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## Research Article

# Mapping Community-Based Services for Social Prescribing for Children and Young People Living with Obesity across South Yorkshire

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**Background.** High numbers of young people are living with obesity in England, with associated negative impacts on their mental and physical health. Social prescribing involves professionals referring individuals to community-based services to provide additional health and well-being support. Social prescribing may be a helpful way to provide holistic support to young people living with obesity alongside weight management services. However, there is a need to better understand the availability of community-based services that could provide this support. **Aims.** This study aimed to explore the process for mapping community-based services to be part of a social prescribing offer within children's specialist weight management services in one region of England and to provide an understanding of the availability of community-based services in this region that are accessible for this population. **Method.** Community-based services providing physical activity opportunities to young people in an area local to a specialist weight management service (South Yorkshire) were mapped using a mixed methods approach, including scoping of online resources and meetings with relevant contacts. Services were identified and reviewed against criteria developed through stakeholder engagement to assess suitability for young people living with obesity. **Results.** A total of 933 community-based services were identified across South Yorkshire between January and June 2023. Scoping and suitability assessment of these services took 6 months. There was often limited information provided about services, particularly relating to costs. Nineteen services met all suitability criteria. **Conclusion.** It requires time and capacity to identify relevant community-based services as part of a social prescribing offering. Although a high number of services were identified, few of these were suitable for young people living with obesity. Consideration should be given to how young people can be supported to access services, as well as how services can be supported to meet the needs of young people living with severe obesity.

## 1. Introduction

Latest reports show that 9.2% of children aged 4–5 years and 22.7% of children aged 10–11 years in the United Kingdom (UK) are living with obesity [1], with inequalities between those living in the most and least deprived areas of the UK. A subset of this group is classified as living with severe obesity and includes 2.5% of children aged 4–5 years and 5.7% of

children aged 10–11 years [1]. Excess weight in childhood has been linked to a range of physical and mental health problems, which can persist into adulthood and lead to long-term health conditions [2–4].

Not only is obesity in childhood associated with poor mental health including low self-esteem, low self-confidence [5], and negative body image [6] but increased risk of being a victim of bullying and discrimination is also reported [7].

This can lead to additional barriers to engaging in physical activity groups and increased difficulties with both weight management and social isolation [8].

Based on increasing levels of young people living with obesity and in need of support, the National Health Service (NHS) in England has commissioned Tier 3 level Complications from Excess Weight (CEW) clinics [9]. Twenty-one clinics were commissioned from 2022, and this number was increased to up to 43 from 2024. Tier 3 services involve clinician-led multidisciplinary teams and are usually recommended when additional support is required after attendance at Tier 2 community weight management programmes and to prevent a young person from reaching the need for more intensive medical treatment, such as surgery, at Tier 4 level [9]. CEW clinics are based at specialist Children's Hospitals and are made up of multidisciplinary teams to deliver support to children and young people aged 2–18 years who are living with severe obesity.

In the development of the CEW clinics, the Association for Young People's Health (AYPH) was commissioned to engage with families with the experience of living with obesity to seek their views on what a "good" service would involve [10]. The key themes identified from this work include patient-centred and nonjudgemental services, which can provide peer support and holistic provision, delivered at trusted and accessible locations. This aligns with the type of support that can be provided through social prescribing.

Social prescribing schemes are increasingly implemented both internationally and in the UK [11]. Social prescribing involves healthcare professionals connecting individuals to community-based services for nonmedical support with their health and well-being. This process can be done through direct referral between healthcare services and community-based organisations, or through referral to a link worker. This link worker role may also be known as a care navigator, or social prescriber, and is a professional who works with an individual to provide flexible, patient-led support in choosing and accessing a community-based service that meets their needs and interests [12]. In England, social prescribing is included in the NHS Long Term Plan [13] with aims that all primary care networks can offer an all-age link worker resource [14]. Alongside supporting individuals to choose and access services, responsibilities of the link worker include developing relationships with, collaborating with, and supporting a range of community organisations [14].

