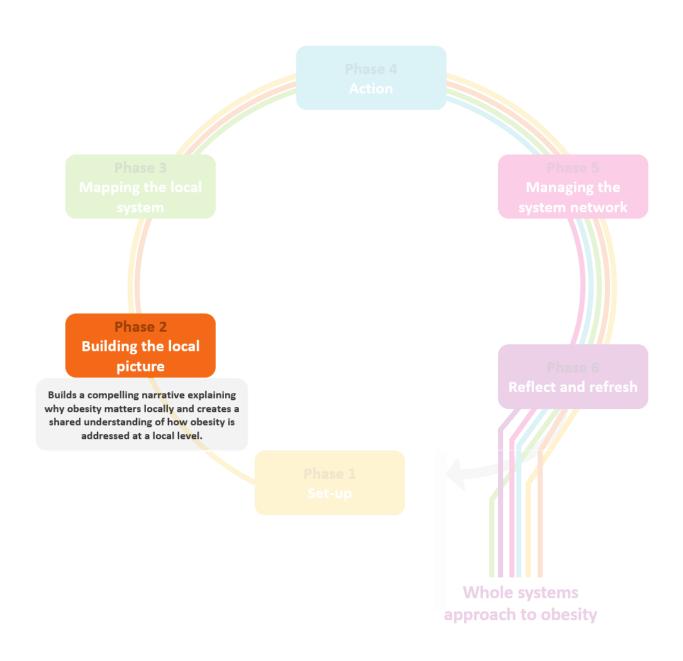
An integral part of the process is the development of a system map (a graphical representation of the local system of obesity causes, similar to the Foresight map)(1). This map can be created by hand, using Microsoft PowerPoint or using specific system mapping software.

Consider contacting IT departments early in the process so that software can be installed onto computers ready for when needed. Further information on software packages is included in appendix 3.

Phase 2: Building the local picture

Figure 9 highlights phase 2 in the whole systems process and the associated key steps. Figure 10 identifies the behaviours that are demonstrated in this phase.

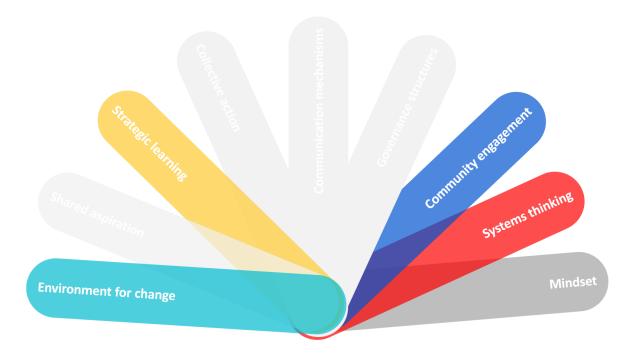
Figure 9: Phase 2: Building the local picture and key steps



Key steps

- 1. Collate key information about obesity locally.
- 2. Start to understand the local assets including community capacity and interest.
- 3. Establish a comprehensive overview of current actions.
- 4. Identify the departments, local organisations and individuals currently engaged in supporting work around obesity.

Figure 10: Key behaviours demonstrated in phase 2



Aim

The aim of this phase is to gather information required to understand the local picture of obesity, including its prevalence, the local impact, relevant organisations and people, community assets and existing actions to address it. Investing time in this phase creates the foundations for a whole systems approach. It will help build a compelling narrative to engage and make the case with a wide range of stakeholders. The outputs of this phase, as well as your understanding of the local picture, will adapt and evolve over time.

"... you need to do it, because otherwise you don't know where you're starting from" (Halton Borough Council)

Collating local material about obesity

Developing a set of key messages about obesity will help stakeholders understand the issues and why they are relevant to them. This enables frank discussions and sharing of views and perspectives on factors relating to obesity. The facts and figures about obesity in the local area (some of which you will already have) form the cornerstone of communication with all stakeholders. This information will be presented during workshop 1 (phase 3) to help stakeholders to see the bigger picture.

Suggestions of information to gather include:

- prevalence of overweight and obesity nationally and locally to demonstrate the scale of the problem and health inequalities which could include prevalence of childhood obesity in different wards
- impacts of obesity on health and non-health issues (for example, social care, education) and how obesity aligns with other priorities - this will support (engagement of stakeholders outside public health) a Health in All Policies approach
- trends in overweight and obesity
- changes in obesity prevalence: for example indicating how the prevalence of local childhood overweight or obesity has changed using National Child Measurement Programme (NCMP) data (29)
- connections between obesity, health inequalities and ethnicity in children
- national public health indicators, such as fruit and vegetable consumption and physical activity levels
- insights from local communities on what they would like to see happening and
 examples that illustrate the effects on 'real' people insights and stories help explain
 how the wider environment interacts with people's individual circumstances and
 characteristics and the challenges for people with obesity; examples might focus on
 a specific local community/area, an at-risk population or a stage in the life course
- local practice examples will help to gain buy-in from stakeholders, particularly if they
 can see how their sector/work may have contributed to and may be able to tackle
 obesity

References in appendix 3 can help support with this task.

Resource B – a summary of key local authority policies

Resource C – example slides the pilot local authorities prepared to present their localised data in workshop 1

Why community assets matter

Community centred ways of working are recognised as sustainable and effective approaches to help reduce health inequalities (30).

One approach to consider is involving communities in identifying assets that might help tackle obesity. Community assets include skills, knowledge, social networks, resources and facilities which can be available within the public, private and third sector (31). Some of these assets could be unknown to professionals but may be familiar to community members.

Knowledge of community assets develops over time and the act of mapping assets with communities can be an effective way of engaging communities in the obesity agenda. Asset mapping with communities can help identify community members who could become part of the system network. This should be part of an incremental process and not a one-off activity (32).

Resource A – further information on community asset mapping

Action mapping

A prerequisite to developing a local whole systems approach is having an overview of the actions currently being undertaken, by the local authority or other organisations, to tackle obesity. Collating actions into one document can help show the breadth of the current approach. This information is useful throughout the process, especially when running workshop 2 (phase 4); developing the action plan (phase 4); and when reviewing actions on a regular basis with the system network (phases 5 and 6).

"The action mapping tool is user friendly and easy to complete...Definitely something that other local authorities should benefit from going forward" (Worcestershire County Council)

Action mapping helps to:

- collate key information about local actions on obesity
- map current actions/interventions against local causes of obesity
- understand where current actions are targeted with regards to the Wider Determinants of Health (WDOH) model (33)
- assess actions and key performance indicators (KPIs) against anticipated outcomes
- understand the impact and effects of obesity and current actions on health inequalities locally

Action mapping can be completed by sharing the tool with colleagues electronically or by hosting a workshop.

The tool will enable you and your stakeholders to understand what actions are currently being delivered and identify any gaps. An example of the tool can be seen in figure 11. Please note that this tool does not evaluate the effectiveness of the actions.

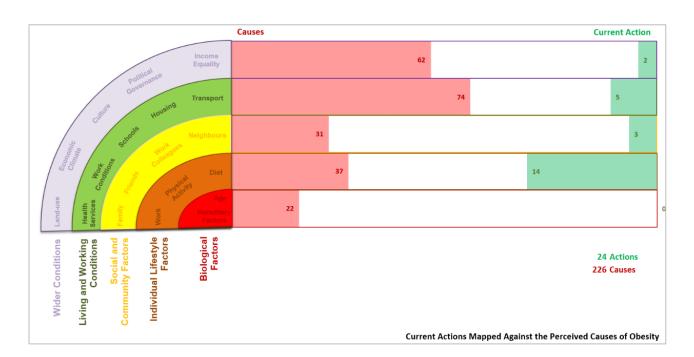


Figure 11: Example of action mapping

There are 2 options available for action mapping which are:

- Option 1: map actions against the WDOH model (33) this quickly provides a general overview of the actions and how they address the WDOH
- Option 2 (builds on option 1) a comprehensive assessment that includes further details on actions (for example, KPIs, sectors responsible) and whether these actions are likely to meet their intended outcomes; this option takes longer to complete, however provides greater insight into each action

Resources D and E – the action mapping tool and a supporting guide for how to complete it.

Network analysis

Most local authorities already work collaboratively with a network of external organisations and communities to tackle obesity in the local area. However, these networks are rarely mapped out. A network analysis helps recognise:

- the current network the main local authority departments, external organisations and/or people within the obesity network
- key departments, organisations or people that are missing
- where gaps might open up if a key person left the network

The network analysis helps to determine the level of involvement each department, organisation and individual has in the network, and how they contribute to the flow of information within the network. In addition, the analysis will help identify who to invite to workshop 1 (phase 3). Repeating a network analysis can be used to evaluate how the network expands over time as part of a whole systems approach (phase 5 and 6). Please ensure adherence to local data sharing policies and compliance with the general data protection regulation when undertaking this task. If you identify somebody who you want to be involved and you do not have their contact details you should see if they are publicly available. If their contact details cannot be found, please ask a contact who identified them to share your details with the individual you want to invite and ask them to make contact.

"It is a really useful tool and allows you to identify gaps and also systems leaders outside the local authority... I think its strength is its simplicity" (Dudley Metropolitan Borough Council)

How

The network analysis tool is completed by sharing it with stakeholders electronically or by hosting a workshop (this is in the same workshop as the action mapping tool).

