



## **Authors**

Laura Cross-Bardell, Division of Primary Care, University of Nottingham

**Dr Lydia Bird**, Division of Primary Care, University of Nottingham

**Derek Ward**, Professor of Public Health, Health and Social Care Research Centre, University of Derby

Joe Kai, GP, Professor and Head of Primary Care, University of Nottingham

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Correspondence / Contact for queries: Joe Kai, Professor & Head of Primary Care, University of Nottingham & General Practitioner, Derby Family Medical Centre <a href="mailto:ioe.kai@nottingham.ac.uk">ioe.kai@nottingham.ac.uk</a>



## Introduction

Tackling obesity is arguably the foremost priority, and greatest challenge, facing public health and health care. Obesity forms a preventable and treatable risk for major common problems such as cancer, heart disease, type 2 diabetes, stroke and osteoarthritis.

Around 58% of women and 65% of men are overweight or obese (BMI >25) and 26% are obese (BMI>30) (1). Currently obesity is responsible for more than 30,000 deaths each year (2). Over the next 30 years, obesity is projected to rise to 60% in men, 50% in women, and 25% of children (3). Obesity prevention and treatment have been highlighted as priorities for the NHS (4). Addressing the obesity epidemic could have major impacts on reducing disability, health burden, and death; and improving quality of life.

In the East Midlands, 66% of the population is overweight or obese, the third highest rate of excess weight in England (1). The East Midlands is a diverse region of the UK that includes three cities - Leicester, Nottingham and Derby, within larger rural county areas such as Derbyshire and Peak District, Lincolnshire Wolds and Rutland, and Nottinghamshire.

The AHSN Why Weight project, has worked with service commissioners and other key stakeholders across the eight local authorities of the East Midlands.

The aim was to understand current obesity prevention and service pathways in the region, and to facilitate further development and implementation of evidence-based obesity prevention and treatment services.

This summary report provides a brief cross-sectional perspective on services directly targeting the prevention or management of adult obesity. They were commissioned by local authorities and CCGs in the East Midlands during 2014-2016.

#### Context

Organisational 'reform' and austerity

Prior to 2013, NHS Primary Care Trusts (PCTs) were responsible for identifying and addressing health needs at a defined population level. This included public health, alongside addressing health inequalities and commissioning of health services to meet local needs..

The 2012 Health and Social Care Act (5), introduced by the new Conservative-Liberal coalition government following the 2010 election, imposed a profound shift in organisational and statutory responsibilities. In 2013, PCTs were abolished, and local



government became responsible for public health, with (previously NHS-employed) public health professionals moving to this sector or exiting elsewhere. A new body, Public Health England, with regional centres, was set up in an advisory and support role, but without responsibility for delivery of public health.

Local authorities thus newly became responsible for commissioning primary obesity prevention and non-specialist weight management. At the same time, newly formed NHS Clinical Care Groups (CCGs) were expected to lead commissioning of specialist weight intervention services, while the also newly formed NHS England commissioned bariatric surgery for obesity.

NHS England (6) anticipated that from April 2016, CCGs would also assume responsibility for commissioning bariatric surgery, however this transfer remains in progress. Given the major re-organisation across the public sectors, it is unsurprising that the commissioning landscape remains partially fragmented and ill defined. There remains on-going debate as to precisely where commissioning responsibilities start and finish.

At the same time, the whole system, has faced the challenge of 'austerity Britain', with local authorities wrestling with >30% central budgetary cuts, and the NHS tasked with making multi-billion savings, while maintaining and developing services (7). In this context, confronting competing priorities, and responding to acute health or social care needs, public health and prevention may easily slip down the agenda.

Evidence and guidelines for effective obesity prevention and care

A plethora of guidelines have been published by NICE (8-13) and other organisations (4, 14-16) on the structure, content and delivery of obesity prevention and treatment services. The recommendations suggest that action should span infrastructural changes that benefit the entire population through to highly specialised medical intervention for individuals. This is often described in terms of tiers or levels of support.

