Project Delivered in Collaboration with Health Innovation Manchester and Eli Lilly

Understanding Obesity Care Pathways in Greater Manchester Integrated Care System

March 2024

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Executive Summary

Prevalence

More than 1 in 4 adults (27.1%) are living with obesity in Greater Manchester, which equates to 606,292 (data from Office for Health Improvement and Disparities' (OHID) Fingertips tool Obesity Profile - OHID (phe.org.uk))

Data from the Greater Manchester Care Record shows 499,711 of these adults have a BMI recorded, in their patient notes, of ≥30, plus Black, Asian and Minority Ethnic group BMI ≥27.5-29.9[23].

Of this population:

- 15% are people from Black, Asian and Minority Ethnic population with BMI 27.5-29.9
- 51% have a BMI 30 – 34.9
- 21% have a BMI 35 – 39.9
- 13% have a BMI ≥40

Locality

Obesity prevalence varies by locality with the highest prevalence in Oldham at 31.9% and the lowest in Trafford at 22.2%[23.]

Age and Gender

Obesity increases across both genders to a peak of 30% for women and 29% for men between the ages of 66-69, then tapers off[23]. The GMCR data shows a difference in prevalence between men and women which exceeds what has been observed nationally from NHS Digital[12]. This may suggest there is potentially undiagnosed obesity in men aged 18-45.

Deprivation

The most deprived decile has an obesity rate of 248.6 per 1000, which is over double the rate of the least deprived decile (106.5 per 1000)[23].

Ethnicity

Calculating rates per 1,000 shows a disproportionate number of patients are coded as 'Other Ethnic Groups' in primary care[23]. For this reason, it has not been possible to comprehensively profile Greater Manchester obesity prevalence by ethnic background. This highlights the need for accurate recording in patient notes.

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Capacity and Demand[20]

- Annual tier 2 referrals as proportion of total BMI 30-35 population – 4.3%.
- 60% of patients referred enrol in the Tier 2 service.
- Annual Tier 3 referrals as proportion of obese (BMI ≥35) population – 8.3%.
- 50% of patients referred enrol in the in Tier 3 service.
- Annual Tier 4 Referrals as proportion of eligible obese population (BMI ≥40) – 4.5%.
- 11.4% of patients referred enrol in the Tier 4 service.

Service provision[20]

Tiers 2 and 3

- Service eligibility criteria vary across localities, irrespective of provider, attributed to local commissioning arrangements.
- Care pathways also vary with some providers delivering programmes of differing duration within the same tier.
- Commissioned capacity is not matching increasing demand, particularly in terms of Tier 3 provision. Consequently, people reportedly may wait up to 12 months for Tier 3 intervention.
- Not all people referred to services take-up the programmes offered, nor treatments that they are eligible for. Anecdotal information suggests the underpinning reasons are multi-factorial.
- Presentations are becoming more complex with more people requesting 1-2-1 and mental health related support.

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Foreword

One of the core strategic priorities for Health Innovation Manchester (HInM) over the last three years has been to develop meaningful partnerships between the healthcare system, academia, and industry partners.

Health Innovation Manchester's (HInM's) vision is to become a recognised international leader in accelerating innovation that transforms the health and wellbeing of our citizens, which includes understanding how new innovations, including new medicines and new technologies, can be deployed into our Greater Manchester (GM) system at pace and scale to drive benefits for our citizens.

As part of our proven methodology, in the implementation of innovations into real-world settings, we recognise the need to have a deep and insightful understanding of the care pathways that we are working or potentially going to be working in. In order to develop a more detailed understanding of the obesity services, capacity and demand has been the focus of the first phase of the HInM and Lilly UK partnership.

In December 2022 HInM and Lilly UK came together to work in partnership to gain a deeper understanding of the current obesity services across the GM system, as there was no clear single report available that described the "current state". The second phase of the programme will focus on working collaboratively with the system to develop a "future state" that will optimise system readiness and appropriate use of any future innovations, such as medicines and/or technology to support citizens towards healthier weight management. Phase two will also note and prioritise any gaps in this first report and agree who best to take responsibility for emerging actions which arise from this initial report.

Our insights were gathered through a number of approaches, which included the establishment of a steering group currently chaired by the Manchester University NHS Foundation Trust Clinical Lead for Diabetes, Endocrinology and Metabolic Medicine.
We also worked with partners from:

- The HInM and Lilly project team
- Tier 2, 3, and 4 weight management service providers
- The Office for Health Improvement and Disparities (OHID)
- Primary and Secondary Care clinicians
- Greater Manchester Medicines Management Pharmacists
- Greater Manchester Population Health Management Team

We conducted desktop, individual interviews and workshop led data gathering, as well as utilising available data from the Greater Manchester Care Record (GMCR), and from recognised data sources such as the Office for Health Improvement and Disparities' (OHID)

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Fingertips tool. We recognise that there are some limitations to the data from a data quality and a data gathering perspective and we will agree with partners in the Integrated Care System (ICS) the required follow up to how we address these limitations in phase two of the programme.

Key findings of the insight gathering are covered more fully in the report. The findings reflect that there is variation in the weight management service offers across GM, access to and uptake of services is also varied, and obesity prevalence in GM is higher than the national average.

Recommendations

How we build on the report and react to its key initial findings, will be a matter for strategic leaders to agree, once the report is validated.