"It looked overwhelming on first glance, but once you followed the steps it was really straight forward" (Dudley Metropolitan Borough Council)

Resource F – a supporting guide for how to complete the network analysis

Resource G – an email template to send to stakeholders

Resource H – a data collection tool that stakeholders need to complete

Resource I – the network analysis template

Phase 3: Mapping the local system

Figure 12 highlights phase 3 in the whole systems process and the associated key steps. Figure 13 identifies the behaviours that are demonstrated in this phase.

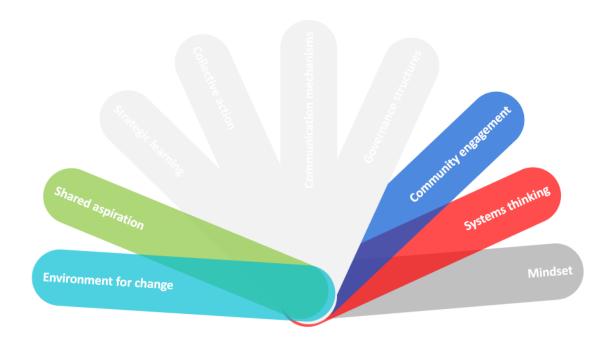
Figure 12: Phase 3: Mapping the local system and key steps



Key steps

- 1. Prepare for workshop 1:
 - identify and engage wider stakeholders
 - prepare presentation slides and add local information
 - prepare facilitators to undertake system mapping
- 2. Deliver workshop 1: system mapping
- 3. Begin to develop a shared vision

Figure 13: Key behaviours demonstrated in phase 3



Aim

The aim of this phase is to bring stakeholders (including communities) together in a half-day workshop to map out the local system that is thought to cause obesity and begin to develop a shared vision. Through this co-creative process, stakeholders can see where, and how, they can help to prevent and manage obesity and what they are collectively trying to achieve. Mapping the local system will also help identify where actions may have the greatest potential leverage (8).

"People felt it would be useful to hear other people's perspectives and for them to contribute and be involved... [the workshop] made them aware of who else needs to be involved in tackling this issue." (Oldham Council)

The importance of a shared vision

A shared vision unites stakeholders with different backgrounds and agendas to a common aspiration (18). A vision is a clear and aspirational statement of what the whole systems approach is trying to achieve (34). It is about looking forward and seeking to motivate and unify everyone so that all stakeholders are working together. A clear vision allows stakeholders to stay focused and move forward in the same direction and helps everyone to see how their work fits in (35). Creating the vision collectively should result in increased stakeholder commitment and engagement. A clear vision will be the foundation for goal setting and action planning.

Why is it important to map the local system?

The system map created in this phase is pivotal to the whole systems approach process because it:

- enables all stakeholders to develop a shared understanding of the factors which cause obesity
- encourages stakeholders to think beyond traditional health promotion approaches, which tend to focus on individual behaviour change
- encourages stakeholders to have different conversations and discover opportunities for alignment
- encourages ownership of the agenda
- helps to create a shift in mindset among stakeholders they begin to understand how the system is working and why the current approach won't alter it
- enables stakeholders to locate themselves and their role within the system

There is no definitive local system map. The map that is developed will not be perfect or include everything – this does not matter. It represents the perspectives of the stakeholders involved and can be refined over time and through continued dialogue with wider stakeholders and communities (through the system network meetings). This will ensure the map continues to represent the local reality. The system map can also be used as a tool to engage with stakeholders not yet involved. For example, the system map could be taken to transport colleagues for verification on aspects which relate to their work. By illustrating where stakeholders – and their work – fit in to the overarching whole systems approach, they can see their place in the system.

Local authorities have the option to develop one system map with a broad range of stakeholders or separate maps with different sets of stakeholders. This will depend on the local context. One consideration could be the geographical reach of the approach that is being implemented. For example, local authorities who are implementing the

approach across their whole local area may decide to develop one high-level system map, focusing on population level obesity causes. For this approach, they may choose to invite stakeholders who can influence population-level policy, actions and levers. Other local authorities who decide to implement their approach in specific neighbourhoods rather than across the whole local authority may choose to do a high-level system map followed by a more localised map developed with community organisations and members of the local community. This will add nuance and local ownership to the original map.

How to map the local system

There are a number of different approaches to system mapping (36, 37). Qualitative system mapping is the approach used in the guide. It was considered to be the most appropriate method for local authorities as other techniques are more complex, requiring quantitative systems analysis (38). Local authorities have the option to explore other methods, which have been signposted in appendix 3.

"...it's reassuring that the complexity of obesity, the places within... the people we are, is actually reflected in the maps, and that's what is shown. So I think it's really helpful, because it gives you a sense that you can be cogs achieving something."

(East Herts District Council)

Understanding communities

Mapping the local system is an opportunity for professionals and communities to share their expertise and experiences. It is also an opportunity for mutual learning. Fully involving communities in mapping the local system is likely to yield rich information on local understanding of the causes of obesity, which can inform subsequent approaches and actions.

Preparing for workshop 1

Identifying relevant stakeholders

By now the geographical area to include in the whole systems approach should have been decided. This will inform who to invite and how to ensure the community is adequately represented. A whole systems approach needs to engage a wide range of stakeholders, and this workshop is only the start of their involvement in the process.

Table 7 provides a list of relevant stakeholders you could invite (some will have been identified during the network analysis in phase 2).

Table 7: An example list of relevant stakeholders to invite to workshop 1

Elected members, officers and	External contacts including:
representatives from the local authority	<u>-</u>
teams:	
Adult services	For County/upper tier – District
	Councils, for Districts – the
Children, young people and	County/upper tier
families (including education	
and training)	Any other local council
	infrastructure, such as town and
Communications and media	parish councils if appropriate
community services including	Will after the large of the control of
community engagement and	Voluntary and community groups
community safety	and community representatives,
Culture, heritage, sport and	including those supporting specific at-risk groups
leisure	specific at-risk groups
loiouro	Local businesses and business
Employment, growth and	bodies
productivity	
	Public, private and not-for-profit
Environmental services	healthcare providers from both
(including environmental	primary and secondary care
health, food waste, recycling	(including GPs, dentists,
and sustainability)	pharmacists, community nursing services)
Highways and transportation	
	Clinical commissioning groups
Housing (including local	
housing associations)	Schools and early years
Planning, investment and	
regeneration	

Securing wider stakeholder representation

To ensure wide stakeholder engagement, it is helpful to send workshop invitations from a senior representative or champion (for example, Chief Executive Officer, Elected Member or the Director of Public Health) and follow up the invitation with a one-to-one approach. The number of people invited to these workshops could vary between 25 to 100. Stakeholders invited to workshop 1 will form the basis of the system network. Building the system network will be an iterative process – you may not identify or manage to engage all the relevant stakeholders in workshop1.

Resource J – an example flyer and email used by pilot local authorities to invite stakeholders to workshops

"I looked at which sectors were under-represented, and I emailed people directly. I then rang people and said 'we haven't got anyone from this sector" (Solihull Metropolitan Borough Council)

The invitation to stakeholders might include:

- the importance of addressing obesity, using the information collated during phase 2
- why addressing obesity is relevant to them Promoting healthy weight in children, young people and families: A resource to support local authorities (26) includes valuable information to help build a business case and resource B a summary of key local authority policies
- how whole systems working can help create an approach, which benefits other departments and local organisations due to the alignment with their own agendas
- an outline of the workshop

Key preparation points for workshop 1

Template workshop slides have been provided which will require tailoring to the local area with the information collated during phase 2 (**resource K**).

It is important for a senior representative (for example, the senior champion) to attend the session and as a minimum to introduce or close the workshop. By taking part in the discussions, the senior representative is kept abreast of what is being developed.

Local authority insights

Stakeholders said that having a senior representative present made them feel they were being listened to and that the issues being discussed were important.

(London Borough of Lewisham and Oldham Council)

Resource L – comprehensive information to help set-up workshop 1

The importance of facilitation

Effective facilitation is vital to the success of the workshop. Facilitators with prior experience may come from the CWT or wider network. They must have developed a good understanding of the whole systems approach, be familiar with the purpose of each workshop task and know how these fit into the whole systems process.

System mapping is not the same as mind mapping It is a very structured methodical task and learning how to facilitate this exercise effectively takes practice. It is essential that facilitators read the introductory sections of this guide, the workshop resources (**resource M, K and N**) and practise mapping prior to the workshop.

Resource M – tips for facilitating workshops with further links to support facilitation

"...they're well versed in that kind of stuff; we do lots of consultation – type work, we do a lot of training, so they're very used to facilitating activity on tables. So, they almost became the little expert in the job." (Bradford Metropolitan District Council)

Local authority insights

Getting together to run through and practise the activities before the workshop increased the facilitators confidence and helped the day run more smoothly.

(Oldham Council and City of Bradford Metropolitan Borough Council)

Workshop 1

A brief outline of the agenda and activities in workshop 1 are provided in:

Resource K – a complete set of amendable slides to accompany workshop 1 **Resource N** – detailed guidance on how to undertake each of the activities in workshop 1

Agenda

An example agenda is provided below for workshop 1. The timings are for guidance only. The workshop should last between 3 to 3.5 hours.