The evidence and guidelines, alongside recommended levels of service, are summarised in a user-friendly synthesis developed by the Why Weight team (17). This is intended for anyone working in the field and particularly those in local authorities or CCGs new to this area of public health responsibility (see Appendix 1)

Primary prevention, often referred to as tier 1, includes infrastructure changes that promote a healthy lifestyle, for example cycle lanes and green spaces, and health promotion campaigns, such as Change4Life. This tier also includes interventions that aim to prevent weight gain by promoting a healthy lifestyle, including physical activity and healthy diet.

The next level of support is the provision of non-specialist weight management intervention (ie support from a trained weight management advisor, also known as



lifestyle intervention or tier 2). Specialist weight management (tier 3) is intended to include access to multi-disciplinary support from qualified health professionals such as dieticians, nurses, psychologists, as the next level of intervention.

Specialist bariatric surgery, or tier 4 intervention is the final element of provision. This includes a variety of procedures, such as gastric banding, sleeve gastrectomy and gastric bypass surgery. These all reduce the size of the stomach, limiting food consumption, and in addition, gastric bypass surgery reduces the absorption of food during digestion.

### Methods

This involved six overlapping and iterative stages:

- 1. Where available, local identified leads for obesity were sought (or following contact by the project, were nominated by stakeholder organisations) in order to engage public health teams in the eight local authorities and the 20 CCGs in the East Midlands region. Following explanation of the work they were invited to provide any existing tier 1 and 2 service specifications, and tier 3 service specifications respectively.
- 2. Working by locality, all relevant, available commissioners participated, with permission, in semi-structured audio-recorded one to one interviews about the obesity prevention and care services they were commissioning or were planning to commission. This included what care was being provided, how care was organised and accessed, and any examples of local development or innovation. A purposeful sample of local obesity service providers was also interviewed.
- 3. Contributors were further invited to provide any additional documents relating to the provision or evaluation of obesity services. Interview transcripts and documentation were examined and critically summarised.
- 4. A preliminary mapping of local service provision was fed back to contributors in each locality who were asked to review this for accuracy.
- 5. This current provision of services was then compared and contrasted with recommendations for best practice (17). This was synthesised to develop the current cross-sectional perspective in this report.
- 6. A further iteration of fact checking with stakeholder contributors was undertaken prior to completion and distribution of this summary report.



## **Findings**

Over thirty service specifications, with associated documents and further materials, were provided and reviewed during initial mapping and subsequent iterations. Twenty-four semi structured interviews were undertaken, two-thirds with local authority public health professionals across the eight localities, and a third with CCGs and service providers.

## 1. Health promotion and primary prevention

- Most local authorities commissioned this level of weight related health promotion intervention for access in their communities. This included exercise intervention such as walking groups / health trainers and food related activity such as healthy eating courses and the teaching of basic cookery skills. The majority of these services accepted self-referral, with some requiring referral from a health professional.
- However, one local authority did not commission any specific weight related health promotion activity at this 'tier one' level. One local authority had a considerable existing programme and range of primary prevention activity. However during the course of this work, budgetary reductions and priorities resulted in the discontinuation of this level of commissioning and public health provision in the locality.

## 2a. Non-specialist weight management intervention

- All local authorities had commissioned at least one multicomponent weight management intervention (summarised in **Table One**).
- All interventions were based on promoting a balanced, reduced calorie diet and encouragement of increased physical activity, designed to promote a 0.5-1kg/week weight loss and a target outcome of 3-5% weight loss by the end of the programme.
- The entry criteria and delivery methods of these programmes varied considerably. BMI based entry criteria were the norm at this level. Whilst one site commissioned a programme that was available to anyone with a BMI of over 25 (adjusted to 23 for clients from black and minority ethnic (BME) backgrounds) another site limited access to their service to those with a BMI of over 30 and with no adjustment for those from BME groups. This contrasts with guidance from NICE on the use of lower entry criteria for individuals from BME groups (18).