We hope the report will provide initial findings that can help inform prioritisation and utilisation of some of the emerging National Institute for Health and Care Excellence (NICE) approved technologies and medicines. Given the agreed role of HInM in helping to support the delivery and deployment of proven innovations, we would recommend that we continue to work collaboratively with the GM ICS in further evaluation to create an ecosystem that is able to optimise these fully.

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1.0. Introduction and Background

1.1. Collaborative Working Agreement and Data Protection

This project is a collaborative working agreement (CWA) between Health Innovation Manchester (HInM) and Lilly UK. This is in line with Clause 20 of the 2021 ABPI Code of Practice[1].

No individual healthcare professional will benefit from the implementation of this Agreement. This document will be publicly available on the Lilly UK corporate website and will be proactively shared with health care professionals and NHS staff within the Greater Manchester area who have an interest in chronic weight management.

The pathway analysis work was undertaken on behalf of Lilly by Tranoca, an approved Lilly vendor.

1.2. Greater Manchester Confidentiality Advisory Group Approval

In September 2023, the Secretary of State for Health approved Greater Manchester's application for the processor, Graphnet, to create the de-identified/pseudonymised data mart to support non-research (e.g., planning). The Health Research Authority (HRA) approved Greater Manchester's application for the processor, Graphnet, to create the de-identified/pseudonymised data mart to support research. In addition, the Research Ethics Committee (REC) has given a favourable ethical opinion for research database as set out in the HRA (IRAS) application for a period of 5 years from January 2023.

[1] ABPI 2021 Code of Practice, ABPI, 2021 [Accessed 30.08.2023] ABPI 2021 Code of Practice

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1.3. Background

In July 2020, the Department of Health and Social Care (DHSC) released the policy paper Tackling obesity: empowering adults and children to live healthier lives[2]. This paper provided guidance that systems may refer to in developing appropriate strategies for the management of obesity care provision. In June 2023, DHSC published further plans to tackle obesity across England, with a focus on weight management interventions and restrictions on promotion and advertisement of less healthy foods[3]. Greater Manchester is similarly committed to reversing the trend on obesity over the next five years. Obesity is regarded as a major challenge given that we are above the National average in terms of its prevalence in our population. Obesity, or healthy weight management as it is described by the GM population health management team, is an example of a challenge that cannot be met by clinical teams in isolation, but one that must be met through health in all policies and outlined as a whole system approach in the Greater Manchester Integrated Care Partnership Strategy[4].

The NHS describes obesity in terms of a person having excess body fat defined by a Body Mass Index (BMI) score of 30 and above, or 27.5 and above in people of a South Asian, Chinese, other Asian, Middle Eastern, Black African, or African-Caribbean family background[5]. Obesity is a complex, chronic condition and is a risk factor for over 200 diseases and for the world's leading causes of poor health and early death including cardiovascular disease, several common cancers, diabetes and osteoarthritis[6]. The UK has among the highest rates of obesity in Western countries[7]. Obesity creates a significant burden on the NHS, estimated to cost c. £9.7bn p.a. by 2050[8], making the disease a top priority within the greater prevention agenda[8].

There are significant inequalities in the prevalence of obesity, for example, by deprivation[9] or ethnicity[10]. Obesity is a major health crisis countrywide, and in Manchester 63% of adults

[2]'Tackling Obesity: empowering adults and children to live healthier lives, Department of Health and Social Care, July 202, [Accessed 30.08.2023] Tackling Obesity: empowering adults and children to live healthier lives - GOV.UK (www.gov.uk)

[3] 'Government plans to tackle Obesity in England, Department of Health and Social Care, June 2023, [Accessed 01.09.2023] Government plans to tackle Obesity in England - Department of Health and Social Care Media Centre (blog.gov.uk)

[4] Improving health and care in Greater Manchester 2023-2028, Greater Manchester Integrated Care Partnership Strategy, 2023 [Accessed 02.10.2023] gm-icp-strategy-190423.pdf (gmintegratedcare.org.uk)

[5] Obesity Overview, NHS England, August 2023 [Accessed 30.08.2023] Obesity - NHS (www.nhs.uk)

[6] Obesity as a Disease: The Obesity Society 2018 Position Statement, Jastreboff. A.M; Kotz, C.M; Kahan, S (*Et al*); 2018, [Accessed 30.08.2023] https://www.Obesity.org/wp-content/uploads/2019/04/Jastreboff_et_al-2019-Obesity.pdf

[7] Ranking (% Obesity by country), World Obesity Global Obesity Observatory, 2017 [Accessed 30.08.2023] Ranking (% Obesity by country) | World Obesity Federation Global Obesity Observatory

[8] Health Matters: Obesity and the Food Environment Health matters: obesity and the food environment - GOV.UK (www.gov.uk)

[9] Integration and Innovation: working together to improve health and social care for all, Secretary of State for Health and Social Care, February 2021, [Accessed 30.08.2023] (publishing.service.gov.uk)

[10] Overweight adults - GOV.UK Ethnicity facts and figures (ethnicity-facts-figures.service.gov.uk)

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and 41% of children at year 6 (age 10-11) are overweight or living with obesity, which is higher than the national average[11].

Against this backdrop, HInM and Lilly UK have come together to undertake a deeper understanding of current 'obesity care pathway' provision across Greater Manchester for people aged 18 years and over via the project 'Understanding Obesity Care Pathways in Greater Manchester Integrated Care System'.

