

What interventions are effective and cost-effective for supporting the health and well-being of people with obesity on healthcare waiting lists? A Rapid Review

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Background

There is a significant demand for **tier / level 3 weight management services**, in Wales. These services include:

- psychological support
- nutrition advice
- exercise
- physiotherapy, and
- referrals for **specialist surgical services** where appropriate

Patients allocated to **tier / level 3 services** have:

- a BMI over 40
- a BMI over 35 with co-morbidities (meaning two or more diseases or medical conditions)
- significant additional considerations (disability, age)
- two or more of the above

Some individuals experience long waiting times to access services.

Study aim

To bring together the evidence around the **effectiveness of interventions** for supporting the health and wellbeing of individuals with obesity on waiting lists.

Focusing on practical and resource-efficient interventions that could be **feasibly implemented in the context of obesity weight management services**.



Evidence Base

The review included 7 studies published between 2017 and 2024, conducted in the following countries:



Canada



Turkey



Australia



Germany



Spain

Key Findings

This rapid review **did not identify any studies assessing the effectiveness of interventions that could be feasibly implemented or scaled up** within the resource limitations of typical tier 3 weight management services in Wales.

Most interventions required:

- substantial input from a healthcare professional
- specialist equipment
- advanced digital infrastructure



There is some evidence to suggest **exercise interventions support the quality of life** of those awaiting surgery. Very limited evidence was found supporting improvements in 'functional' outcomes **e.g. fatigue and walking capacity**.

Only single, low quality studies were available for:



Text message-based prehabilitation interventions



Pre-operative educational interventions



Physical activity counselling interventions



Some of these interventions showed improvements in participants':

- **quality of life**
- **mental well-being**
- **'anthropometric' measures** (such as body weight, BMI, fat mass).

Since most studies were of low methodological quality **we cannot be confident in the true effectiveness of these interventions and caution is required when considering them for real-world application.**

Key Limitations of the Evidence

- No UK based studies were identified
- No studies specifically focused on brief, low-resource interventions suitable for 'scalability'
- Most studies focused on those awaiting bariatric surgery only
- No studies evaluated cost-effectiveness of interventions

Recommendations for future research

Obesity weight management services should consider **conducting robust studies with in-built general- and economic- evaluation** of interventions, with a **focus on feasibility and scalability of interventions when being designed**.

The full rapid review is available to view here:

<https://www.medrxiv.org/content/10.1101/2024.11.07.24316892v1>