Current evaluations of the effectiveness of social prescribing programmes are frequently focused on adult populations, with findings suggesting improvements to well-being and reductions in healthcare resource need [15–19]. The evidence base for social prescribing for children and young people is more limited, although a recent review [20] identified four publications that met inclusion criteria, reflecting an increase in research over recent years. The authors concluded that there is preliminary evidence to suggest improvements to well-being from social prescribing for young people and a favourable return on investment. It is worth noting that young people over 15 years were most commonly included in these reported studies, indicating an evidence gap for younger children.

Social prescribing programmes for children and young people commonly include physical activity and low-level mental health and social support [20, 21]. Social prescribing can provide holistic, accessible support, with the potential to reduce health inequalities [22]. This aligns with recommendations for weight management services [23] and priorities of families with lived experience [10] and with aims of the CEW clinics [9], which include addressing underlying factors to obesity such as biological, psychological, and environmental factors. Whilst the clinical care delivered by professionals at CEW clinics is vital, additional community-based provision such as social prescribing has the potential to provide ongoing support. For example, successful social prescribing schemes can offer individuals' access to low-level mental health support and group physical activity in non-stigmatising, accessible locations, with reduced waiting lists and which can be available alongside, and after clinic-based treatment has ended. A survey of CEW professionals confirmed that they felt that social prescribing would be beneficial for the families they worked with, particularly for providing opportunities to access physical activity and social support and to develop self-esteem [24]. Therefore, the mapping work was focused on identifying group-based physical activity sessions specifically for young people that met acceptability criteria (outlined below).

Social prescribing could therefore be a helpful way to provide additional support to children and young people living with obesity, who are attending CEW clinics. However, social prescribing is complex, and a successful social prescribing service requires strong working relationships between clinical services and local community-based services that are suitable and accessible for the population [22, 25]. To develop a social prescribing service within CEW clinics, there is therefore a need to understand the current provision of community-based services that could provide this support and how CEW clinics could interact with these services.

The results from a survey of professionals working in CEW clinics [24] identified potential barriers to using social prescribing in their service. These included not knowing the available community-based services to refer to and needing additional support in how to identify and connect with community-based groups. Healthcare staff need to have trust in the services they refer families to, particularly when working with potentially vulnerable populations, as there may need to be additional considerations to ensure safety, accessibility, and effectiveness [18]. Similarly, community-based organisations need to have strong relationships with and trust in the clinical services, to ensure they are referring appropriately and are able to provide support as needed.

This study aimed to explore the process for mapping community-based services to be part of a model of social prescribing within children's specialist weight management services in one region of England and to provide an understanding of the availability of community-based services in this region that are accessible for this population.

## 2. Methods

This research was conducted in two stages. Stage 1 identified the provision of community-based groups delivering a range of physical activity opportunities for children and young people across South Yorkshire including Sheffield, Rotherham, Barnsley, and Doncaster. Physical activity is defined by the World Health Organisation as including “a broad range of movement, covering a variety of skill and intensity levels” [26]. Using a broad definition of physical activity allows for activities to be identified and selected by the young person based on their interests and needs (including cultural, mental health, and physical health needs). Furthermore, the use of physical activity, and this definition, aligned to pre-study public involvement work conducted with young people with lived experience of obesity and feedback from CEW professionals regarding where social prescribing may fit within their service [24]. Stage 2 then assessed the identified services against criteria developed through stakeholder engagement work, to determine whether they met the specific needs of the population, children and young people living with severe obesity.

Due to a lack of standardised protocols for mapping community-based services, a diverse sampling approach was employed. This process was informed by similar work involving scoping of voluntary organisations and providing methodological guidance [27]. All information gathered was publicly accessible, meaning that ethical approval was not required.