The aim of the initial phase was to provide a picture of how obesity is currently managed across Greater Manchester to provide a baseline for change. This report provides a summary of the key findings. The next phase of the project will provide a deeper understanding of service provision and the health economic impact of the treatment and care of people living with obesity, to develop a case for change; and to better understand the impact of innovations, be they technological, therapeutic or workforce solutions.

1.3.1. Measuring Obesity – Body Mass Index (BMI)

The most widely used method of identifying obesity is calculating a person's Body Mass Index (BMI). BMI is a measure that uses a person's height and weight to work out whether their weight is healthy. The NHS BMI calculator uses a person's score to place them in one of the six weight categories[12];

- BMI less than 18.5 kg/m2: underweight range
- BMI 18.5 kg/m2 to 24.9 kg/m2: healthy weight
- BMI 25 kg/m2 to 29.9 kg/m2: overweight
- BMI 30 kg/m2 to 34.9 kg/m2: Obesity class 1
- BMI 35 kg/m2 to 39.9 kg/m2: Obesity class 2
- BMI 40 kg/m2 or more: Obesity class 3

People with a South Asian, Chinese, other Asian, Middle Eastern, Black African or African-Caribbean family background will need to use a lower BMI score to measure overweight and obesity[3]:

- BMI 23 kg/m2 to 27.4 kg/m2: overweight
- BMI 27.5 kg/m2 or above: Obesity

[11] Manchester Healthy Weight Strategy, 2020-2025, Manchester Health and Care Commissioning, [Accessed 05.09.2023]

[12] Health Survey for England , 2021 part 1, Overweight and Obesity in adults- methods and definitions, 15.12.2022, [accessed 30.08.2023] Part 1: Methods and definitions - NHS Digital

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1.3.2. Weight Management Services

Different tiers of weight management services cover different activities. The tiers defined in this report follow the Chronic Weight Management "tiers of care", as defined in "Joined Up Clinical Pathways for Obesity"[13] (Appendix 1).

Tier 1 Preventative programmes: Public health interventions aimed at prevention and reinforcement of healthy eating and physical activity messages.

Tier 2 Weight management services: Including lifestyle weight management advice.

Tier 3 Specialist care: 1:1 management by a medically qualified specialist in obesity.

Tier 4 Specialist care: 1:1 management provided by specialist obesity medical and surgical MDTs with access to a full range of medical specialists as required.

The term 'service provider' used throughout the report refers to Tier 2,3 and 4 specialist weight management services.

2.0. Project Approach

The project adopted a pluralistic project approach:

- A collaborative approach to optimise co-production and integrated working
- A system multi-disciplinary governance structure with cross functional working groups (task and finish)

2.1. Aim

The aim is to provide the GM system and industry partners with a clear understanding of the current tiers of services, available across the ten localities and the current levels of commissioned resources against the patient demand if guidelines were followed if access and resources were available. The aim is also to provide more detailed intelligence around the important characteristics that may determine patients' access and uptake to services, as well as providing insight to possible inequities around provision or access to these services.

[13] Report of the working group into: Joined up clinical pathways for Obesity, NHS England, 2014, [Accessed 30.08.2023] owg-join-clinc-path.pdf (england.nhs.uk)

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2.2. Objectives

This work aimed to capture on behalf of Tier 2, 3 and 4 specialist weight management services an understanding of;

- Commissioned capacity,
- Service eligibility criteria and
- Service uptake, treatments, and management

2.3. In Scope

- Map of current adult obesity patient journey across Greater Manchester
- Engagement of a representation of stakeholders who are involved in weight management service provision and commissioning in the mapping of the obesity care pathway
- Analysis of national, regional, and local data sources including the Greater Manchester Care Record

2.4. Out of Scope

- Redesign of the obesity pathway
- Children's obesity services
- Maternity obesity services
- Understand root causes of patient drop out between service tiers
- Management of disordered eating for patients with a BMI between 25-30
- Obesity prevention- including patient education and public health
- Relapsing obesity

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3.0. Project Methodology and Limitations

3.1. Methodology

The mapping phase of the project was undertaken between December 2022 to May 2023. This involved a series of stakeholder workshops and follow up meetings to verify data and insight. Data from the Greater Manchester Care Record was also used to provide demographic data for obesity across Greater Manchester.

3.1.1 Stakeholder Workshops

An initial stakeholder workshop was held in December 2022. The aim was to initially map weight management services across Greater Manchester with stakeholders. There was representation from;

- The HInM and Lilly project team
- Tier 2, 3, and 4 weight management service providers
- The Office for Health Improvement and Disparities (OHID)
- Tranoca – Service Development Consultancy
- Primary and Secondary Care clinicians
- Greater Manchester Medicines Management Pharmacists
- Greater Manchester Population Health Management Team

Service providers represented;

- Two Tier 2 regions (**ABL Health**: Stockport and Oldham)
- Seven Tier 3 regions (**MoreLife**: Manchester, Salford, Bury, Stockport and Tameside, **Ashton, Leigh and Wigan (ALW)**: Wigan and **ABL Health**: Oldham)
- One Tier 4 provider, Northern Care Alliance (NCA) covering all Greater Manchester 10 localities

The initial stakeholder workshop was followed up with a questionnaire for providers to complete. Responses to these questions helped further the understanding of current obesity service availability and capacity across Tiers 2-4 in Greater Manchester. Local service datasets were requested from; ABL Health, MoreLife, ALW and the NCA Tier 4 service, albeit some of those requests could only be partially fulfilled.