Activity	Time
Welcome and Introductions	15-20 mins
Group activity 1: Consequences and realities of obesity	15-20 mins
Presentation 1: Consequences of obesity in the local area	10-15 mins
Presentation 2: Whole systems approaches	20-30 mins
Refreshment break	10-20 mins
Group activity 2: Understanding the local causes of obesity	75-105 mins
Group activity 3: Developing our vision	20-30 mins
Close	5-10 mins

Resource O – an agenda that can be amended and used as a delegate hand-out

Summary of session content

A summary of the content of each session in workshop 1 is provided in table 8.

Table 8: Summary of workshop 1 session content

Activity	Purpose	Steps	Intended outcome
Group activity 1: Consequences and realities of obesity	To encourage people to think about why obesity matters to them and to consider the different perspectives of community members and professionals working in different sectors	1.Participants individually note down as many consequences of obesity that they can think of 2.Tables discuss the consequences	A common understanding of the realities and the nature of the impact of obesity
Presentation 1: Consequences of obesity in the local area	To outline the scale of obesity, associated inequalities at the local level, impact on different sectors and how it links with the strategic priorities of the local authority		Increased stakeholder buy-in through a shared knowledge of obesity prevalence and an understanding that obesity impacts across sectors and is not just an issue for public health
Presentation 2: Whole systems approaches	To explain what systems thinking is, what a whole systems approach is and how it differs from more traditional approaches		Participants begin to understand what a whole systems approach involves, how it addresses obesity from a new perspective and will require a different way of working to more traditional approaches
Group activity 2: Understanding the local causes of obesity	To identify and map out the perceived local causes of obesity	1.Participants note causes of obesity and choose 5 causes to explore further 2.Groups create local system maps	Participants begin to see the bigger picture, how the parts of the system are interrelated, identify root causes of obesity and explore the factors, drivers and beliefs of the individuals and organisations that cause

			the system to function as it does. The system maps are a key stage in developing the local whole systems approach to tackling obesity
Group activity 3: Developing our vision	To begin to develop a clear and aspirational vision statement of what the whole systems approach is trying to achieve	1.Participants discuss the important elements of a good vision 2.Participants note down ideas	Participants begin to unify and see how their work aligns towards a shared ambition

Local authority insights

One local authority commented on the limitations of community engagement when designing interventions. Some of the key local drivers of obesity (maternal body weight, diet and lack of breastfeeding) were unfamiliar to community stakeholders. Had the process of causal mapping been entirely community-led, this important evidence-based insight would not have been considered and a potential avenue for reducing obesity left unexplored. This highlights the importance of combining professional expertise with community insights and acknowledging the limitations of stakeholders' ability to determine the full spectrum of local causes. Exploring community stakeholders' response to this information – that antenatal and perinatal factors have a big impact on body weight later in life – would be one way to help make sure that any proposed interventions were acceptable and meaningful to community members.

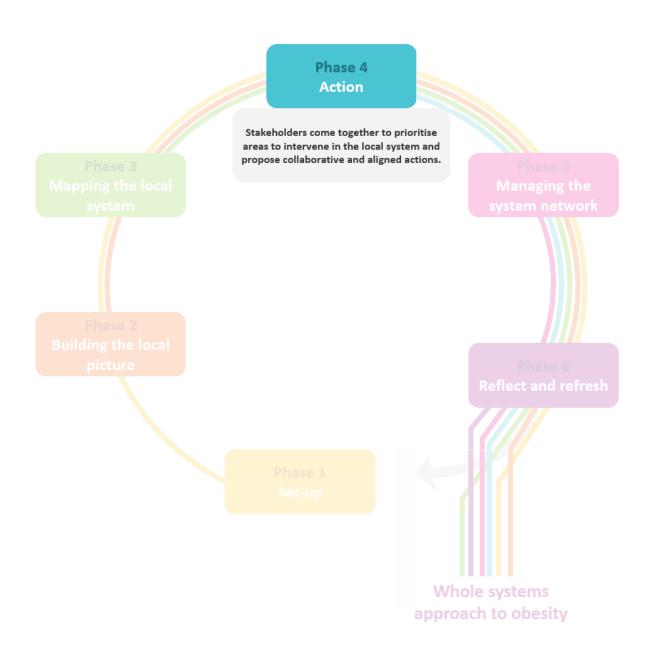
(City of Bradford Metropolitan District Council)

Phase 4: Action

Figure 14 highlights phase 4 the whole systems process and the associated key steps.

Figure 15 identifies the behaviours that are demonstrated in this phase.

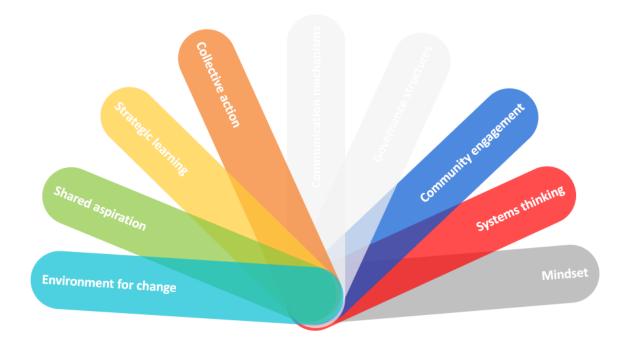
Figure 14: Phase 4: Action and key steps



Key steps

- 1. Prepare for workshop 2:
 - create a comprehensive local system map
 - prepare presentation slides and add local information
 - prepare facilitators to support action planning
 - refine a draft shared vision
- 2. Deliver workshop 2: action planning
- 3. Develop a draft whole systems action plan
- 4. Refine the shared vision

Figure 15: Key behaviours demonstrated in phase 4



Aim

The aim of this phase is for stakeholders to refine the shared vision and to propose actions that may provide the greatest opportunity to change the system. A facilitated workshop (workshop 2) helps participants with this process.

Identifying opportunities to change the current system

The process of identifying where, and how, to intervene in the system takes place in workshop 2. The aim of this workshop is to collaboratively identify actions, both new and existing, to help shape a whole systems action plan.

Through a mixture of presentations and group activities, participants will:

- review the process undertaken so far
- review the collated system map see figure 16 for an example of a comprehensive system map from a local authority involved in the programme. Other examples are included in appendix 5
- prioritise areas across the system for action
- discuss what action is currently underway across the system
- define actions that offer the opportunity for long-term sustainable change, using the action scales model
- consider how actions can best be aligned to maximise their impact
- provide input into the development of a local whole systems action plan, ensuring actions align with the best available evidence base
- identify actions to address the local health inequalities associated with obesity

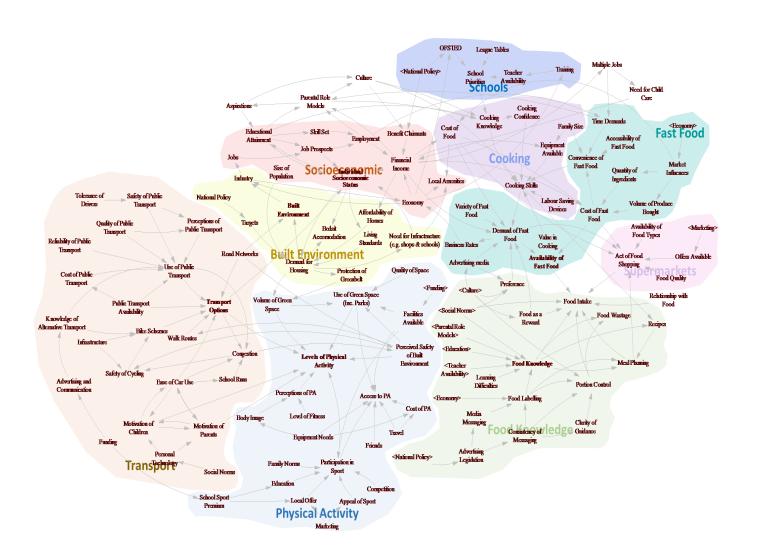


Figure 16: Example of a comprehensive system map

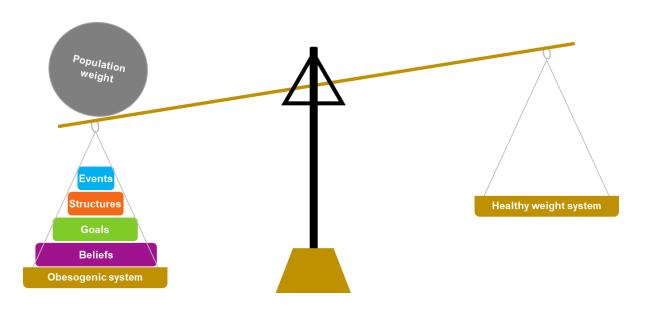
The action scales model

Understanding how and where to intervene in a system is key to help identify which actions are more likely to bring about sustainable systems change. The action scales model has been developed through the adaptation of an existing systems model and has 4 different system levels: events, structures, goals and beliefs (39-42).

The action scales model is designed to stimulate thinking about actions within a complex system. The model (figure 17) is visually depicted as a set of scales and weights. On the left hand-side of the scales is an obesogenic system and, on the right, a healthy weight system. The weights represent 4 different levels to intervene in a system: events, structures, goals and beliefs. The model is used to help stakeholders identify a coherent set of actions that are more likely to bring about sustainable systems change.