**2.1. Public Involvement.** Existing work involving mapping of voluntary organisations [27] recommends a flexible approach to mapping, utilising online searches, and engagement with relevant stakeholders. Prior to beginning to scope community-based services, both young people and professionals were consulted as part of public involvement work. The researcher met with young people with lived experience and staff at SHINE (Self Help, Independence, Nutrition, and Exercise). SHINE is a local community-based weight management programme for young people [28, 29]. SHINE provides holistic support, over 12-week programmes, supporting young people with both their physical and mental health. The researcher attended one of the SHINE group sessions, which was attended by five to six young people aged 10–17 years. Some of the young people also had experience of attending a CEW clinic. The researcher shadowed the activities during the session and then held a group discussion about the project and the young people’s experiences of attending groups in their community, including what groups they liked to attend and any barriers to access they had faced.

The researcher also attended local CEW clinic multi-disciplinary team meetings and held short discussions with staff. This focused on what community-based services they were currently aware of locally and what they looked for in services when referring families. These discussions helped to focus on the type of information that should be scoped for community-based services and to refine the criteria used in

Stage 2. For example, as a result of discussions with staff, cooking and healthy eating services were also identified alongside physical activity services.

**2.2. Stage 1.** Stage 1 included accessing existing online databases, websites, and social media pages as well as outreach and engagement via meetings and emails with relevant contacts. A template was developed (see Table 1) with basic information to be recorded for each service.

Existing online tools (Damm Charity Directory, Voluntary Action databases, Local Authority Directories) were used to find community-based services, and Local Authority and Council websites were scoped, using search terms related to “children and young people,” “families,” “community” and “physical activity,” “sport,” “leisure,” “recreation,” and “wellbeing.” Multiple links on these websites were used to find relevant information including “Parks, Sport and Recreation,” “Physical Activity and Sport” or “Public Health,” “Community Wellbeing,” and “Children’s Health and Wellbeing.”

In addition, local council/authority physical activity lead workers, children and young people services leads, and social prescribing contacts in each locality were contacted via email and virtual meetings were held to enquire about what mapping work may have already been completed, where to access this information, and any other relevant links to public online databases that hold this information.

The relevant South Yorkshire leads of regional and national organisations were also identified and contacted, including Yorkshire Sport Foundation, This Girl Can, Healthy Holidays, Children’s University, VCSE Alliance, Voluntary Group Networks, and Creative Minds Foundation. National sports governing body websites were also identified comprising of archery, athletics, basketball, bowls, boxing, canoeing, cricket, cycling, equestrian, football, golf, gymnastics, hockey, netball, rugby league and union, running, squash, and swimming. Websites were scoped, and where relevant, meetings were held with contacts from the organisation to gather additional information.

Websites with an online directory of services were searched using the terms “any” physical activity or sport or activity, with “any” distance from each location (Sheffield, Barnsley, Rotherham, Doncaster). A broad definition of physical activity was used, including sports clubs as well as performing arts, nature-based activities, and low-intensity activities such as yoga. All results were recorded using an Excel database, with separate tabs for each district. The template for the information collected for each service is presented in Table 1.

**2.3. Stage 2.** The services identified in Stage 1 were then individually analysed to check their suitability for children and young people living with severe obesity. A set of criteria was developed to assess this suitability. These criteria were initially based on the key themes identified by young people and parents in the AYPH report [10], which was then discussed through the public involvement work conducted with young people and CEW staff. Reflections from young

TABLE 1: Information about community-based services gathered at Stage 1.

Category	Description
Service name	Name of the service
Online link	Link to website or online information. Usually, this was an official web page or social media page (e.g., Facebook)
Sport	The type of activity offered by the service. Consistent naming was used, such as football, dance, performing arts, etc.
Age	The age range of children or young people catered for by the service
Location	A postcode was recorded. If a range of venues were available, these were all noted
Notes	This section was open text and recorded further information about what the service offered, such as day/time the sessions ran and if they catered for any additional needs, such as neurodiversity, learning disabilities, and physical disabilities

people around what types of services they wanted to access and what barriers they had experienced were incorporated into the criteria, alongside feedback from staff regarding what they looked for in services they could refer families to.