In addition to the questionnaire, a series of provider and commissioner specific meetings were held. The aim of these meetings was to discuss and confirm the data and associated insight. This process identified additional stakeholders who were then invited to the follow up workshop.
A follow up workshop was held in March 2023 to present the initial findings to the contributing stakeholders. The meeting was recorded, and minutes circulated to the wider

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group to mitigate gaps in feedback for those who could not attend. There was representation from;

- Commissioners
- Service providers covering 8/10 localities and Tier 2-4 service provision
- Greater Manchester Population Health Management Team
- Primary and Secondary Care clinicians
- OHID
- Greater Manchester Medicines Management Pharmacists
- HInM and Lilly project team
- Tranoca– Service Development Consultancy

Following the second stakeholder workshop stakeholders were invited to meet separately to confirm their data for inclusion in the mapping report.

3.1.2 Service Provider Mapping

The data and insight collected from the above methodology was applied to:

- Map the known patient pathways for weight management Tiers 2, 3 & 4,
- Capture 'demand' data in terms of referral numbers, programme starter numbers, treatment rates and anticipated service growth over time, and
- Understand service capacity.

3.1.3 Greater Manchester Care Record (GMCR) Analysis

The GMCR is a shared care record bringing together the health and care information of the 3.1m Greater Manchester residents, currently coordinated by HInM with the 10 localities, Greater Manchester Health and Social Care Partnership and supplier Graphnet**.**

The record brings together data from;

- Primary/Secondary Care (GPs/Hospitals)
- Mental Health
- Community
- Specialist Trusts (including the Christie cancer treatment centre)
- Social Care.

Other health and care providers may be added over time.

3.1.4 Greater Manchester Care Record Obesity Prevalence Analysis

HInM data analysts conducted the data analysis using the Greater Manchester Care Record (GMCR). The data extract was obtained using the latest BMI reading according to the

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following inclusion criteria of a BMI range 30 to 190 for all ethnic groups, plus 27.5 to 30 for Black, Asian, and Minority Ethnic groups, aged 18 years and over.

The following demographics were included:

- Age
- Sex
- Ethnicity
- Lower super output area (LSOA)
- Locality and registered GP practice

The GMCR is made up of multiple data sources and is reliant on the quality of data from the source systems. The NHS Quality and Outcomes Framework (QOF) includes an indicator relating to the percentage of patients with a body mass index (BMI) of 30 or more recorded in the preceding 12 months. GMCR data was flagged with relevant criteria and cross-referenced with QOF data for the purpose of validation. This suggested GMCR source data may be approximately 15% lower than expected. At a practice level, it could be seen that some practices did not appear to be flowing data into GMCR until recently. Nevertheless, in the absence of an alternative granular data source, the GMCR has been used in this report to support understanding of local demographic profiles.

3.2. Limitations

- Triangulation of the GMCR data extract with NHS QOF data suggested under-reporting of obesity prevalence within the GMCR by approximately 15%. Data are also dependent on Greater Manchester citizens having had their weight and height measured and a BMI score recorded in their health records.

- It was not possible to completely map weight management service provision across Greater Manchester, particularly for Tier 2 & 3 services and on behalf of some Greater Manchester localities, namely Bolton and Trafford.

- Where local service dataset requests were partially fulfilled or data were not available for localities for whom specialist weight management service provision was not established, some data assumptions have been made. All data assumptions were agreed with the workshop attendees and are clearly referenced within this report.

- This review presents a snapshot in time, consequently all data and associated insight are drawn from information that was available at the time. Notably weight management service outcome data was not obtainable.

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4.0. Findings

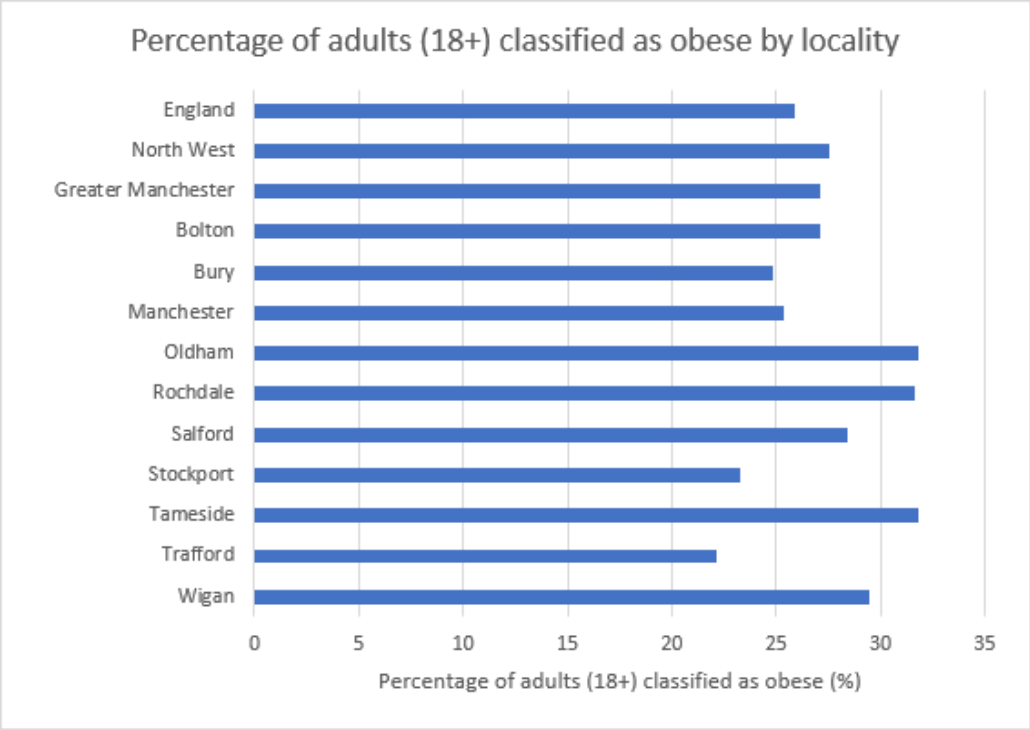
Two data sources have been used to look at demographics across Greater Manchester: Office for National Statistics data which uses population data from the Census, and Greater Manchester Care Record data which includes people that are registered with GP practices, which is larger than the number of residents by around 10%. The GMCR has been used in this report to support understanding of local demographic profiles

