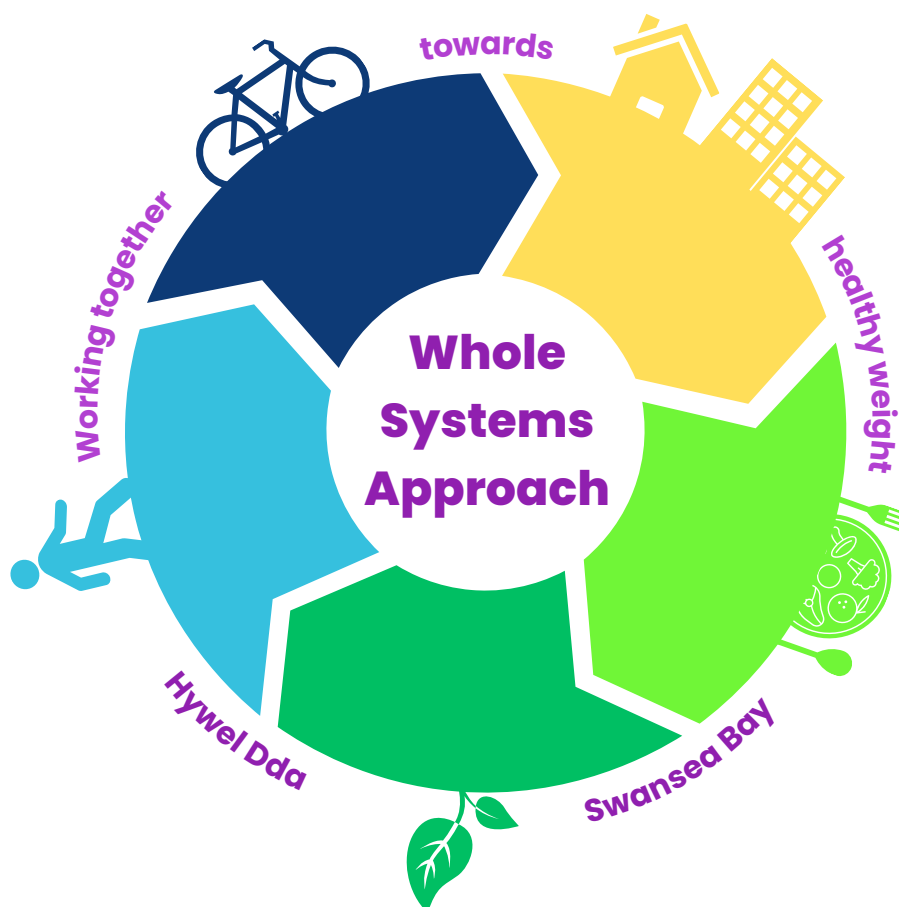


# Mapping the healthy weight system across Swansea Bay

## Summary Report

July 2023



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# Foreword

## Working Together Towards Healthy Weight

I am delighted that Swansea Bay and Hywel Dda University Health Boards are working together to address this key public health priority through taking a 'Whole Systems Approach' (WSA) to Healthy Weight. Too many people in the Swansea Bay University Health Board area face poor physical and emotional health as a result of excess weight.

The last decade has been characterised by a period of austerity and declining wages and more recently by high food inflation and increases in the cost of living. The measures put in place during the COVID-19 pandemic also impacted people's health behaviours – including diet and physical activity. When combined, these factors have the potential to further increase overweight and obesity, particularly among those facing financial hardship and at greater risk of food insecurity – a risk factor for unhealthy weight. These differences in obesity rates translate to worse health outcomes for poorer groups in our communities and contribute to widening and unacceptable health inequalities. To prevent the situation from worsening we have a collective responsibility to act now to support children and families and to create local environments that promote a healthy weight.