Ten criteria were developed, including the need for accessible services (local, low cost), trusted staff (training, experience, holistic approach), peer support (children and young people group-specific offer), and understanding experience of weight stigma (recreational offer, group-based with others with similar experiences).

Each community-based service identified at Stage 1 was then assessed against these criteria (see Table 2). To identify more detail about any identified services, websites and social media sites (such as Facebook groups and Instagram pages) were explored. Engagement with key contacts from Local Authorities, Yorkshire Sport Foundation, and Sheffield Children’s Hospital was used to provide additional information where needed.

**2.4. Analysis.** Analysis was conducted by the researcher. Basic descriptive statistics including simple frequency distributions and counts were used to describe the data [30], by highlighting how many and what types of activities were available in each locality. Percentages were then calculated to summarise the types of activities available in each locality including how many services met each of the ten criteria.

Given that many of these services can change in short time scales due to staffing changes and short-term funding [11, 27], the list of services identified is likely to be out of date within a short time frame. Therefore, the aim of this work was to provide an overview of the mapping process and an understanding of the extent and types of available services suitable for CEW clinics to link with and not to provide a comprehensive database of services.

### 3. Results

**3.1. Mapping Process.** Stage 1 of mapping services took place from January to March 2023 (approximately 3 months). Almost 1,000 ( $n = 933$ ) services were identified across each of the four localities. Sheffield had the highest number of services identified ( $n = 356$ ), then Doncaster ( $n = 226$ ), Barnsley ( $n = 199$ ), and Rotherham ( $n = 152$ ). The second stage assessment of suitability then took place between April

and June 2023, taking approximately 3 months. In total, identifying and scoping services took approximately 6 months to complete.

Generally, the information provided by services was limited and could be challenging to find. Often services required initial contact or an expression of interest to provide full information about costs or session availability. Each locality varied in how community services were organised and structured. If a service had a website, this was most helpful for identifying details about a service; however, social media pages were often more common and more likely to show whether a service was still active. Therefore, a mixed approach, involving online searches and contact with relevant stakeholders, was employed to ensure that all relevant information was gathered. This has been recommended in similar scoping work [27].

When meeting with contacts at Local Authorities during Stage 1, there was consistent feedback that there was a need for an accessible database of community-based services in their localities. It was commonly felt that information about current provision was often known by a few members of staff rather than being stored as a resource that was publicly available or accessible.

**3.2. Types of Services Identified.** The top five activities for each locality and the percentage of the total number of services relating to this activity are presented in Table 3. For each of the four localities, the most common sport offered was football, with approximately 20% of the total number of services in each locality being related to this. Cricket was also in the top 5 most commonly offered sports for each locality, as well as “general” or “multisport” clubs as part of leisure centres and community centres. Dance clubs were in the top 5 for three of the four areas. There was a wide range of sports provided overall, with 82 different activities identified including less traditional opportunities such as circus skills, fencing, skateboarding, cheerleading, roller-skating, and weightlifting available.

Services did not always offer a recreational or development opportunity, with many focusing on working towards gradings, competitions, matches, or public performances. Classes also often increase in skill and intensity with age, which may make it more challenging to begin a new sport when older in age compared to opportunities available for younger children.

TABLE 2: Information gathered at Stage 2 for assessing the suitability of services.