- Access to services varied between self-referral via a referral hub, to referral of clients only by a health professional, often a GP.
- Delivery methods broadly fell into two categories. Those that delivered both diet and physical activity components together, in one session, or services that focused on diet with separate access to physical activity e.g. free access to local leisure centres.
- All services included weekly sessions for a period of between eight and twelve weeks, and some included phone or online support in between.
- All services included evidence-based behaviour change components, such as goal setting and motivational interviewing and were delivered in a group session format, led by dieticians or specifically trained individuals delivering dietician designed content.
- Some services included additional support for up to 12 months, others invited attendees to follow up sessions at specified time points, primarily for the purpose of outcome data collection.
- All services used differing outcome criteria for measuring success, making comparison challenging.
- As with 'tier one' health promotion activity, over the period of this work a number of sites changed their provision. Two sites decommissioned one or more services and several sites underwent a review of services, with service redesign currently on-going.

Further similarities and differences between programmes are shown in Table One.

Table 1: Non-specialist weight management services

	Locality	Site A	Site B	Site C	Site D	Site E	Site F	Site G	Site H
Accepts Self -Referral?		Yes	Yes	No	No	Yes	Yes	Yes	Yes
	Provider	LA	WMC	WMC	NHS	WMC	2 X WMC	NHS & WMC	NHS
	Service led by	Trained advisor	Trained advisor	Trained advisor	Trained advisor	Trained advisor	Trained advisor	Dietician & Trained advisor	Dietician & Trained advisor
Eligibility criteria	ВМІ	≥30	≥30	≥30	≥30	≥30	≥30	≥25	≥25
	BMI with comorbidity		≥25	≥28	≥28		≥28		
	BMI for BME groups	≥27.5	≥23			≥27*			≥23*
Programme content	Healthy eating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Behaviour change	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Physical activity	Integrated	Integrated	Available separately	Available separately	Available separately	Integrated and available separately	Integrated and available separately	Integrated
Programme duration (weeks)		8	12	12	12	12	12	10-12	12
Add	litional support (months)	12	6	0	0	0	0	0	0
Outcome targets	% Weight loss	5	5		5	5	5	3	5
	% of service users	50	40		50	33	36	50	30

LA = Local Authority, WMC = Weight Management Company BMI = Body Mass Index, BME = Black and Minority Ethnic, \*only if South Asian



## 2b. Non specialist weight management intervention for high risk groups

Provision of intervention for high risk groups; men, pregnant women, BME groups and those with specialised learning needs, is highly variable across the East Midlands.

- Two local authorities (A & E) had commissioned programmes specially designed and targeted to men.
  - One of these services has since been decommissioned due to low service uptake (E).
  - One local authority (H) includes men as one of the high risk groups that must be targeted by the universal weight management service.
- All but one local authority had made some provision for pregnant women
  - o Intervention included a midwife led maternal weight management programme for obese pregnant women (C).
  - A telephone triaging service for pregnant women (G) and a pregnancy oriented weight management programme (A, B).
  - One service continues to support women up to 12 months after giving birth (A).
  - Rather than commissioning specialist intervention for pregnant and maternal weight management, two local authorities (E & G) required universal services to incorporate support for women before, during and after pregnancy.
  - One local authority (D) previously commissioned maternal services with local midwifery services and is currently redesigning services to meet local need.
- One local authority (H) commissioned a service tailored to the needs of a specific ethnic minority group individuals of South Asian ethnicity.
  - Four non-specialist weight management services (B, D, E & H) included lower entry criteria (see table 1 for further details) for individuals from one or more BME group.
  - Some service specification documents (A, B & F) required that nonspecialist weight management service made provision for additional



support for individuals from BME groups, however the nature of this support was not specified.

- o Only one local authority (B) specifically required the non-specialist weight management service to ensure provision of translation services.
- Only one local authority (A) commissioned a dedicated service for individuals with specialised learning needs.
  - o In addition one local authority (D) asked their service provider to make reasonable adjustments to meet vulnerable peoples' needs, including encouraging individuals with specialised learning needs to attend the intervention with their carer or support worker.
  - One local authority (F) requested that service providers consider an individual's 'mental ability' in all programme communication.
  - One local authority (D) required their non-specialist weight management provider to run training on healthy eating and weight management for staff who work in residential facilities that support people with learning disabilities.

#### 3. Specialist weight management intervention

In April 2013, NHS England commissioning policy (16) mandated that individuals undergoing bariatric surgery receive specialist weight management support for a minimum of six months prior to their surgery. This appears to have been a key driver for the provision of specialist weight management services. All individuals preparing to undergo bariatric surgery in the East Midlands are provided with specialist weight management support.