Resource P – a more detailed explanation of the model

Figure 17: Action scales model



Preparing for workshop 2

Key preparation points

- develop a briefing for attendees who did not attend workshop 1 (phase 3)
- create a collated system map by bringing together the individual system maps generated in workshop 1 (phase 3)
- overlay current actions onto the collated system map (those listed in the action mapping tool, phase 2)
- draft a vision statement(s) using ideas generated in workshop 1 (phase 3)
- edit the workshop template slides, adding local information and examples
- ensure that a senior leader agrees to attend and as a minimum introduces and/or closes the workshop
- effective facilitation of workshop 2 is vital ensure there are sufficient facilitators for the workshop who are fully briefed and prepared as for workshop 1 (phase 3)

Local authority insights

To help familiarise new attendees with the process so far, provide an overview of workshop 1 as a slide or a page of A4 which summarises the key messages: a whole systems approach, scale of the problem locally, action mapping, network analysis and workshop 1 activities.

(Halton Borough Council)

Resource Q – comprehensive information to assist in the preparation of workshop 2. This includes how to create a collated system map from the individual maps created in workshop 1.

Local authority insights

Effective facilitation: Obesity and whole systems approaches are topics which generate different points of view, so there will be instances where people disagree, for example on what causes obesity or on what the actions should look like. Facilitators should feel confident in managing these challenging conversations and ensuring that participants are respectful of each other, whilst staying on track.

(Oldham Council)

Workshop 2

A brief outline of the agenda and activities in workshop 2 are provided in:

Resources R – a complete set of amendable slides to accompany workshop 2

Resource S – detailed guidance on how to undertake each of the activities

Resource T – agenda that can be amended and used as a delegate hand-out.

Resource U – action register template

Resource V – activity in workshop 2

Agenda

An example agenda for workshop 2 is provided below. The timings are for guidance only. The workshop should last between 3 to 3.5 hours.

Activity	Time
Welcome / introduction	10-15 mins
Presentation 1: The process so far	5-10 mins
Presentation 2: The outputs and learning to date and workshop overview	20-30 mins
Group activity 1: Prioritising areas to intervene	5-10 mins
Presentation 3: Understanding system levels and the action scales model	10-15 mins
Refreshment break	10-20 mins
Group activity 2: Identifying opportunities	90-120 mins
Group activity 3: Refining our vision	15-20 mins
Close	10 mins

Summary of session content

A summary of the content of each session in workshop 2 is provided in table 9.

Table 9: Summary of workshop 2 session content

Activity	Purpose	Steps	Intended outcome
Presentation 1:	То		All participants to
The process so	summarise		view these
far	the process		workshops as a
	to date,		fundamental part
	explain the		of a journey. By
	current		framing the
	phase and		process as a
	provide		journey, a sense
	details of		of sustainability
	next steps		and longevity is
			created
Presentation 2:	To outline		Participants gain a
The outputs and	findings from		shared
learning to date	the work to		understanding of
and workshop	date,		the complexity of
overview	including		the local picture,

	information relating to the system maps, community assets and current actions		understand their contribution to the creation of a healthier local system, via collective action and a shared vision, and are aware of current approaches and the partners involved
Group activity 1: Prioritising areas to intervene	To prioritise areas of the system map for intervention	1.Participants familiarise themselves with the themes of the system map 2.Participants individually prioritise 3 themes they or their department, organisation or group can influence 3.Members of the CWT identify the most popular themes	A number of prioritised themes are chosen for which actions will be identified
Presentation 3: Understanding system levels and the action scales model	To present the different levels of system actions in the action scales model and how these can bring about differing degrees of leverage for system change		This presentation aims to enable participants to confidently use the action scales model in the next part of the workshop
Group activity 2: Identifying opportunities	To work collectively in small groups to propose actions that could change the functioning of the current system. This	1.Participants choose a prioritised theme that they believe they can influence 2.Proposed actions are written on the system map and added to the action register	A number of aligned system actions are proposed, which (if implemented) aim to alter the functioning of the current system

	may include identification and enhancement of existing actions	 3.Additional supporting actions are added into an action register using the action scales model 4.Participants are given the opportunity to consider how to strengthen existing actions 5.Participants are given the opportunity to identify actions for other themes 	
Group activity 3: Refining our vision	To develop a clear and aspirational vision statement of what the whole systems approach is trying to achieve	Draft vision ideas are presented for discussion	Participants begin to unify and see how their work aligns towards a shared ambition

Developing the draft whole systems action plan

The next step of phase 4 is to develop the draft whole systems action plan by reviewing and aligning existing and new actions proposed during workshop 2 and ensuring they align with the best available evidence base. PHE's Promoting healthy weight in children, young people and families: A resource to support local authorities can support this process (26).

The draft action plan is then shared with wider stakeholders for review in phase 5. It can provide a framework (for the CWT and stakeholders) to discuss progress and opportunities to link different actions. It can also help to identify key partners who can support the programme and its governance structures.

The resources required are:

- collated system map
- list of current actions (captured using the action mapping tool in phase 2 and actions identified in workshop 2)
- list(s) of proposed stakeholder actions (captured in workshop 2, phase 4)

There are 2 elements to this final step:

- 1. Overlaying actions on to the collated system map.
- 2. Transferring the material into the draft whole systems action plan. For each action this includes consideration of:
 - what system level does the action target (event, structure, goal, belief)?
 - what are the anticipated outcomes for the action in the short, medium and longterm and for whom?
 - how does the action impact on health inequalities?
 - does the action align with the best available evidence base? PHE's Promoting healthy weight in children, young people and families: A resource to support local authorities can be used to support this (26)
 - is the action feasible to deliver?
 - who will take responsibility for delivering the action?
 - does the action align with other proposed or current actions?
 - what could the unintended consequences of the action be, including how these may impact inequalities?
 - what is the implementation timeframe for the action?
 - how and when will progress be monitored?

Local authority insights

Several local authorities have commented that involving communities in local actions requires a long-term commitment, and that the way in which communities are involved and engaged develops over time. For example, one local authority has started a local Obesity Alliance, whose wide and varied membership includes community members and organisations. This alliance meets on a quarterly basis to share learning and agree actions. This work is supplemented by training delivered by a local community development agency, helping community organisations deliver healthy eating and physical activity messages as part of their usual work. A third strand of work involves participatory budgeting, where community organisations can bid for small amounts of funding lasting one year. Priorities (in this case, active ageing, social isolation and cooking classes) and allocation of funds are agreed by a panel of community members.

(London Borough of Lewisham)

Whole systems approach to obesity: A guide to support local approaches to promoting a healthy weight

Resource W – guidance on how to develop a draft whole systems action plan.

Resources X and Y – whole systems action plan templates

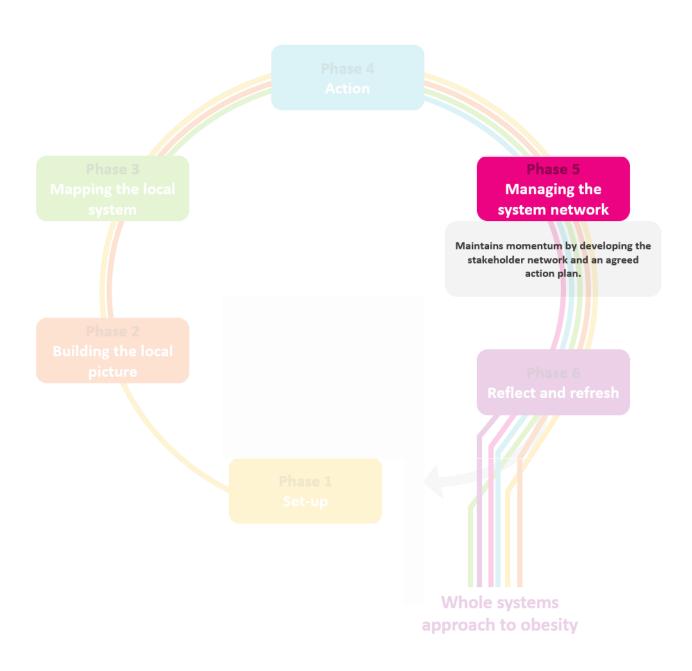
Developing the final shared vision

The final step of phase 4 is for the CWT to finalise the shared vision by reviewing the feedback received during workshop 2. The shared vision is then presented to the wider stakeholders in phase 5.

Phase 5: Managing the system network

Figure 18 highlights phase 5 in the whole systems process and the associated key steps. Figure 19 identifies the behaviours that are demonstrated in this phase.

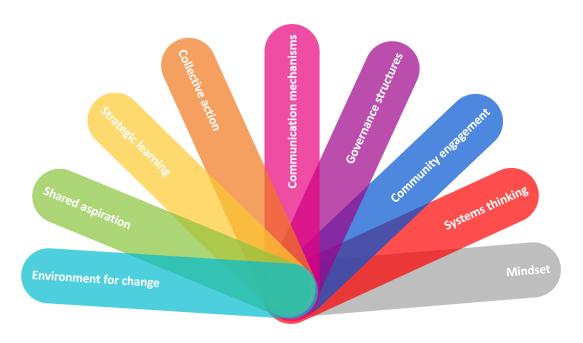
Figure 18: Phase 5: Managing the system network and key steps



Key steps

- 1. Develop the structure of the system network
- 2. Undertake the first system network meeting
- 3. Present the finalised shared vision
- 4. Agree the action plan

Figure 19: Key behaviours demonstrated in phase 5



Aim

The system network is an inclusive forum, which brings stakeholders together to promote systems working to tackle obesity across the local area as introduced in phase 1. The aim of this phase is to get the system network up and running by developing the structure of the network and undertaking the first meeting. Participants at workshops 1 and 2 (phases 3 and 4) will form part of the system network.