The complex drivers of excess weight mean that organisations cannot bring about change by acting alone. A growing body of evidence points towards the need to take a 'whole systems approach' (WSA) with a focus on collaborative action across organisations and communities. This approach gives us the best chance of achieving our common goal of better, healthier lives for all in Swansea Bay, as set out in the recently published *A better future for all, Swansea Bay's Population Health Strategy (2023)*.

This summary report provides an update on the work undertaken by the recently appointed regional lead, together with the Public Health Team to begin to develop a whole systems approach to healthy weight across Swansea Bay and regionally. I am grateful to them for their hard work and to everyone who has actively engaged in the process so far.

Taking this approach will require long-term commitment, collaboration and joint responsibility across partner organisations and our communities. I hope that it will enable us to bring about long-lasting change towards an environment that supports healthy weight, with the benefits that offers, not only for individuals and communities but also for the climate and sustainability.

**Dr Keith Reid MBE**

Executive Director of Public Health

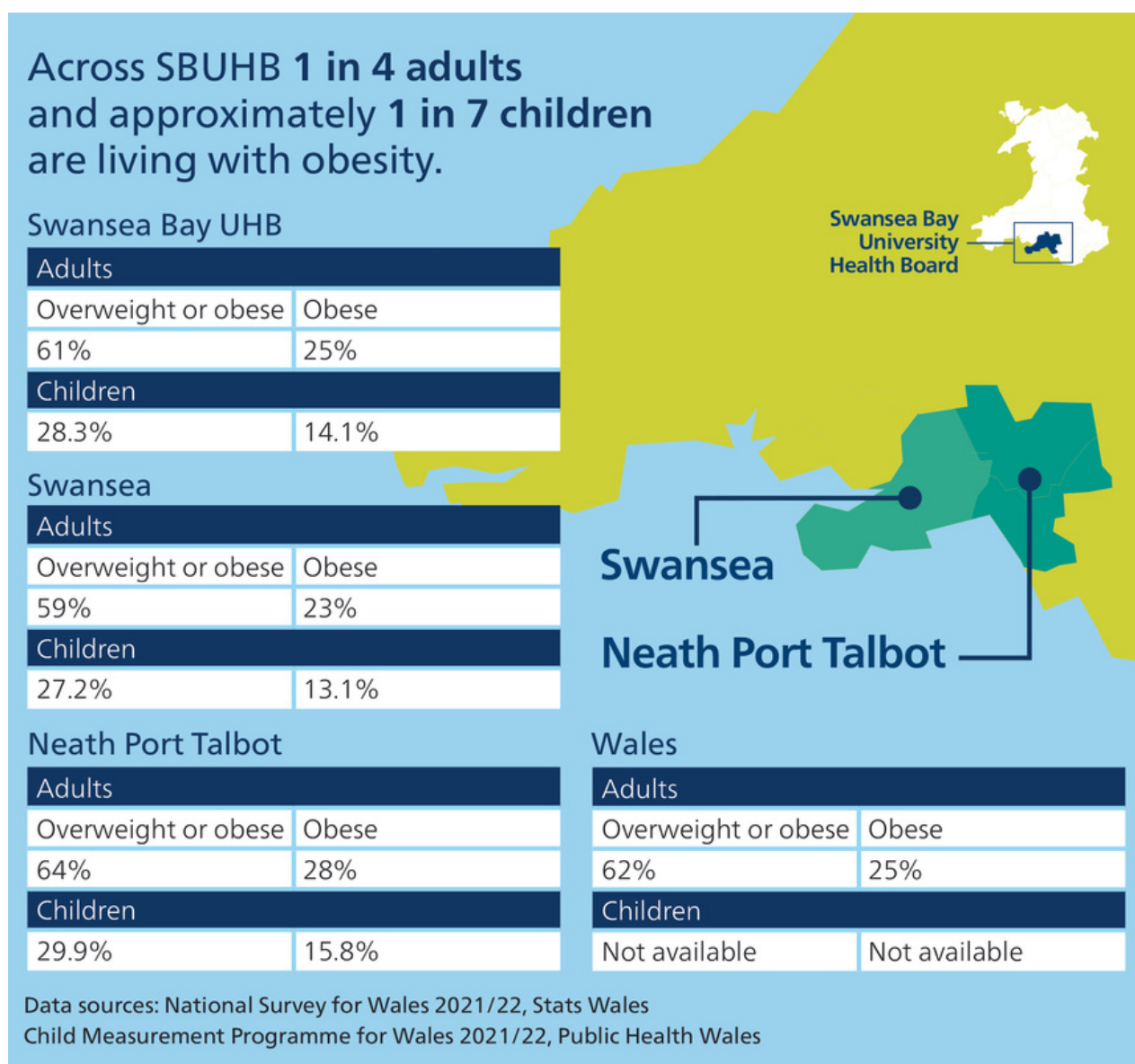
Swansea Bay University Health Board

# Background

## The challenge

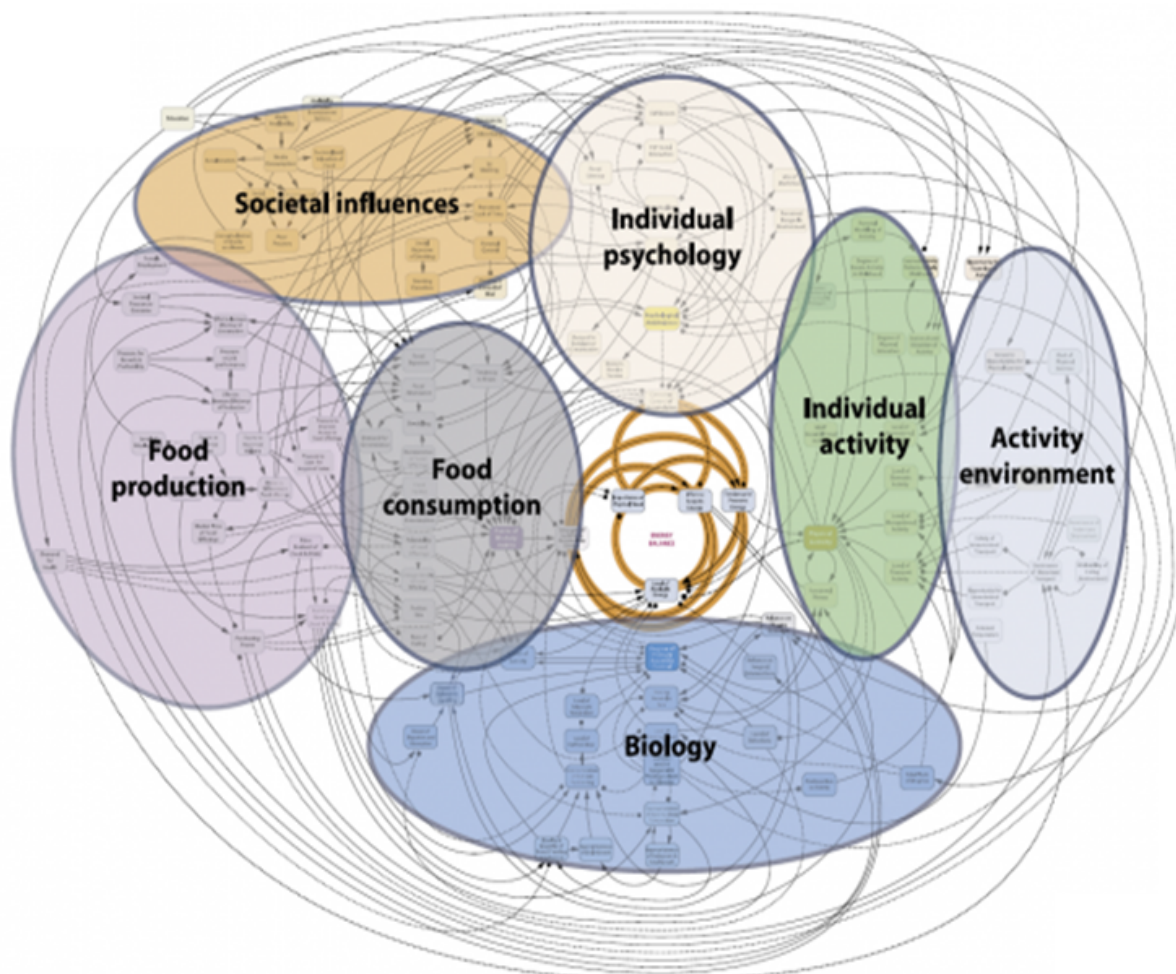
Looking after ourselves and the next generation is vital to our ability to flourish and live fulfilled and happy lives. Yet, too many people across Swansea Bay face serious risks to their health and wellbeing associated with excess weight, with one in four adults and one in seven children (aged 4-5 years), experiencing obesity<sup>1,2</sup>.