With the exception of one service (D) which supported those with complex weight management issues regardless of their desire or eligibility for surgery', this 'tier 3' support in the region appears to have a focus on ensuring that people are medically and psychological prepared for surgery. In contrast, current recommendations (13) advocate that this type of comprehensive specialist weight management intervention should support those with common co-morbidities and complex weight management issues, including but not limited to those considering surgery.

At the time of mapping, two sites (A & C) did not commission any additional specialist weight management intervention, except for that required in preparation for surgery.



Both of these sites are currently developing plans for new specialist weight loss intervention in their localities.

Six sites (B,D,E,F,G,H) currently commission some form of specialist weight management service that is available for obese individuals regardless of their surgical intentions and these are predominantly dietician led.

Entry to these services (except at site B) has been via referral from a health professional and all sites had BMI based eligibility criteria, with one service including lower BMI criteria for people of BME origin.

Services are being delivered by a range of health professionals, which is reflected in the variable content and delivery style of services. For example, some offer access to psychological support as an integral part of the service, whilst others require the service user to be referred to clinical psychologists in secondary care and this is only available if a specific need is identified.

All services offer one to one support, with a minority also offering additional group support. Access to dieticians was available in all the commissioned services, whilst access to specialist physicians and exercise specialists was more limited.

Two sites offered access to a physiotherapist if required, only one service offered an integrated physical activity component, run at the same time as the diet component.

All services were able to refer onto bariatric surgery if clients were eligible and interested in having surgery.

Provision of specialist weight management in the East Midlands is thus highly variable (Summarised in **Table 2**).

Table 2: Specialist weight management services

	Site A	Site B	Site C	Site D	Site E	Site F	Site G	Site H
Core intervention provided by	Specialist physician	Dieticians and exercise specialists	Specialist physician	Psychologist, Dietician / Nutritionist & Weight Reduction Support Worker	Psychological wellbeing practitioners	Dieticians	Dietitians	Dietitians
Additional intervention (if required) provided by	Dieticians	Psychotherapists	Dieticians	Diabetes Specialist Nurse, Exercise Specialist & Physiotherapist	Dieticians	Teleconferencing to physiotherapy and psychology support*	Clinical psychologists	Clinical psychologists
Description	Assessment for surgery	1-1 & group weight management (psychological & pharmacological intervention as required)	Assessment for surgery	Psychology-led weight management intervention and behavioural support	Psychological support (Cognitive Behavioural Therapy)	1-1 and group dietetic weight management	1-1 sessions	1-1 sessions
Duration	NA	Minimum -24 weeks, Maximum 104 weeks	NA	Minimum -24 weeks, Maximum 104 weeks	52 weeks		52 weeks	52 weeks
Entry Criteria	BMI >40, or >35 with co- morbidities	BMI >40, or >35 with co- morbidities or ≥27.5 if BME	BMI >40, or >35 with co- morbidities	BMI >40, or >35 with co- morbidities	BMI >40, or >35 with co- morbidities	BMI >40, or >35 with co- morbidities	BMI >40, or >35 with co- morbidities	BMI >40, or >35 with co- morbidities