System network structure

The system network will need to meet regularly to reflect on responsibilities, review and monitor progress, adapt the action plan and maintain momentum (phase 6). The work of the system network should be tailored to fit the circumstances and preferences of the local authority and wider stakeholders.

Table 10 provides an outline of how some of the pilot local authorities set-up their system networks.

Table 10: Examples of system networks

Pilot A

Bringing all stakeholders together

This District Council created a system network which included stakeholders from multiple sectors and community members.

They invited all stakeholders to attend their rolling system network meetings. This was a small council, and so this approach may be useful when there are a smaller number of stakeholders in the system network (<50).

Pilot B

Geographical area / administrative boundary

This County Council worked with its District Councils to create a number of system networks (one per District). As a result, several districts now have a system network.

These system networks then operate at the district level, meeting regularly to bring stakeholders together from across the district council. Members from the county council also attend.

This approach helps to ensure the whole systems approach is tailored to the differing district contexts.

Pilot C

Themes

This metropolitan borough council created a single system network which included community members and stakeholders from across sectors (>50).

Several sub-groups were created within the system network to focus on a theme of the system map. Chairs from each sub-group ensured the system network continued to work as a collective body. The entire network meets annually.

System networks which create sub-groups of stakeholders to focus on specific themes (see pilot C in table 10) should feedback progress to the whole network. The system network can then review the effects of these actions beyond their immediate operational boundaries and consider them in the context of the whole system.

Considerations for managing the system network

Resources required

Consider the resources needed to establish and run the system network in terms of strategic input, the CWT roles (including administrative support) and governance. This should be considered at the start of the process to ensure adequate resources are identified and allocated.

Joint ownership

The system network provides opportunities for different stakeholders to co-own the aspiration and approach. Shared decision-making helps achieve this and keeps obesity a priority for stakeholders.

Continuous senior leadership involvement

Senior leader involvement and visibility signals a strong statement of intent. Leading by example helps set and guide the culture of the system network. Direct involvement of senior officers and elected members underlines to other system leaders not currently engaged that working across organisational boundaries is of value.

Ongoing communication

This will enable stakeholders to continuously see their place and value in the local system.

Collective action

Some organisations (such as local authority departments and local NHS organisations) may have mandated and financially commissioned responsibilities for certain actions. Facilitating stakeholders to connect actions across different partners and agencies will align and strengthen actions to maximise impact

Planning the first system network meeting

Presenting the shared vision

The proposed shared vision should be presented at the first system network meeting and reiterated at all subsequent meetings. Keeping an emphasis on the vision allows stakeholders to stay focused and move forward in the same direction and helps

everyone to see how their work fits in.

Agreeing the action plan

The first system network meeting is dedicated to agreeing the whole systems action plan drafted by the CWT during phase 4. The format of the meeting will depend on how the system network has been set-up. However, in general the CWT will need to:

- summarise the process so far, including the prioritised themes from workshop 2
- outline the process taken to develop the draft whole systems action plan which could include presenting the system map(s) overlaid with current and new actions and the short, medium and long-term approach
- present a general overview of the action plan, providing brief details about each column and any additional information relating to how these were completed, for example if similar actions have been grouped together, how the feasibility of actions was determined or how inequalities are being addressed
- allow stakeholders time to review and discuss the action plan which is best achieved within small groups, split into themes - ideally, each group should have 2 facilitators, one to guide stakeholders through the content of each of the columns of the action plan and the other to take notes; stakeholders should consider whether there are any obvious gaps in the plan and how these could be addressed
- agree actions for delivery in the short, medium and long-term and who will be responsible for them, so that all stakeholders are clear about their roles and responsibilities
- present how the action plan makes use of community assets

Determining which new stakeholders should be engaged

Groups should be given the opportunity to identify other stakeholders who should be involved in the system network. Consideration should be given to stakeholders or partner agencies who could deliver complementary actions to maximise impact. The following questions are useful to consider:

- what key stakeholders are missing from the system network (both inside and outside the local authority) and what gaps could they potentially fill?
- whose existing work in the system supports the proposed actions?
- are actions balanced across all levels of the action scales model and if not, could any new stakeholders support this?
- are there any relevant untapped local community assets that we could use?
- who is best placed to engage with new stakeholders, and how?

Community involvement

One way to involve communities is to recruit members of the local community to take on responsibility for supporting actions and sharing their skills and assets. Such members can help bring stories and truths from the local community into play, essential for a connected local approach (further information is available in resource A – community engagement and community asset mapping).

Local authority insights

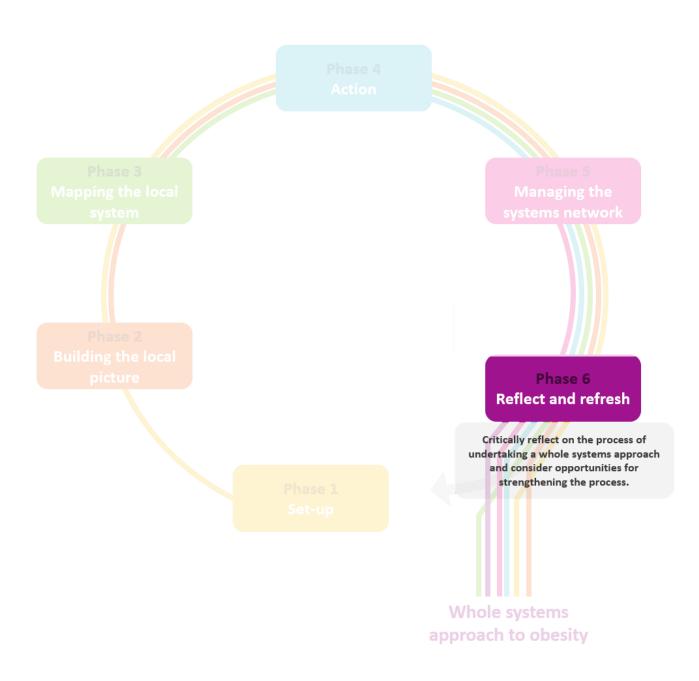
Community involvement has been adopted by some local authorities as a way of extending the reach of their programmes with limited budgets. For example, one local authority is training a volunteer to be a Sugar Smart Ambassador. She will work with early years settings to reduce sugar consumption in nurseries, playgroups and children's centres.

(London Borough of Lewisham)

Phase 6: Reflect and refresh

Figure 20 highlights phase 6 in the whole systems process and the associated key steps. Figure 21 identifies the behaviours that are demonstrated in this phase.

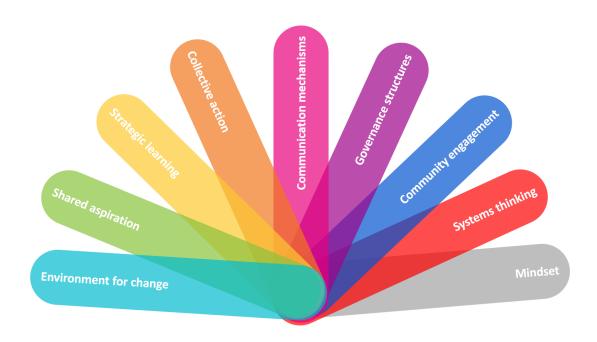
Figure 20: Phase 6: Reflect and refresh and key steps



Key steps

- 1. Monitor and evaluate actions
- 2. Maintain momentum through regular meetings
- 3. Reflect and identify areas for strengthening
- 4. Monitor progress of the whole systems approach and adapt the approach to reflect system changes over time

Figure 21: Key behaviours demonstrated in phase 6



The system network becomes operational during phase 6. The network will come together at agreed time points, to collectively reflect on how the local whole systems approach and its actions are progressing and to consider and agree appropriate changes.

Responsibilities of the system network

Stakeholders involved in the system network will have responsibility for:

- local delivery of individual obesity actions within their own organisation or local authority function
- collective ownership of actions and the approach with the system network

These responsibilities are depicted in figure 22 and are explained in more detail in the following sections and in figure 23.

System network

Reflect Refresh and learn

Reflect system stakeholder

Adapt

Local delivery of actions

Monitor / evaluate

Figure 22: Responsibilities of the system network

Local delivery of individual actions

Monitoring and evaluating the progress of individual actions is essential to understand how they are progressing and if the need to be adapted. It is also an important prerequisite to evaluate the collective range of obesity actions with the system network. The action mapping tool (**resource D**) can help stakeholders determine whether appropriate KPIs are being used. Information on how individual actions are progressing should be summarised by stakeholders and shared for discussion at the system network meetings.

Collective ownership of actions and the approach

Regular reflection on how the whole systems approach and its actions are progressing helps to maintain momentum and ensure the approach adapts and evolves to changes in the system.

The following section describes 4 key areas that the system network should collectively reflect on, and subsequently refresh actions and the approach as appropriate. This is

followed by a section on broader considerations for the system network, which cut across these 4 key areas.

Key areas: reflect and refresh

The system network should collectively reflect on the following areas at least every 12 months:

- 1. The local obesity system
- 2. Areas of leverage
- 3. Whole systems action plan
- 4. The system network

The local obesity system

The local system causing obesity is likely to change over time. This is due to changes within and outside the local system, through the influence of actions on each other and changes that occur in response to actions undertaken.