Excess weight increases people's risks of long-term health conditions such as diabetes, heart disease and some cancers; it impacts psychological and emotional wellbeing and is associated with and contributes to a shortened lifespan. It disproportionately affects the lives of poorer groups in our communities, contributing to persistent and unacceptable health inequalities.



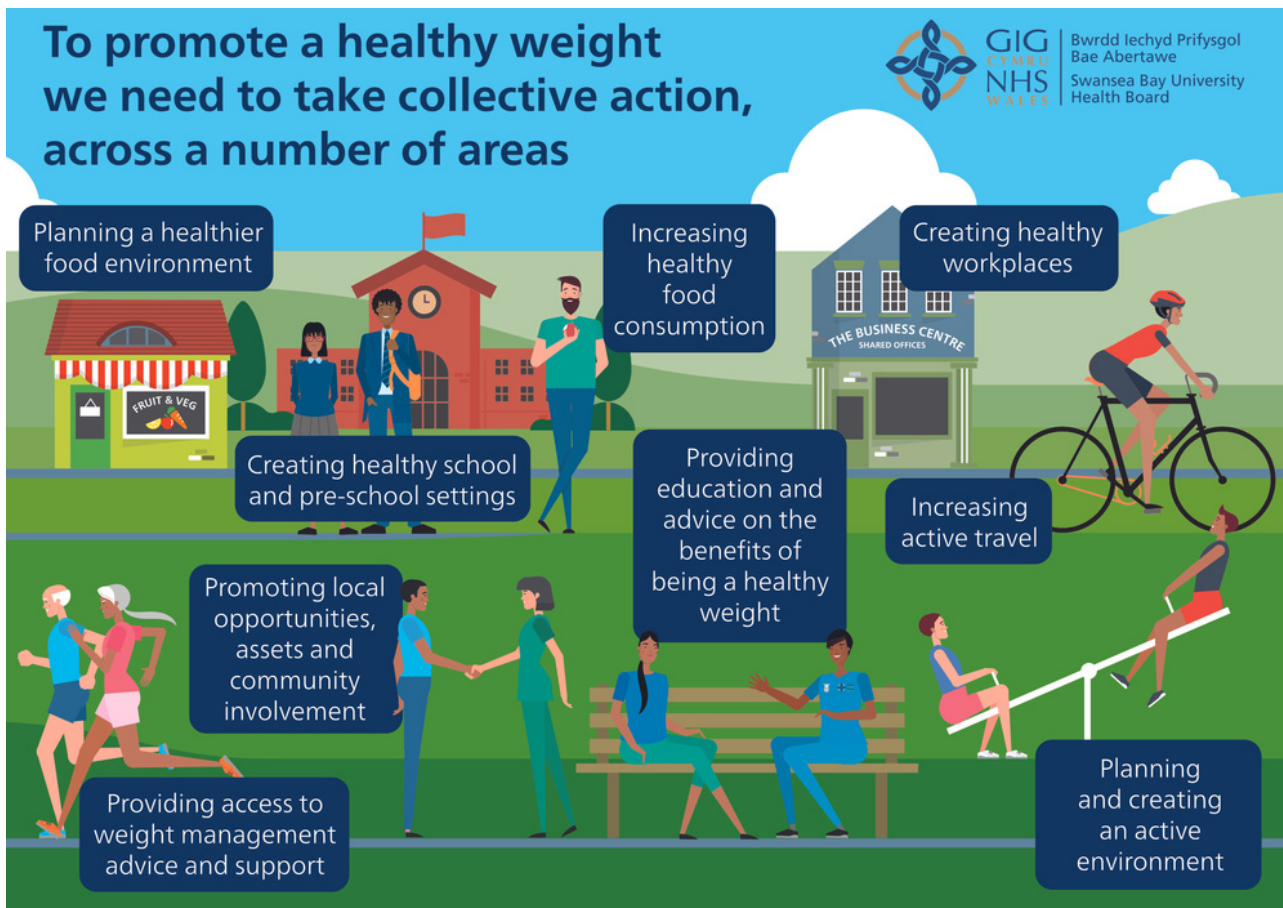
The COVID-19 pandemic has highlighted and at least temporarily exacerbated these existing health inequalities, which when combined with declining wages and recent high food inflation, could push many more people into food insecurity. This is a risk factor for unhealthy weight and has the potential to further increase obesity among those facing financial hardship, again widening health inequalities. Beyond individuals, it impacts wider society through reduced productivity and increased health and care costs with the cost of adult obesity to UK society estimated at £58 billion annually<sup>3</sup>. These factors make addressing the issue of excess weight an urgent priority.