<sup>\*</sup>currently being piloted, NA = Not Applicable



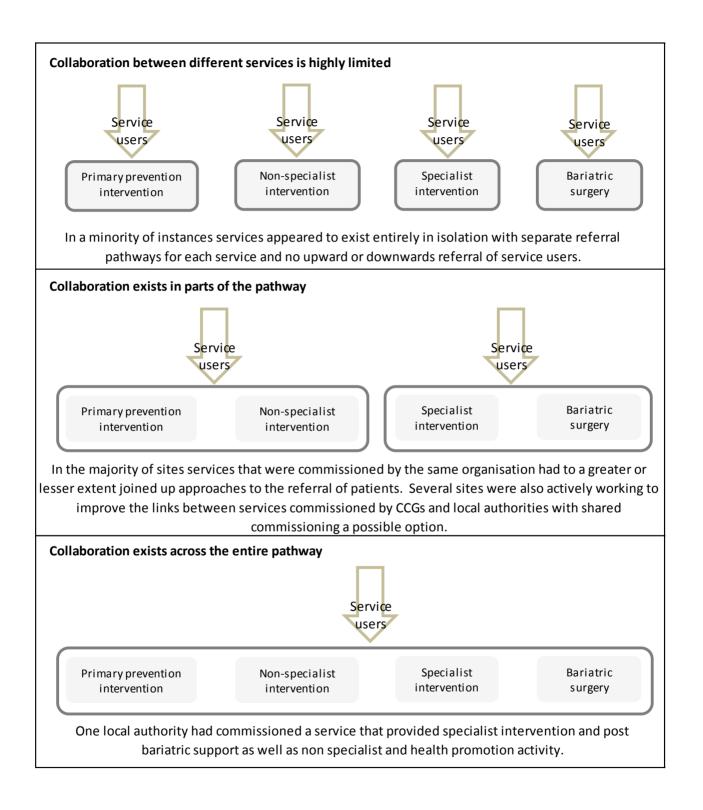
## 4. Surgical Intervention

Two surgical teams in the East Midlands carry out Bariatric surgery, with the majority of patients receiving treatment at one regional centre. For geographical rather than clinical reasons some patients are referred to surgical teams outside of the east midlands for treatment. Access to bariatric surgery is via GP referral. Patients are supported following surgery for a minimum of two years by the team that carried out the surgery.

## Organisational structure and coherence of service pathway

- This work also explored the ways in which services were structured and whether this facilitated or hindered co-operation. At most sites in the region there was commonly disconnection between different services 'in the real world', rather than a more coherent service pathway envisaged in the 'ideal' of NICE guidance (17).
- In some areas, commissioners and service providers were unaware of what other relevant services existed within their locality. In particular, there was a limited scope for clients entering obesity prevention and care pathways to be logically referred between different services or levels of intervention.
- In some localities a need was identified to improve the interface between primary care and available services, in order to facilitate GP awareness and referral of clients, particularly those with complex needs to the most appropriate service.
- The relatively limited co-operation between different parts of the pathway in localities is perhaps unsurprising given that, as noted above, three entirely different organisations each became newly responsible for commissioning different types of public health and intervention services in 2013.
- **Figure 1** illustrates the existing forms of collaboration between services in pathways across the region.







## Discussion

Throughout this work the Why Weight team encountered dedicated and hard working professionals across local authorities, CCGs and providers who were passionate about the prevention and treatment of obesity. However, these individuals, particularly in the commissioning sector, were often working across many competing areas of new responsibility, and with little proactive or specific support for public health delivery.

We found stakeholders were working within systems and structures that seemed to obfuscate rather than enhance commissioning and service development for prevention, despite national policy rhetoric on the importance of the same (19), and the increasing health crisis that rising obesity levels presents.

The main challenges identified for most stakeholders were:

- A lack of evidence and support on *how* obesity services should be commissioned, developed and delivered, rather than guidance on simply 'what' should be in place.
- The complexities associated with multiple stakeholders working together.
- The development and provision of services during a period of financial austerity.

Whilst there are multiple guidelines relating to obesity prevention and treatment services (17), we identified little evidence based advice on the specific details of how services should be delivered, and a lack of practical or tailored support for those, such as local authorities or CCGS, tasked with commissioning them.

Whilst guidelines are often intentionally non-specific, in order to facilitate services being tailored to local contexts and populations, this can be problematic, since commissioners do not have clear guidance on the best approach to service delivery.

The absence of evidence relating to some services is a key challenge for the further development of services and NICE acknowledge that there is "a paucity of good-quality evidence on the effectiveness of [weight management] interventions in non-clinical settings" (8).

The relatively limited co-operation between different parts of the pathway in localities is perhaps unsurprising given the current funding structure. Despite integration of services into a pathway approach being central to current obesity prevention and treatment recommendations (17) three entirely different organisations each became newly responsible for commissioning different types of public health and intervention services in 2013. Further action to promote integration is clearly needed.



The limited integration of services has been noted in this work. Indeed, on several occasions it was apparent individuals working in one part of the pathway were unaware of other services available in their locality. This highlights that simply recommending integration is not sufficient to overcome the barriers to integration that exist.