Category	Description
Location	Is the organisation based close to the city/town centre or near public transport, or is it further away, requiring car travel?
Cost	Are the sessions free to attend or is there associated cost? If there is a cost, how much is this (e.g., annual membership costs or per session costs)?
Experienced/trained staff	Are staff leading the sessions qualified, DBS checked, or experienced in running groups with children and young people?
Holistic approach	Does the service focus on supporting a young persons' mental health, well-being, or developing wider skills such as communication and self-esteem? Are sessions provided by the service open to all young people or are they targeted at a more specific group (e.g., religious organisations, those with additional needs)?
Children and young people group-specific offer	Additionally, does the service offer sessions just for children and young people (and are these split by age or developmentally appropriate groups, rather than including all ages together in one session)?
Recreational or development offer	Does the service offer recreational or development sessions or are sessions more intensive and high commitment (e.g., those focused on regular competitions, leagues, or races)?
Ongoing/Running	Is there evidence that the service is currently running or is it closed?
Focus on physical activity or cooking	Do sessions include physical activity or cooking as part of their main offer?
Potential for additional group	Does the organisation run multiple groups and have the potential for setting up an additional group specifically for young people attending CEW clinics only?
Type	Recording any information on what type of organisation it is, e.g., charity, CASC (community amateur sports club), company, CIC, voluntary organisation

TABLE 3: Top 5 activities for each locality and percentage of services related to this activity.

Activity	Sheffield		Doncaster		Rotherham		Barnsley	
	Percentage of services (%)	Locality	Percentage of services (%)	Locality	Percentage of services (%)	Locality	Percentage of services (%)	
Football	20	Football	21	Football	18	Football	20	
General sport	8	Leisure centres	5	Community groups	11	Cricket	10	
Cricket	8	General sport	5	Cricket	10	Dance	8	
Tennis	4	Cricket	5	Golf	5	General sport	8	
Dance	4	Dance	4	General sport	5	Running	4	

3.3. *Suitability Assessment.* Services were assessed in terms of their suitability for children and young people living with severe obesity based on the criteria identified. There were few services which that met all criteria of being low cost, having a holistic approach, having a specific children and young people's offer, being in an accessible location, having trained and experienced staff, and being a running, active service. Overall, across each locality, there were 19 services that met all of these criteria. The services that met all criteria were commonly the Community Football Foundations in each locality and local leisure centres. Services also included a boxing gym, circus skills sessions, community multisport sessions, and a number of gyms, which offered accessible community sessions targeted specifically at young people. Many teams offered girls-only sessions, and few clubs noted that they were able to support young people with additional needs.

Each locality was assessed in terms of how many services were available, which were active and running, and which also focused on physical activity or cooking as their main offer. Services were then assessed in terms of how many met additional criteria separately such as also having a recreational component, providing specific

groups for children and young people, or having a holistic approach or being low cost. The results are presented in Table 4.

For cost, services were categorised into either low cost (free or under £4 per session), medium cost (£4-£10 per session), high cost (£10-£20 per session), or very high cost (over £20 per session). Some services did not provide information about costs, and these were marked as "No Information" or "NI."

There were similar distributions across each locality, although Barnsley had a higher proportion of services that offered recreational or development sessions. Most commonly services did not report a specific well-being element or were not low-cost access. This is to be taken with caution, as only services that explicitly stated costs were included in this analysis. Many services did not provide any costing information and so this number of services may be higher.

#### 4. Discussion

This work aimed to identify community-based services delivering a broad range of physical activity opportunities to children and young people across South Yorkshire,

TABLE 4: Number and percentage (%) of services in each locality meeting criteria.

Locality	Active service with a focus on physical activity or cooking				Active service with a focus on physical activity or cooking AND recreational or development offer				Active service with a focus on physical activity or cooking AND specific children and young people's offer				Active service with a focus on physical activity or cooking AND holistic approach				Active service with a focus on physical activity or cooking AND low cost			
	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)	Number	Percentage of services meeting criteria (%)		
Sheffield (n = 356)	261	73	152	43	207	58	70	20	35	9%	10	3%	3	free	35	9%	10	3%		
Doncaster (n = 226)	150	66	109	48	115	51	26	12	29	13%	1	<1%	free	29	13%	1	<1%	free		
Rotherham (n = 152)	90	59	68	45	65	43	22	14	18	12%	6	4%	free	18	12%	6	4%	free		
Barnsley (n = 199)	156	78	114	75	121	80	39	26	21	14%	6	4%	free	21	14%	6	4%	free		

specifically Sheffield, Doncaster, Barnsley, and Rotherham and to assess these in terms of suitability for children and young people living with severe obesity. The aim was to explore the process for mapping community-based services that could be part of a social prescribing offer within a Complications from Excess Weight (CEW) clinic in this region and to provide an understanding of the availability of community-based services in this region that would be accessible for this population.