The causes of excess weight are complex and best illustrated through the Foresight obesity system map<sup>4</sup> below. It shows the drivers of excess weight including individual biology and psychology, societal and environmental factors. It is important to note that whilst these drivers exist for all, the way in which they affect people's ability to maintain a healthy weight is different for different groups across society. This is because almost every aspect of life - jobs and homes, access to education and transport and whether people experience poverty or discrimination - often referred to as the wider determinants of health, shape the way in which people are born, grow, live, work and age and thus impact opportunities to eat healthily, to be active and to maintain their overall health and wellbeing.



*Foresight Map – 'Tackling Obesity..Future Choices' Obesity Systems map 2007*

In order to influence change, we firstly need to understand the parts of the system, but also to view it as a 'whole' to better predict how decisions and any changes may impact across the whole of the system. We can then work together to improve, align and adapt it in a way that brings about positive and sustainable change. There is a growing body of evidence that this could be achieved through taking a 'Whole Systems Approach' (WSA) and seeking solutions that take account of the wider determinants of health as illustrated below.



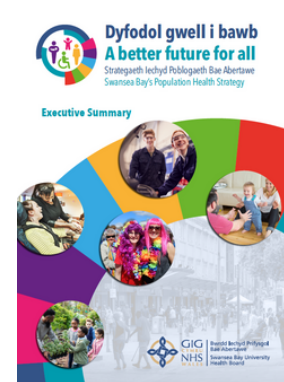
## Taking a 'Whole systems approach' (WSA) across Wales

In 2019, Welsh Government launched the Healthy Weight Healthy Wales strategy<sup>5</sup> with the aim of preventing and reducing obesity in Wales. As illustrated below it embeds the seven goals and five ways of working of the Well-being of Future Generations (Wales) Act, 2015 and has a core focus on 'Leadership and Enabling Change' which is supporting us to take this collaborative whole systems approach to healthy weight across Wales. The approach is co-ordinated nationally by Public Health Wales and implemented locally through small WSA implementation teams based in public health teams at health board level.



Hywel Dda and Swansea Bay University Health Boards are taking a regional approach to implementation. The WSA team will support both Directors of Public Health and through them Local Authorities, Public Services Boards (PSBs) and communities in taking a Whole Systems Approach to healthy weight. The aim of this work is to enable local stakeholders to come together to agree actions and work together in an integrated way to bring about sustainable, long-term system change, focussed on creating the conditions which promote healthy weight in the context of improved health and wellbeing.