The existing system map reflects the views of the stakeholders involved in developing the map. As the system network develops, so will the local understanding of the causes of obesity. Over time, the network's understanding of how the system functions will also develop. Revisiting and updating the system map will enable stakeholders to understand what has changed, ensure the map continues to represent the local reality and help engage new stakeholders.

The following questions will help the system network reflect on changes to how the system functions and help update the system map:

- does our collated system map reflect the current local reality?
- are any drivers missing or has our understanding changed?
- has our understanding of any of the relationships in the collated system map changed?
- how can we ensure we have a comprehensive understanding of the local system as it evolves over time?

Once the system network has identified what changes need to be made to the collated system map, an abbreviated version of the process outlined in **resources K**, **N** and in phase 3 (mapping the local system) can be followed to update it.

Areas of leverage

The system map can help identify additional areas of leverage, new opportunities to align actions, and areas where new actions and/or stakeholders are required. The following questions will help the system network reflect on this:

- are we working as a collective, aligning and connecting, rather than working independently on singular actions?
- what have we learnt that will help support the implementation of future actions / the collective effort and shared vision?
- are there any different themes or areas that we should consider supporting in response to changes in the local obesity system, within the system network or elsewhere?

Whole systems action plan

It is important to understand how the actions are progressing and how collective action has contributed to changing the system in a way that supports the long-term vision.

When evaluating actions as part of a whole systems approach, traditional KPIs and specific outcomes (for example, obesity, physical activity or food consumption) should only form part of the picture. Local authorities should also consider how actions affect the functioning of the local system and how they align with each other to support collective effort. The logic model can be used to support these considerations (appendix 4). At present there are no specific tools available to evaluate actions collectively. Guidance is available on the benefits of using systems tools to evaluate individual actions and how to evaluate interventions in a complex system (11, 12).

The following questions will help stakeholders reflect on how the whole systems action plan is progressing:

- does the plan include a mixture of short, medium and long-term actions?
- have realistic goals been set that can be achieved in the short and medium term?
- how do actions work together, impact each other and contribute to changing how the system works?
- who has been additionally impacted by this action have there been any positive or negative unintended consequences?
- is there a balance of actions across the action scales model?
- how are you evaluating your actions? Are you doing this from a systems perspective in addition to looking at individual KPIs and outcomes?
- what changes are you making to your action plan because of this reflective process?

 do actions need to be developed/included that relate to new themes identified in the system map? Who will be responsible for delivering them?

After reflecting on progress with the actions, the CWT should work with the system network and senior leaders to adapt the whole systems action plan. It is important to allow time for actions to result in changes in the system and to consider how actions are working collectively towards the shared long-term aspiration. It is also vital that senior leaders are updated on a regular basis to ensure continuous engagement, galvanise stakeholders and maintain momentum.

The system network

The system network is essential for the ongoing delivery of the whole systems approach. The following questions will help provide an indication of how embedded the whole systems approach is and will identify opportunities for improved ways of working:

- is the system network meeting regularly?
- are the systems working behaviours being put into practice? How are they being assessed?
- how does the system network communicate with all stakeholders?
- how are the governance structures working?
- do the stakeholders in the system network have a shared vision?
- has the system network evolved? (revisiting resource F, network analysis, will help identify how the system network has adapted over time)
- how is feedback from the system network captured and used to improve the function of the system network?
- is the whole systems approach moving in the right direction (in relation to the vision)?
- is the approach helping to reduce local health inequalities (and not making health inequalities worse?
- are stakeholders in the system network working differently since starting the whole systems approach?
- have the systems goals and beliefs changed in relation to the action scales model?

To capture feedback from the system network, a survey could be used.

Resource Z – a template feedback survey to send to the stakeholders in the system network (43).

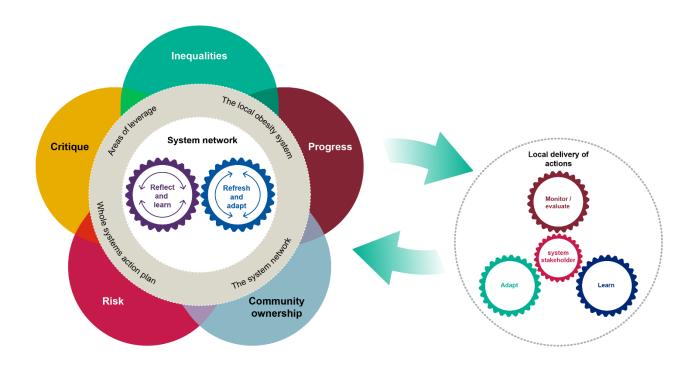
The information obtained can then be discussed in a system network meeting to improve ways of working.

Further considerations

The system network should also reflect on several further considerations which cut across the 4 key areas discussed above. These are also depicted in figure 23.

- progress What progress has been made with the approach and actions?
- risk What risks are associated with delivering this approach? How will these be mitigated?
- **inequalities** What is the likely health impact of actions on inequalities? Are inequalities impact assessments being undertaken and monitored?
- critique What could be done better? How could this be achieved?
- **community ownership** Is there community representation, engagement, trust and ownership across the approach? (further detail below)

Figure 23: Responsibilities of system network including key areas to reflect and refresh and further considerations

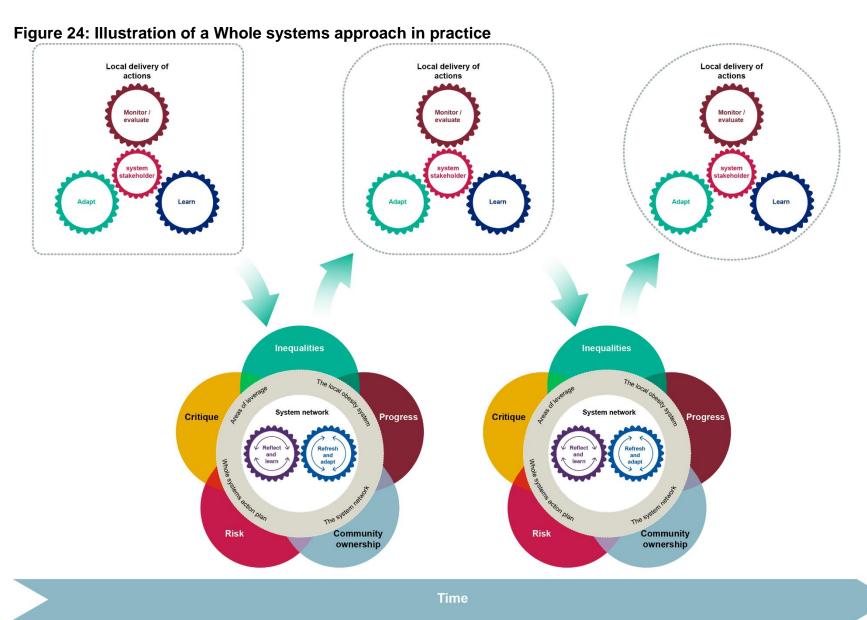


Community ownership

It is important to consider that a community's idea of what success looks like may be different from other stakeholders. Involving community representatives in monitoring,

evaluating and adapting plans from the outset can contribute to a broader understanding among stakeholders of a 'successful' systems approach. One option would be to ensure that, where possible, outcomes and methods of measurement are developed with input from community representatives. Enabling community members to understand the effect of the work they are involved in and how it benefits their community is key to building and maintaining trust – it will also help the CWT ask the right evaluation questions. If progress can be demonstrated against factors that are important to the community, this should help motivate and encourage further participation.

Figure 24 depicts the relationship between local delivery of actions by individual stakeholders and the development of the whole systems approach by the system network. It is intended to demonstrate how these 2 aspects interact, and how the local delivery of actions develops and changes through the interaction with the system network.



Summary

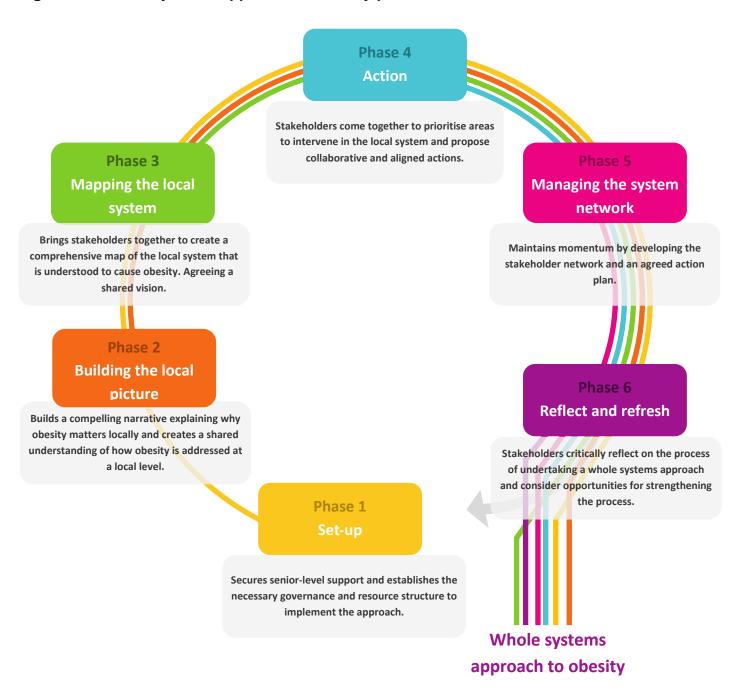
A whole systems approach to obesity is a long-term and sustainable way of working that will continue to develop and evolve over time (see figure 25 for an overview of the process). This guide aims to help you start your whole systems journey – it can also support those who are already making progress.

