Whole Systems Approach to Obesity
Co-creating a world class solution to a world wide challenge
Why is obesity an issue?

It’s widespread

Two thirds of adults, a quarter of 2–10 year olds and one third of 11–15 year olds are overweight or obese

Prevalence remains high

Overweight and obesity in adults is predicted to reach 70% by 2034

More adults and children are now severely obese

Consequences are costly

A high BMI...
- is costly to health and social care
- has wider economic and societal impacts
Obesity harms children and young people

- Emotional and behavioural
  - Stigmatisation
  - Bullying
  - Low self-esteem

- School absence

- High cholesterol
- High blood pressure
- Pre-diabetes
- Bone & joint problems
- Breathing difficulties

- Increased risk of becoming overweight adults
- Risk of ill-health and premature mortality in adult life
Obesity harms health

- Heart disease
- Stroke
- Depression and anxiety
- Sleep apnoea
- Cancer
- Liver disease
- Asthma
- Type 2 diabetes
- Reproductive complications
- Osteoarthritis
- Back pain
Obesity harms communities

Increased sickness absence
Increased demands on social care services

Less physically active population
Reduced productivity

Severely obese people are over 3 times more likely to need social care than those who are a healthy weight.
Obesity does not affect all groups equally

Obesity is more common among:

- People from more deprived areas
- Older age groups
- Some black and minority ethnic groups
- People with disabilities
Obesity harms adults

- Less likely to be in employment
- Discrimination and stigmatisation
- Increased risk of hospitalisation
- Obesity reduces life expectancy by an average of 3 years
  - Severe obesity reduces it by 8-10 years
The annual cost of obesity

Cost to wider economy
£27bn

Obesity medication
£13.3m

Obesity attributed days sickness
16m

Cost to NHS
£6.1bn

Social care
£352m
Examples of costs

“We discovered that heavy duty stair lifts which cater for clients up to 25 stone (160kg) can add up to 50% to the purchase and installation cost”
Large local authority - Midlands

“We spent £400K in 2013-2014 providing bariatric equipment in the community”
Medium sized local authority - South East

“We discovered clients who were unable to climb stairs, had slept on sofas and were unable wash properly leading to further costly medical complications”
Large local authority - Midlands

“We spent £600k per annum providing weight management services for children and adults”
Medium sized local authority - South East
A complex issue
Life course approach

- Pre-conceptual & maternal
  - Emotional and behavioural
    - Stigmatisation
    - Bullying
    - Low self-esteem

Early years

School aged children

Working age adults

Older adults

Obesity attributed days sickness: 16m

Cost to NHS: £5.1bn

Increased risk of becoming overweight adults

Less likely to be in employment
Action on obesity can lead to:

- Reduced health inequalities
- Greater social cohesion
- Stronger local economy
- Reduced demand on health and social care services
- Better quality of life
- Less discrimination and bullying
- Fewer people with long-term conditions
- Improved local environment
There can be added benefits

More walking and cycling

Less car travel, pollution & congestion

Safer and more welcoming streets

Increased social interaction

Supports local business
Considerations: Factors and impact of obesity

Complexity of obesities

- Societal impact
- Health
- Quality of life
- Cost to NHS & economy

Factors and impact of obesity:

- Societal impact
- Health
- Quality of life
- Cost to NHS & economy

Individual's energy cycle

Factors:

- Societal influences
- Individual psychology
- Food production
- Food consumption
- Biology
- Activity environment

Impact:

- Cost to NHS & economy

Diagram: Obesity System Map Version 1, 20 December 2006
Moving interventions upstream

1. Systems Change
   - Change internal and external capacity

2. Predisposition Change - tackling vulnerabilities

3. Environment Change

4. Behaviour Change
   - Changes in Obesity Measures

Create and strengthen systems and relationships

What works and why? Build community engagement and capacity

Logic/assessment: does it work? Could it work? What would impact be? What timescales?

Public Health England
Local Government Association
Leeds Beckett University
Partnership: the key to success
Why is systems thinking more helpful?

- **Silo working**
- **Generalising**
- **Individual, isolated initiatives. Total impact unpredictable**
- **Top down control**

- **Integrated / the whole system**
- **Tailored to context: what matters here?**
- **Looking at how system works as a whole**
- **Dynamic feedback loops**
- **LA holding the ring, stakeholders are partners**
Appreciative Inquiry Cycle

- **Local Authority WSA to Obesity**
- **Discovery**
  - “As is” state
- **Dreaming**
  - “To be” state
- **Designing**
  - “How to do it”
- **Delivery**
  - “Implementation”

As is}
Listening to LAs: continuous cycle of learning

1. How can we translate that for WSA obesity?
2. Understanding why – Cultural Web/Network Analysis
3. Starting with “what works well”
4. Getting to know and understand each LA
5. Review and revision, wider audience creates final version
6. Co-produce toolkit and road map
7. Test outside ideas and use Logic Model
Assessment Tool?

Create Environment
- Wider Context & Priorities
- Engage all sectors

GMB 1 - core team
- Commence analysis
- Identify wider stakeholders

GMB 2 - wider stakeholders
- Repeat and strengthen analysis
- Start action planning

GMB 3 - wider community
- Strengthen analysis
- Action planning/assessment

Supporting Materials?

Review whether all stakeholders are present and engaged and repeat initial scoping as required

1. Positive conversation – what works well here and why?
2. Group Model Building cycle x 3
3. Keeping the thinking dynamic

Keeping the thinking dynamic: maintaining and building the network of relationships, scanning horizon for changes both internal and external, revisiting assumptions
Input welcomed

• Join Community of Learning
• Newsletters and events
• Register interest at http://www.leedsbeckett.ac.uk/wholesystemsobesity