This work makes a significant contribution to our common goal of better, healthier lives for all in Swansea Bay, as set out in the recently published *A better future for all, Swansea Bay's Population Health Strategy (2023)*<sup>6</sup> and the *Well Being Plans 2023-2028*<sup>7, 8</sup> of the Swansea and Neath Port Talbot Public Services Boards (PSBs).



To begin the WSA in Swansea Bay the Public Health Team hosted a series of strategic workshops in January 2023, working with partners to map out the local healthy weight system. The main focus of the work, based on a nationally agreed definition is highlighted below. The WSA teams are implementing the approach using a nine step process which has been adapted for use across Wales by Public Health Wales and is based on the learning from the Whole Systems Approach to Obesity Programme in England.

"Respond to complexity through an ongoing, dynamic and flexible way of working. To bring together communities, partner organisations and stakeholders to 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."



# Workshops Summary

The Public Health Team, supported by Leeds Beckett University, facilitated two 'whole system' mapping workshops, one for Swansea and another for the Neath Port Talbot local authority area. The aim was to develop a series of qualitative healthy weight system maps, powerful tools that can help people visualise a system, its drivers and interconnections. From here it is possible to create a shared understanding of the issue and identify opportunities for collective action to bring about change<sup>9</sup>.

## The aims of the workshops were to:

- Better understand the drivers of unhealthy weight and the healthy weight system across Swansea and Neath Port Talbot
- Work together to build qualitative system maps – a visual representation of the participants perceptions of the root causes and local drivers of obesity
- Undertake a baseline Social Network Analysis
- Begin to identify opportunities for change.

A total of 25 organisations, detailed in Appendix 1, were invited to attend the workshops. Over the course of the two workshops 23 participants representing Health; Local Authorities; Universities; the Third Sector and Natural Resources Wales attended.

Based on Public Health England's 'Whole systems approach to obesity: a guide to support local approaches to promoting a healthy weight'<sup>10</sup>, the workshops included:

### Welcome and Introductions

**Presentation:** Healthy Weight Healthy Wales

A presentation sharing information on: obesity and its consequences, including local prevalence data; the wider impacts of obesity; and the nine step approach to whole system working for healthy weight in Wales.

**Presentation:** An introduction to systems approaches

A presentation to introduce participants to systems and systems thinking principles.

**Group Activity:** Qualitative system map development

Participants worked through a process to identify and map out the local causes of obesity and how they are linked.

Participants also completed an electronic Social Network Analysis (SNA) survey developed by Dr Alex Bond (Leeds Beckett University) – an established technique that identifies and analyses the inter-connections and influences between different people or organisations within a system<sup>11</sup>. This was intended to provide a baseline of the current network. Results of the SNA will be shared with partners over the coming weeks and months as part of the next steps.

# System Maps

Participants developed 6 system maps on paper which were then transferred on to system mapping software by Leeds Beckett University. During the subsequent verification and refinement stage involving the Public Health Team, it was clear that there were considerable similarities in the drivers of unhealthy weight identified in both counties – these were focused on two overarching areas: **physical activity** and **food**. Therefore, it was agreed to collate the workshop outputs into one physical activity focused system map (Figure 1.) and one food focused system map (Figure 2.), containing all the factors identified by participants as drivers of healthy weight, colour coded and grouped as distinct areas on the maps.

## In relation to physical activity, participants identified the following drivers:

- motivation to be physically active
- quality movement in children
- active travel
- outdoor/green space
- early years opportunities
- social norms



## In relation to food, participants identified the following drivers:



### 1. Healthy nutrition/eating habits

- knowledge about healthy food and food preparation
- school food
- food preparation/cooking skills
- food production
- availability / affordability of healthy food

### 2. Unhealthy/processed food consumption

- advertising/marketing of unhealthy food
- availability/accessibility of unhealthy food

## Limitations

It should be noted that the content, accuracy and insights obtainable from any qualitative system map depends on the stakeholders involved in the map generation process. Key gaps in stakeholder representation or knowledge may lead to the omission of important interrelationships and/or causes of obesity.