A whole systems approach is not a linear process, and you may want to revisit phases within this guide, to understand changes to the local picture (phase 2), remap the local system driving obesity (phase 3), and to ensure that actions are undertaken in an aligned, efficient, coordinated and dynamic manner (phases 4-6). Making the most of your system network to reflect upon and share learning will inform which aspects of your approach and action plan to refresh and adapt.

The approach outlined in this guide will take time to implement, and the expected time frames to achieve outcomes from collective actions and different ways of working must be realistic and considered throughout the cycle of reflection. It is vital to harness a collective effort over the long term to create a whole systems approach.

It is clear that no one organisation has all the answers or has all the responsibility for tackling obesity and promoting a healthy weight. It is 'everybody's business'. A whole systems approach enables local leadership, across stakeholders and communities, and helps deliver local ownership to make a difference to how obesity and its causes are tackled.

Figure 25: Whole systems approach to obesity process



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Appendices

Appendix 1: Acknowledgments

The guide and resources were developed in partnership with Leeds Beckett University, the Association of Directors of Public Health, the Local Government Association, working collaboratively with local authorities across England. Our thanks go to all individuals and organisations who freely gave their time and expertise to support the development of this guide. Special thanks go to the programme's advisory group, pilot local authorities (Durham, Gloucestershire, Lewisham and North Kesteven), test local authorities (Bradford, Dudley, Halton, Hertfordshire, Oldham, Solihull and Suffolk), the 40 other local authorities who reviewed the guide and resources and external experts who peer reviewed the guide and resources.

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Appendix 2: Glossary

Action mapping tool	A tool to collate actions to address obesity from across the system, based on the wider determinants of health model.
Action scales model	A simple tool representing a complex system, outlining 4 system levels (events, system structures, system goals and system beliefs), as a means of conceptualising where to intervene in a system.
Alignment	Bringing together efforts to make sure they work collectively/supportively alongside each other.
Community centred approaches	"community-centred approaches seek to mobilise the assets within communities, promote equity and increase people's control over their health and lives" (30)(p.3).
Community assets	Any positive aspect of the community that can be drawn on to support health and wellbeing, including skills, knowledge, social networks, resources and facilities, and physical, environmental and economic resources.
Complicated systems	Simple systems made up of many parts which interact in a predictable way.
Complex system	A system made up of many parts which interact in a disordered and unpredictable way.
Core working team	A small number of individuals that will coordinate the whole systems approach, undertaking the day-to-day work and providing administrative support.
Dynamic approach	An approach that changes over time in response to an improved understanding of, and changes occurring within, the system.
Feedback loops	A concept of causation where the outcome of an event or action 'feedbacks' on itself through a circular chain of cause and effect (such as, A causes B, B causes C, C causes A).

Linear cause and effect	A concept of causation where the causation is unidirectional (such as, A causes B, B causes C, but C doesn't influence A). A B C
Leverage	The magnitude of effort (change) required relative to the magnitude of change in the behaviour of the system. Low leverage points involve a small amount of effort and produce a small change in system behaviour. High leverage points involve a small amount of effort and produce a large change in system behaviour (41).
Logic model	A graphic which represents the theory of how an intervention produces its outcomes. It represents, in a simplified way, a hypothesis or 'theory of change' about how an intervention works (44). The whole systems approach to obesity logic model outlines the key inputs, outputs and short, medium and long-term outcomes that local areas could expect to see if implementing a whole systems approach (appendix 3).
Network analysis tool	A tool to determine the departments, organisations and individuals involved in tackling obesity across the region.
Shared vision	A clear and aspirational statement of what the whole systems approach is trying to achieve.
Simple system	Simple systems have a knowable cause and effect between their parts and the result. They are predictable.
System	A system is a collection of interdependent and interconnected parts. If something happens to one part of the system, other parts of the system will be affected.
System mapping (for obesity)	A process to identify and visually represent how the local causes of obesity are linked.
System network	A broad set of stakeholders from your local place, from both within and outside of the local authority, responsible for the sustained implementation, adaptation and refinement of the whole systems approach and action plans.
Systems thinking	A way of looking at, learning about, and understanding complex situations (45).

Systems working behaviours	Behaviours underpinning whole systems working at a local level.
Unintended consequences	Unplanned outcomes that occur when changing the system. They can have positive and negative impacts.
Wider determinants of health	The conditions in which we are born, grow, live, work and age that influence health (46).
Wider determinants of health model	A socio-ecological model which illustrates 5 factors that influence health: biological factors, individual lifestyle factors, social and community factors, living and working conditions and wider conditions (33).
Whole systems approach	A local whole systems approach responds to complexity through an ongoing, dynamic and flexible way of working. It enables local stakeholders, including communities, to come together, share an understanding of the reality of the challenge, consider how the local system is operating and where there are the greatest opportunities for change. Stakeholders agree actions and decide as a network how to work together in an integrated way to bring about sustainable, long term systems change.

Appendix 3: General references and further reading

In addition to the references included in the guide, below are references to literature that informed the development of the whole systems approach more broadly, and further reading on systems theory, techniques and local and international practice.

Defining a whole systems approach and the behaviours associated with the practical application of systems science and systems thinking.

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Group model building and systems mapping

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Siokoua C, Morgana R, Shiella A. Group model building: a participatory approach to understanding and acting on systems. Public Health Research & Practice. 2014;25(1):e2511404.

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Systems theory and techniques

Collective impact forum. Collective impact forum. 2014. [Available from: www.collectiveimpactforum.org/].

FSG. Systems thinking toolkit: Putting systems thinking into practice in your organization. [Available from: www.fsg.org/tools-and-resources/systems-thinking-toolkit-0].

Kleiner A, Smith B, Roberts C, Senge PM, Ross R. The fifth discipline fieldbook: Strategies for building a learning organization. Great Britain: Nicholas Brealey Publishing; 1994.

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PHE resources to support phase 2: building the local picture

Public Health England. Promoting healthy weight in children, young people and families: A resource to support local authorities. 2018.[Available from: www.gov.uk/government/publications/promoting-healthy-weight-in-children-young-people-and-families].

Summary: A series of briefings to support local stakeholders, including local authority leaders, departments and services along with Clinical Commissioning Groups and other NHS partners to promote healthy weight in children, young people and families as part of a whole systems approach. The briefings make the case for taking action to reduce childhood obesity, gives examples of actions that can be taken, provides key documents that form the evidence base along with other resources that inform associated topic areas for that particular briefing note.

Public Health England. Health matters: obesity and the food environment. 2017. [Available from: https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment-2].

Summary: Provides information on the scale of the obesity problem, factors behind the rise in obesity levels, improving everyone's access to healthier food choices, how local authorities can help businesses offer healthier food and drink, national policies to tackle obesity, a call to action and providing additional resources.

Public Health England. PHE data and analysis tools.2019. [Available from: www.gov.uk/guidance/phe-data-and-analysisftools#obesity-diet-and-physical-activity].

Summary: Provides data, analysis tools and presentations, including: local authority child obesity data tool, obesity data and tools, obesity knowledge and intelligence, obesity tool for local authorities, standard evaluation frameworks, childhood obesity patterns and trends: presentation, adult obesity patterns and trends: presentation, child diet patterns and trends: presentation.

Public Health England. Child and Maternal Health. 2019. [Available from: https://fingertips.phe.org.uk/profile/child-health-profiles].

Summary: Provides data on obesity among children and young people. You can also view the NCMP Local Authority Profile, an on-line data tool containing all available data from the National Child Measurement Programme (NCMP) from 2006/07 to the most recent year.

Public Health England. Support for Local Authority Public Health Teams. 2019.[Available from: https://phelibrary.koha-ptfs.co.uk/laph/#access].

Summary: The Discovery Service is a single search across multiple information resources and provides seamless access to the full text research articles available. The Discovery Service will enable local authority public health teams to search and access the 1300 titles currently provided by Public Health England, along with the nationally procured core content journals and databases.

Examples of system mapping software

Insight Maker. Insight Maker. 2010-17.[Available from: https://insightmaker.com/].

Kumu. (2019). "Make sense of your messy world. 2019.[Available from: https://kumu.io/].

Microsoft. Visio. Work visually. Diagramming made simple. 2019. [Available from:https://products.office.com/en-gb/visio/flowchart-software].

Venatasystems. Vensim. 2015. [Available from: www.citethisforme.com/guides/vancouver/how-to-cite-a-website]. (free download available)

Generic software options include: Microsoft PowerPoint (limited functionality for system mapping).

Example system approaches to obesity

The following programmes include elements of systems working and best practice.

Amsterdam Healthy Weight Programme

Municipality of Amsterdam. Amsterdam Healthy Weight Programme. 2019. [Available from: www.amsterdam.nl/sociaaldomein/blijven-wij-gezond/amsterdam-healthy/].

EPODE

The programme aims to encourage greater cross-sectoral working, especially between public, private, political and scientific communities. It is being delivered in 20 countries through the European International Network. This work informed the development of the Amsterdam project.

Elements of best practice: Political commitment, public-private partnerships, social marketing, monitoring and evaluation, blending prevention and care.