4.1 Prevalence Analysis

4.1.1 Obesity Prevalence in Greater Manchester

Since September 2019, NHS Health Check activity data is published on the Office for Health Improvement and Disparities' (OHID) Fingertips tool. Fingertips uses data from the Office for National Statistics which shows a population of 2,215,143 adults (18+) in 2021 – the most recent year for which census data is available. The predicted increase in population for 2023 is 0.998% based on national population growth rates[24], so the estimated adult population in 2023 for Greater Manchester is 2,237,240. Data sourced from Fingertips (which are derived from the findings of the Active Lives Adult Survey and scaled up to provide an England-wide picture), suggests that more than 1 in 4 adults (27.1%) are living with obesity in Greater Manchester which equates to 606,292 people (Graph 1).

Whilst Greater Manchester prevalence is comparable regionally (North West) it is higher than the England figure of 25.9%[25]

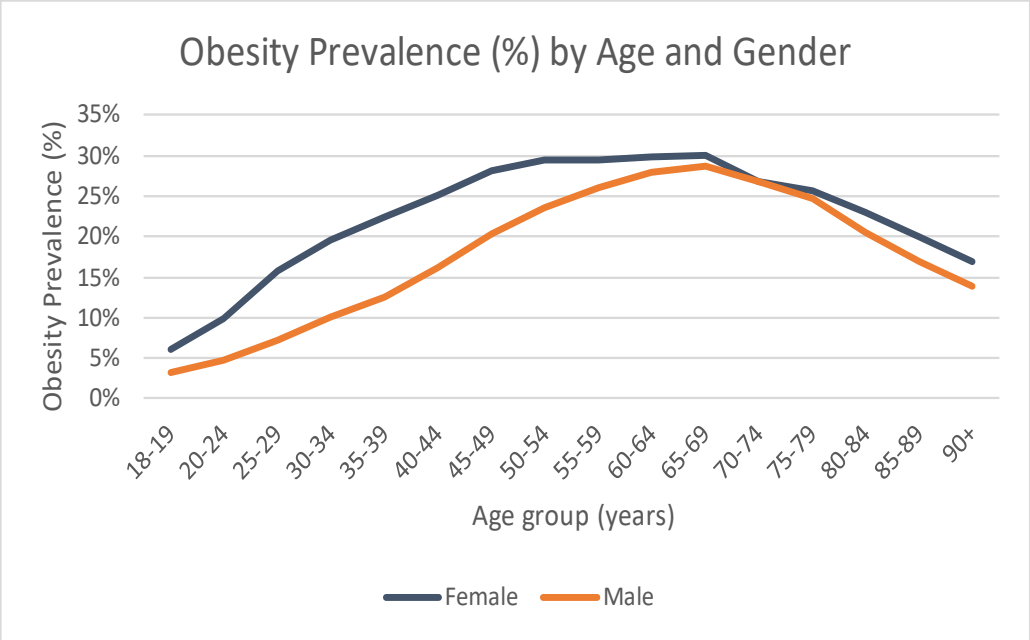


Graph 1: Percentage of adults (18+) classified as living with Obesity (%) by Greater Manchester locality (Fingertips, 2021/22)[25]

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4.1.2 Age and Gender

Obesity increases across both genders to a peak of 30% for women and 29% for men between the ages of 66-69, then tapers off[23]. The GMCR data shows a difference in prevalence between men and women which exceeds what has been observed nationally from the Office for Health Improvement and Disparities[21]. This may suggest there is potentially undiagnosed obesity in men aged 18-45 (Graph 2). This disparity may be due to women attending Primary Care for routine screening programmes or family planning services leading to interactions at a younger age, whereas men are invited for routine health checks from age 40 onwards.