*4.1. Mapping Process.* Identifying local community-based services is an important part of developing a successful social prescribing offer [25] but can be challenging. A national survey of Complications from Excess Weight (CEW) clinic professionals found that whilst staff were willing to use social prescribing in their service, they were unsure of which available community-based groups existed in their local areas [24]. Many staff reported feeling that social prescribing was more adult-focused, and they were less aware of services specifically for children and young people. This could reflect limited capacity from healthcare professionals for scoping what services are available but may also reflect a limited number of services that exist in the local community. Social prescribing has previously been more commonly implemented in adult services [31].

There may be additional considerations needed when referring young people to services compared to referrals for adults. For example, when working with young people a whole-family approach may be required, with a need to support parents and carers as well as the young person directly. Furthermore, young people may be more reliant on family members to support with attendance at groups, based on aspects such as time, cost, and travel. For staff, there may be more specific skills and training required when working with young people, especially for those with additional needs [31, 32].

This aligns with reports that call for increased investment into youth services [25, 32] and highlights the need to understand how to best identify local community-based services, especially when exploring the use of social prescribing with specific populations, such as young people living with obesity, who may have additional requirements.

There are limited standardised protocols for the process of mapping voluntary and community-based services. Challenges reported by other authors include minimal information publicly available, and the need for flexibility and the ability to adapt data collection templates to the diverse provision of services [27]. This scoping study followed a similar approach to that of Walker and colleagues, using a mixed approach of scoping online information and holding meetings with relevant stakeholders. There is an opportunity for future research to consider a variety of methods in which to map community assets, such as using survey methods with service providers, or online directories of services.

Overall, 933 community-based services were identified within South Yorkshire. Detailed information about these services was often limited and challenging to find, taking

a total of approximately six months to both identify these services and assess them in terms of suitability for young people living with severe obesity. Given that community-based services can change in short time scales due to staffing changes and short-term funding, this list is already likely out of date [11, 27, 33]. However, it is important to note that community-based services may not always have the funds and capacity to host a website and keep this up to date. It therefore may not always be appropriate for the individual services to have the responsibility of providing this information. It may be that a central organisation can hold information about local opportunities, for example, via online directories. This exists in some areas, hosted by Local Authorities or the Local Active Partnership, who were found through this mapping work to have good knowledge of local services; however, this is not available in all localities with a potential variation in provision depending on where families live.

In practice, if identifying available services to be part of a CEW clinic social prescribing offer, there is a need to consider how this information about community-based services could be identified and kept up to date to ensure that families are not referred or signposted to services that are no longer running or that have changed their offer. This would be an ongoing requirement, which is unlikely to be able to be completed by clinical staff with limited capacity [24]. This may fall under the role of a link worker, who often takes responsibility for scoping community services, building relationships between services, and who can support young people to choose and access groups. However, youth link workers are not always available across all localities, and there is an understanding that link workers need additional skills to work effectively with young people and their families compared to an all-age approach [32, 34]. Investment in link workers who are well equipped to work with diverse groups of young people could help support integration of social prescribing into wider clinical services. Whilst these link workers may use mapping databases initially as a tool to support development of networks of local services, their role could offer the time and capacity to build relationships with services and more in-depth understanding of their provision, for example, through feedback from service users and interactions with delivery staff. This detailed knowledge of services and relationship building can be highly beneficial but can also cause potential challenges if this knowledge remains with the individual link worker in case of staff turnover [35].