Epode international network. Context. 2014. [Available from: https://epodeinternationalnetwork.com/about/context].

Healthy Together Victoria

The programme set out a clear complex systems approach. The aim of this work was to strengthen the obesity prevention agenda, through a long-term commitment and by targeting multiple levels and locations at once: employers, schools, sports clubs, food outlets.

Elements of best practice: Leadership and governance, dynamic workforce, relationships that can drive change, knowledge co-creation to action, funding mechanisms.

Victoria State Government. What is Healthy Together Victoria. 2015. [Available form: www2.health.vic.gov.au/about/publications/policiesandguidelines/What-is-Healthy-Together-Victoria].

Strugnell, C., et al. (2016). "Healthy together Victoria and childhood obesity - a methodology for measuring changes in childhood obesity in response to a community-based, whole of system cluster randomized control trial." <u>Arch Public Health</u> **74**: 16.

Healthy Together Victoria. Complex Systems Thinking. 2013. [Available from: https://www.youtube.com/watch?v=pZU8MYGqm2s].

Oklahoma City

A Mayor led approach to re-design the city to create a healthier environment which used revenue generated through a sales tax to modify the built environment of the city. This approach, which focused on individual responsibility, was supported by a strong social marketing and media campaign.

Elements of best practice: Political leadership and commitment, media support, clear goals.

TED. How an obese town lost a million pounds | Mick Cornett. 2014. [Available from: www.youtube.com/watch?v=raClUeGUr3s].

Appendix 4: Logic model

Inputs

Outputs Activities and Participants

Short term outcomes (1 to 5 yrs.)

Medium term outcomes (5 to 10 yrs.)

Long term outcomes (10yrs.+)

- Active senior leadership support, skills and commitment
- -Data and intelligence Partnership and collaboration
- -Dedicated time and commitment from the team implementing the approach and the wider system network
- -Dedicated time and resource to support development of workforce capacity
- -Accountability and governance structures
- -Communities

Assumptions

- -Central Government action will enable/ amplify local action on tackling obesity.
- -Systems change will impact on obesity related outcomes
- -Local delivery and implementation will vary to ensure suitability and relevance to local circumstances
 Activities are cyclical not linear- and feedback loops will be key

Provide leadership to engage stakeholders, including communities to support a whole systems approach to tackling obesity (Phase 1)

Collate and use data and intelligence to develop a narrative that makes the case for change and demonstrate how health inequalities will be addressed (Phase 2)

Develop a vision and local targets (Phase 3)

Develop collective stakeholder ownership of the issue through development of system map that depicts obesity causes in the local area (Phase 3)

Development and implementation of a localised obesity action plan that identifies, prioritises and aligns systemwide actions (including policies and programmes) across stakeholders (Phase 4 to 6)

Feedback loops between activities and outcomes

Community engagement in the approach

Actions to address wider determinants of health

Systems thinking practice being integrated across the local authority and wider partners

Collaborative working across departments and with other organisations

Prioritised and aligned set of actions being delivered to tackle obesity across the local system, that address health inequalities

Learning being captured and shared

Improvement in intermediate markers of health and inequalities (healthier eating and physical activity)

Systems behaviours embodied by the local authority and local stakeholders (Introduction)

Collaborative working across departments and with other organisations

Transferable workforce skills related to systems working - can be used for other public health issues

Community and other assets being used effectively

'Health in All Policies' approach being implemented across the local authority

Learning being captured and shared

Reduction in child and adult obesity in the local areas

Reduction in health inequalities

Improvement in workforce productivity

Reduce demand on healthcare, recognise cost savings

Reduce obesity related costs to social care

Improvement in wellbeing

Improvement in health

Learning being captured and shared

Systems change

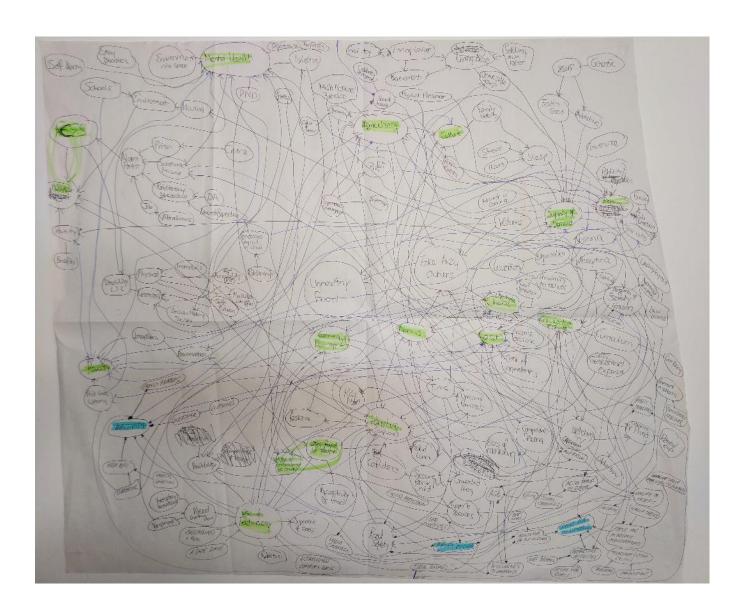
Health outcomes

96

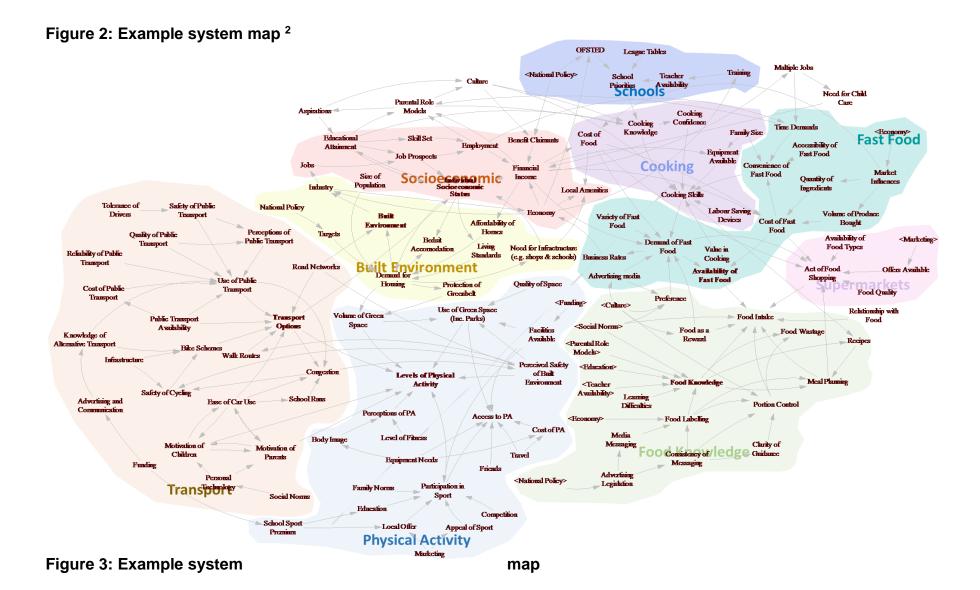
Appendix 5: System maps

This appendix includes a selection of example system maps which were developed by the local authorities who helped to co-produce and test the guide and resources. These are sample system maps and should be used as a guide only. Each local area is different (for example, assets, needs, barriers, opportunities) and so systems mapping should be undertaken as a critical step in developing a shared understanding and ownership of the local system.

Figure 1: Example system Map 1¹



¹ Please zoom in electronically to review the detail of this system map as it is not clear when printed.



² Please zoom in electronically to review the detail of this system map as it is not clear when printed.

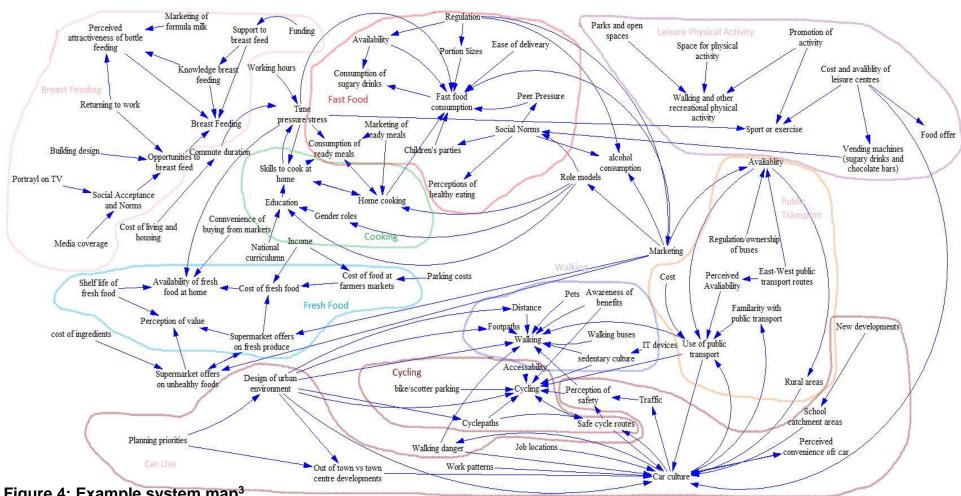


Figure 4: Example system map³

³ Please zoom in electronically to review the detail of this system map as it is not clear when printed.

Whole systems approach to obesity: A guide to support local approaches to promoting a healthy weight



Figure 5: Example system maps