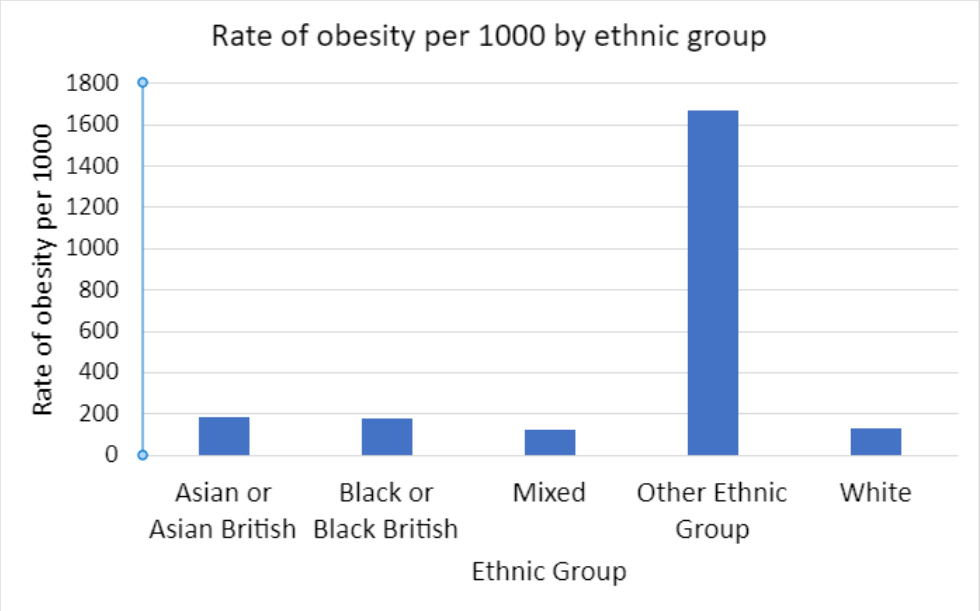


Graph 2: Percentage Obesity prevalence by age (years) and gender (male and female) across Greater Manchester (GMCR)[23]

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4.1.3 Ethnicity

Ethnicity data for obesity prevalence using the GMCR shows potential over-reporting of 'Other Ethnic Category' when looking at rates per 1,000 by ethnic group within Primary Care systems (Graph 3)[23]. This only became apparent when calculating rates per 1000 based on Census 2021 population figures by ethnicity. For this reason, it has not been possible to comprehensively profile Greater Manchester obesity prevalence by ethnic background. This highlights the need for accurate recording in patient notes



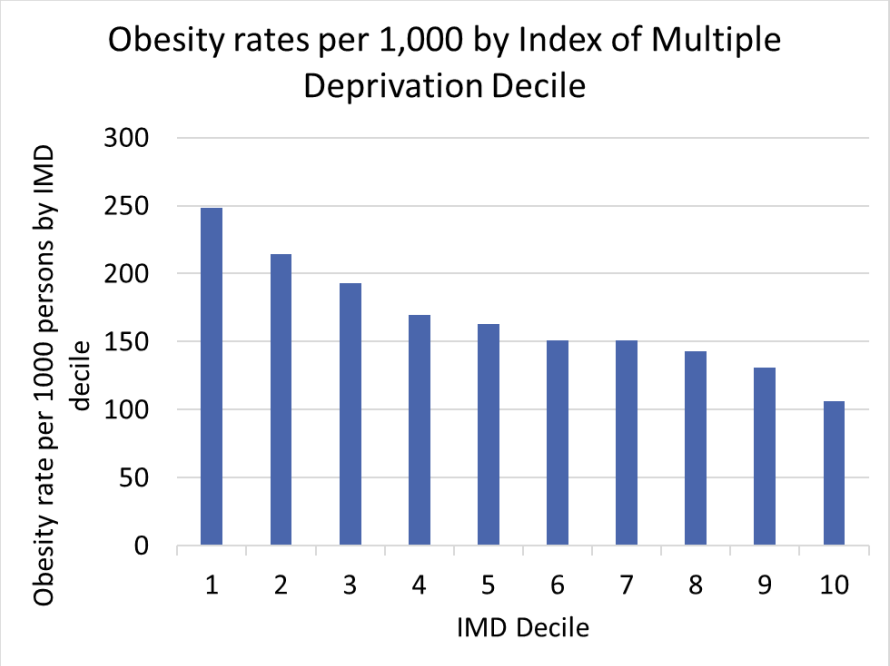
Graph 3: Obesity rate per 1000 population by ethnic group across Greater Manchester (GMCR)[23]

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4.1.4 Deprivation

The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation in England and is part of a suite of outputs that form the Indices of Deprivation. It follows an established methodological framework in broadly defining deprivation to encompass a wide range of an individual's living conditions. The deprivation deciles range from 1 to 10, with 1 being the most deprived and 10 the least deprived or most affluent. People may be considered to be living in poverty if they lack the financial resources to meet their needs, whereas people can be regarded as deprived if they lack any kind of resources, not just income.[14]

Obesity rates per 1000 increase with deprivation across Greater Manchester (Graph 4). The most deprived decile has an obesity rate of 248.6 per 1000, which is over double the rate of the least deprived decile (106.5 per 1000)[23]. This is of significance as five localities (Manchester, Rochdale, Salford, Oldham, and Bolton) rank in the 10% most deprived in England.[15]



Graph 4: Obesity rates per 1000 by Index of Multiple Deprivation (GMCR)[23]

Rate per 1000 is calculated using Local Super Output Area population data[22]

[14] The English Indices of Deprivation 2019, Ministry of Housing, Communities & Local Government, 26.09.2019, [Accessed 30.08.2023] The English Indices of Deprivation 2019 (publishing.service.gov.uk)
[15] Exploring local income deprivation, Office for National Statistics, Exploring local income deprivation (ons.gov.uk)

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4.2 Weight Management Service Mapping

The following sections of this report pertain to information that was available at the time of this review[20].