*4.2. Suitability of Services.* This current mapping work found a high number of services available for children and young people; however, the number of services that met all the suitability criteria for a population of young people living with obesity was limited (19 out of 933 services overall). Services other than these 19 may not be “unsuitable” but rather did not meet all criteria or may have had insufficient information provided to determine this. It may be that new sessions could be created, existing sessions could be adapted, or additional support could be provided to increase accessibility of these services for young people living with obesity.

Commonly Community Foundation Football Clubs and Leisure Centres met all criteria, as they had the existing infrastructure to be able to offer free or low-cost support across multiple community-based locations. Although these clubs offered multisport opportunities, it should be noted that many young people living with obesity face barriers relating to negative experiences of weight stigma and sport [10]. Therefore, traditional sports clubs and gym settings can cause a barrier for young people, as noted through engagement work with young people and families [10].

It is important that healthcare professionals can trust services to offer helpful and compassionate activities to children and young people, especially if they are vulnerable or have additional needs to consider [18, 34]. Accessibility factors such as access to a car, provision of safe and reliable public transport, cost requirements (including any cost of equipment), and perceptions of a safe and inclusive environment, as well as timing of sessions, can all provide barriers to attendance [36] and exacerbate health inequalities. There was often a need to contact a club directly for more information, which may deter some families from enquiring, especially if they face additional barriers such as cost or travel access.

Community-based services provide important opportunities for young people, but there is a need to consider not only how young people can be supported to access services but also how services can be supported to meet the needs of young people. Additional support for community services needs to be considered especially if they are providing support to young people with more complex needs. There is a need for two-way trust between clinical and community services; for example, community services need to trust that clinical services are referring the right young people to their service and provide clarity on what the service can offer [25]. Staff at community-based services may require time and financial support to be able to access training, such as supporting mental well-being, neurodiversity training to support young people with additional needs, or opportunities for supervision.

**4.3. Strengths and Limitations.** This mapping work was able to provide an overview of the number and type of community-based services offering physical activity opportunities for children and young people in South Yorkshire that are suitable for young people living with severe obesity. However, this is limited by the fact that this is likely not an exhaustive or up-to-date list and is specific to the local area. Nationally, each locality will vary in terms of how much existing work has been done to map community assets; for example, some areas may already have access to existing online databases.

It is also important to note that analyses conducted were based on the availability of information reported by the services themselves. For example, where numbers of services are categorised as “low cost” such as in Table 4, only services that explicitly stated costs were included in this analysis. There were many services that did not provide any costing information and so this number of services may be higher.

Additionally, where services reported using a holistic approach, this might not accurately reflect what happens in practice and may be better recorded through feedback with service users. For this study, this information was recorded based on what services reported about their own provision, and it may be that there is a more objective way to classify this, such as training requirements or quality standards; however, this again adds time and cost implications to services.

The services and activities that young people want to access are highly individualised. It should be considered that what is accessible for one person may not be accessible for all and not all young people living with obesity will have the same preferences over what activities they want to access and how they want to access these. Whilst this study has focused on mapping local community services, in practice social prescribing services should also work with each individual young person to identify what matters to them. In this way, the mapping of services and the creation of a database of local assets is important but is only one way to identify local opportunities and social prescribing activities need not be limited to just these services.

## 5. Conclusion

Identifying suitable, local community-based services is a key part of developing a social prescribing offer, but this information can be challenging and time-consuming to find and keep up to date. Support is needed in terms of developing strong working relationships between clinical and community-based services, particularly when working with more complex groups such as young people living with obesity. Consideration should be given to how young people can be supported to access services, as well as how services can be supported to meet the needs of young people living with obesity. A youth-specific link worker embedded into clinical services may be a helpful way to provide this support.

## Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## Disclosure

This work was undertaken as part of a PhD programme at Sheffield Hallam University.

## Conflicts of Interest

The authors declare that there are no conflicts of interest.

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