In addition, the flux and change that followed the 2013 public sector 're-organisation' has continued to further hinder integration. This exists at both an individual and organisational level, with staff members regularly changing or moving roles and responsibilities for commissioning shifting from one organisation to another. Individuals, who have often not previously worked in this field and who may lack relevant specialist knowledge may be tasked with commissioning obesity services as one among may other competing priorities in their role.

However on-going changes to commissioning responsibilities (CCGs taking responsibility for bariatric surgery) have also provided an opportunity, which several sites in the East Midlands have exploited. This has enabled review of their entire obesity pathways and to look for opportunities for greater collaborative and joined up working.

A further possible effect of the tiered approach to intervention activity is that it may lead to an over medicalisation of weight management. Currently, 'multidisciplinary specialist weight management' intervention is predominantly, but not exclusively, focused on preparation for bariatric surgery. Whilst the evidence base for weight loss through surgery is strong, it is not an option that is universally suitable or desirable for a large proportion of the obese co-morbid population. It is important that an integrated approach to services does not inadvertently lead to individuals being 'funneled' towards surgery without opportunity to make use of other approaches that more targeted non-surgical intervention could support if it were more available.

An unavoidable and ongoing contemporary challenge is the national economic situation. A wide variety of obesity related health promotion activity and non-specialist intervention was identified in this review. However, recent funding cuts or constraints have already affected these. There is concern that health promotion, or indeed secondary prevention, is often an early casualty when budgets are tight; or when rapid return on investment is sought. Furthermore public perceptions of obesity are often ill-informed and pejorative. Cutting funding to obesity treatment services and rationing other services on the basis of weight may be perceived as a politically acceptable method of cutting services. Yet if obesity prevention and treatment is not prioritised the disease burden and associated financial costs for individuals and society will be vast; and place a cyclical and continuing burden on the NHS and social care.



## **Conclusions**

Provision of adult obesity prevention and treatment services is variable across the East Midlands. Challenges to the commissioning and provision of services are considerable and include: the lack of practical evidence or realistic support at regional or national level on 'how' obesity services should be developed and provided, and complexities associated with the re-structuring and re-organisation of sectors and services, in the context of major financial austerity.

At the time of this work all localities have nevertheless negotiated some of these difficulties, and succeeded to varying degrees in commissioning and providing some non-specialist weight management and health promotion activity for their local populations. The majority of areas in the region had either existing specialist weight management services or where in the process of developing these. Specialist services for those not eligible or considering bariatric surgery is identified as a particular opportunity for further development.

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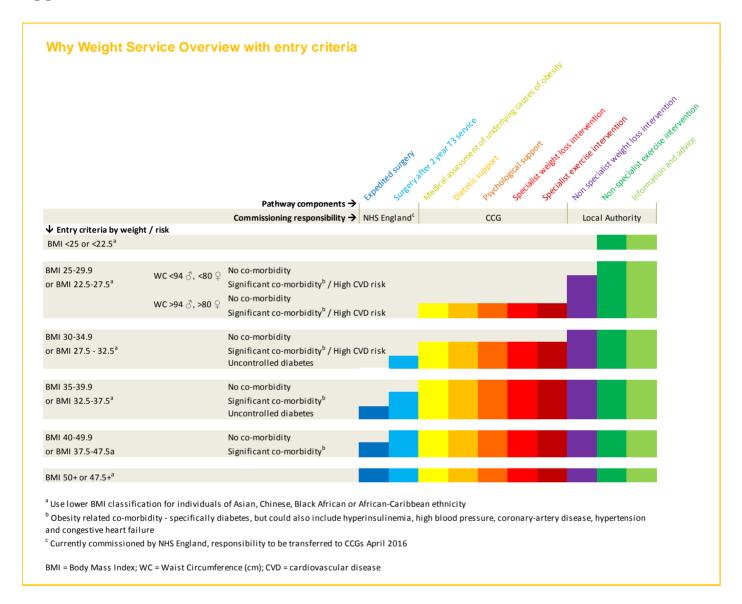
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# **Appendix 1**



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