4.2.1 Overview

- Tier 1 services are accessible to anyone in Greater Manchester and are a wide-ranging blended offer of web-based/ digital information and wellbeing activities support. Given the breadth of provision, these services have not been individually mapped.
- Across Greater Manchester, Tier 2 weight management services are provided by two organisations across three localities (Figure 1). ABL Health provides a Tier 2 service in Stockport, and Oldham and Weigh Ahead operate in Salford.
- It was reported that Rochdale's Tier 2 service delivered by Your Trust has recently been decommissioned, though this was not confirmed.
- Tier 3 weight management services are delivered by four providers across eight of the ten Greater Manchester localities; ABL Health, MoreLife, Ashton, Leigh, and Wigan (ALW) and New Weighs (Figure 1).
- Tier 4 specialist care services are delivered by a single provider, Northern Alliance via the Salford Royal Hospital team on behalf of all 10 Greater Manchester localities.

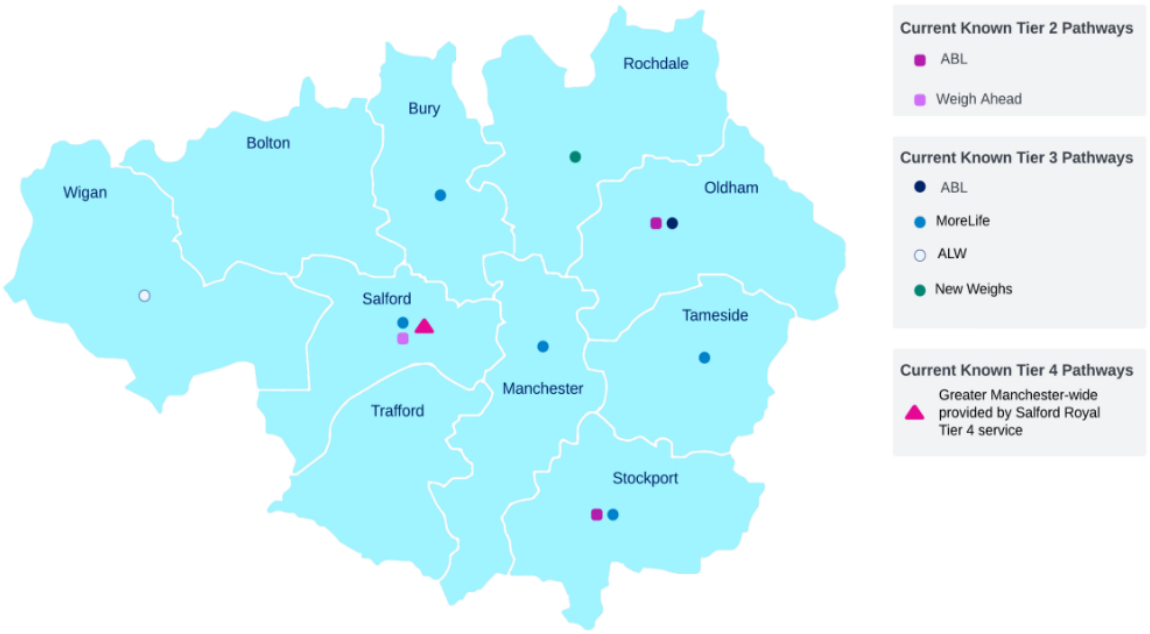


Figure 1: Map of Greater Manchester with known service providers for Tier 2, 3 and 4 weight management services[20]

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4.2.2 Capacity & Demand

Tranoca Service Planning Software was used to estimate yearly demand on Tier 2, 3 and 4, services across Greater Manchester. This analysis was based on GMCR data split by BMI category (Table 1) and actual referral numbers obtained from service providers. For localities where weight management service provision was not established, referral numbers have been assumed based on adult population size to generate a Greater Manchester picture.

Table 1: Population level data from GMCR for people living with Obesity by BMI Score

POPULATION – Greater Manchester Care Record Data	**Greater Manchester**
Total population size	3,160,705
Adult population size (18 and over)	2,470,109
Total population living with Obesity (BMI ≥30 plus Black, Asian and Minority Ethnic group BMI ≥27.5-29.9) using GMCR data	499,711
Of this total population:	
• Black, Asian and Minority Ethnic population with BMI 27.5-29.9	74665 (15%)
• population with BMI 30 – 34.9	252,113 (51%)
• Population with BMI 35 – 39.9	105,348 (21%)
• Population with BMI ≥40	66,585 (13%)

Data suggest that referrals to specialist weight management services, namely Tiers 2, 3 & 4 may not be in line with expected demand (Table 2). Whilst current and prior service users are not known, data suggest potential unmet need in terms of identification and referral to specialist weight management services[20]

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Table 2: Estimated Greater Manchester Weight Management Service Demand for a 12-Month Period

ESTIMATED NEW REFERRALS INTO WEIGHT MANAGEMENT SERVICES	
Tier 2 Services	
Estimated Tier 2 referrals	10717
Tier 2 referrals as proportion of total BMI 30-35 GMCR population	4.3%
Tier 3 Services	
Estimated Tier 3 referrals	14355
Tier 3 referrals as proportion of total BMI >35 GMCR population	8.3%
Tier 4 Services	
Estimated Tier 4 referrals	3000
Tier 4 referrals as proportion of total BMI >40 GMCR population	4.5%

20: Lilly Data on File – Tranoca phase 1 Obesity Report

However, service providers have said that not all referrals convert to 'admission', as broadly around 60% of Tier 2 and 25-60% of Tier 3 referrals subsequently enrol. The reasons for variation in uptake are multi-factorial and are reported to include; inappropriate referral, lack of 'patient' understanding as to why they have been referred and/ or unwillingness to participate in the programme or unmet expectations (set by the referrer) from the outset[20].