In this first phase, attempts were made to ensure that participants were drawn from across organisations represented in strategic partnerships, such as the Public Services Boards and the Regional Partnership Boards, as well as individual organisations and those working on a regional footprint for example, Natural Resources Wales and the South West Wales Corporate Joint Committee. The health sector made up the majority of the stakeholders involved and there is an acknowledgement that some sectors were under-represented. However, it should be recognised that the qualitative systems mapping process for the Health Weight Healthy Wales WSA was always intended to be iterative. Likewise, the Social Network Analysis was intended to provide a baseline. In future months and over the next steps of the process a wider breadth of stakeholders, together with communities will be actively engaged. At all stages the maps can be refined based on new knowledge and insights.

# Next steps

This first stage has introduced the whole systems approach in Swansea Bay, it has brought people from different organisations together through the workshops, to map out the drivers of excess weight across the current system.

In the coming months, the next steps will be to:



1. Share the maps and outputs of the work to date widely, with partners and communities.

2. Complete recruitment to the regional WSA Implementation team, providing capacity to help drive this approach forward across Swansea Bay and Hywel Dda University Health Board areas.

3. To bring as many people as possible together in a second workshop to review the system maps in detail and to identify a 'short-list' of **local sub-system areas** that we may want to focus on.



4. From here it may be possible to agree one or two priority sub-systems that will become the focus for collaborative work over the next two years and beyond.

## Appendix 1 – Invited organisations

<b>Regional</b>	
Arch	South West Wales Corporate Joint Committee
Bevan Foundation	Sustrans
Designed to Smile	Swansea Bay City Deal
Down to Earth	Swansea University
Early years Integration programme	Transport for Wales
Eco schools	Welsh Network of Healthy Schools Schemes – Swansea Bay team
Mid and West Wales Fire & Rescue Service	West Glamorgan Regional Partnership Board
Natural Resources Wales	University of Wales Trinity St David
Public Health Wales	Value Based Healthcare sustainability lead
4th Region	
<b>Swansea Bay University Health Board</b>	
Arts and health	Health Visiting
Board members and Executives	Midwifery
Capital planning	Nutrition & Dietetics
Community Health Council	Procurement
Healthy Travel Charter	

<b>Swansea</b>	
Bwyd Abertawe	Public protection
Early Years and Childcare	Regeneration Swansea
Education	Sports Development
Gower college	Swansea Council for Voluntary Services
Housing	Swansea Poverty Truth Commission
Leisure	Swansea Public Services Board
Planning and licensing	Transport
<b>Neath Port Talbot</b>	
Early years and childcare	NPT Council for Voluntary Service
Education leisure and lifelong learning	NPTC Group colleges
Housing	NPT Local Economic Partnership Forum
Planning and licensing	NPT Public Services Board
Poverty	Sports development
Public protection	

## Appendix 2 – Glossary

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 thinking	A way of looking at, learning about and understanding complex situations
Whole Systems Approach	A response to complexity through an ongoing, dynamic and flexible way of working. To bring together communities, partner organisations and stakeholders to 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.
System mapping (for obesity)	A process to identify and visually represent how the local causes of obesity are linked.
Sub-system	A system that forms part of a larger system

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**With thanks to:**

Everyone who has supported and engaged in this work so far, we look forward to your continued input and hope that you may encourage others to participate.

Colleagues in the the Swansea Bay Public Health Team who facilitated discussions and mapping activities at the workshops.

Dr Duncan Radley and Dr Alex Bond for their experience and support throughout.

If you would like further information on any aspect of this report, including a copy of the full project report ***Systems mapping and social network analysis of healthy weight systems across Swansea Bay University Health Board area*** prepared by Dr Duncan Radley and Dr Alex Bond, Leeds Beckett University, please contact:

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