Whilst there are reportedly no waiting lists for Tier 2 service intervention, people can wait up to 12 months to enter a Tier 3 service. Service providers reported that in addition to a tangible increase in referrals over the past 2-3 years, presentations are more complex resulting in a need for more 1-2-1 based interventions and support from a mental health perspective. Data received from providers suggest that Tier 3 referral numbers are increasing year on year; of particular note is the period 2020/21 to 2021/22 when referral numbers more than doubled[20].

In terms of Tier 4 capacity, it was reported that there are waits of up to 18 months for an initial assessment and then a further 12-18 months for bariatric surgery. Service providers advised that some people are choosing to pay privately for their surgery. Whilst numbers are not quantifiable, this is of significance as it was reported that the Tier 4 and some Tier 3

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services are often having to take on the two-year post-surgical management and support of those people[20].
There is reportedly no formal commissioned support for people referred to the Tier 4 service in anticipation of needing surgical intervention whilst they wait to be assessed by the Tier 4 team, although ABL said they do support people who are awaiting surgery across Greater Manchester via webinars and Facebook groups. At the time of this review ABL said that they had 1,500 people registered to attend pre-surgery webinars[20]

4.2.3 Variation

This review has found that weight management service eligibility criteria vary across localities, sometimes irrespective of provider. This has been attributed to local commissioning arrangements rather than being provider driven.

For example, in terms of Tier 2 provision the eligibility criteria for;

- ABL is a BMI score of 25-35 or 23-25 for those people with South Asian, Chinese, other Asian, Middle Eastern, Black African, or African- Caribbean family background, whereas for,
- Weigh Ahead it is a BMI of 30-34.9 or 27.5-34.9 for those with an ethnic minority heritage.

Similarly, in regard to Tier 3 provision whilst most services can accept referrals for people with a BMI of 35 or more, in Bury eligibility is set at a BMI score of 40 or more. Some providers also advised that they are not commissioned to accept people with a BMI of less than 35, even if considered to be at high clinical risk[20]. No Tier 3 service in GM adjusts referral criteria for people from South Asian, Chinese, other Asian, Middle Eastern, Black African, or African- Caribbean family background[20], in line with NICE guidance[16]

Care pathways also vary as whilst Tier 2 programmes typically run for twelve weeks, in some localities programmes can extend for up to a year. Similarly, some providers offer a two year rather than one year duration Tier 3 care pathway[20].

4.2.4 Treatment Uptake

The National Institute for Health and Care Excellence (NICE) suggests 4% of eligible adults will access Tier 3 weight management services, of which 90% of these are estimated to start treatment per year on Liraglutide. There is therefore an expectation that around 3.6% of the eligible population (people who have non-diabetic hyperglycaemia and cardiovascular

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disease) will access the anti-obesity medication, Liraglutide, each year[16]. This equates to 299 patients eligible for Liraglutide per year across Greater Manchester[17].

Data based on prescribing and capacity information received from the Tier 3 service providers suggest that only 238 people are currently receiving their first year of Liraglutide treatment in Greater Manchester. The reasons for this are not fully known, however service providers did offer that whilst some people may be eligible for Liraglutide, the decision to treat may be rescinded at a follow up appointment prior to commencing treatment. This is usually because they no longer fulfil the eligibility criteria at that point in time, especially when there has been a delay between appointments due to capacity constraints.

5.0 Recommendations

In the next phase of the project, and through a Collaborative Working Agreement with Lilly, HInM along with Greater Manchester Integrated Care System, will support the development of a case for change for obesity across Greater Manchester in line with the Greater Manchester Joint Forward Plan[18]. The next phase will build on the key themes identified in terms of the need to; build on current insight & intelligence and explore actions and solutions that may address the findings of unwarranted variation and significant unmet need within some of our obesity care pathways. Approaches taken will need to align with the principles of Core20PLUS5 to ensure that the allocation of limited healthcare resources are directed towards people living with obesity who have the greatest unmet need[19]. This work will also include an evaluation of the economic impact of obesity in Greater Manchester, exploration of the lived experience perspective and a national and international horizon scan of new and innovative weight management interventions.

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7.0. Appendix

Definitions for Weight Management Service Tiers

The Chronic Weight Management Tiers of Care are as below, as defined in “Joined Up Clinical Pathways for Obesity.”

- **Tier 1 Preventative programmes**: Public health interventions aimed at prevention and reinforcement of healthy eating and physical activity messages.

- **Tier 2 Weight management services**: Lifestyle weight management advice. This may be given in Primary care as part of on-going personalised care. Weight management services delivered in the community led by a health care professional (e.g., dietician) trained in obesity. This may also include additional support by commercial weight management services. These commercial programmes will be well defined with scientific leadership and with clear protocols.

- **Tier 3 Specialist care**: 1:1 management by a medically qualified specialist in obesity. This may be community or hospital based +/- outreach and delivered by a team led by a specialist obesity physician. Patient management will also include specialist dietetic, psychological, and physical activity input. This will include group work and access to leisure services. There will be access to a full range of medical specialists as required for co-morbidity management.

- **Tier 4 Specialist care**: 1:1 management provided by specialist obesity medical and surgical MDTs with full access to a full range of medical specialists as required. All patients will be referred to Tier 4 by a Tier 3 service. The difference between the medical specialty at Tiers 3 and 4 will be a qualitative level of experience in complex patient management. All surgical procedures will take place in Tier 4.

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