NHS Health Scotland

Standards for the delivery of tier 2 and tier 3 weight management services for children and young people in Scotland

Document endorsed by BDA The Association of UK Dietitians

Healthier Scotland Scottish Government

This resource may also be made available on request in the following formats:

0131 314 5300

nhs.healthscotland-alternativeformats@nhs.net

Contact:
Dr Suzanne Connolly, Senior Health Improvement Officer, Diet and Healthy Weight Team, NHS Health Scotland.
Email: suzanne.connolly4@nhs.net

Acknowledgement of contribution:
Vicki Bennett, Dietitian, Food and Health Team, Fife Health and Social Care Partnership

Cath Morrison, Programme Manager Child Healthy Weight, NHS Lothian

Dr Laura Stewart RD, Professional Adviser, Diet and Healthy Weight Team, Scottish Government

Published by NHS Health Scotland

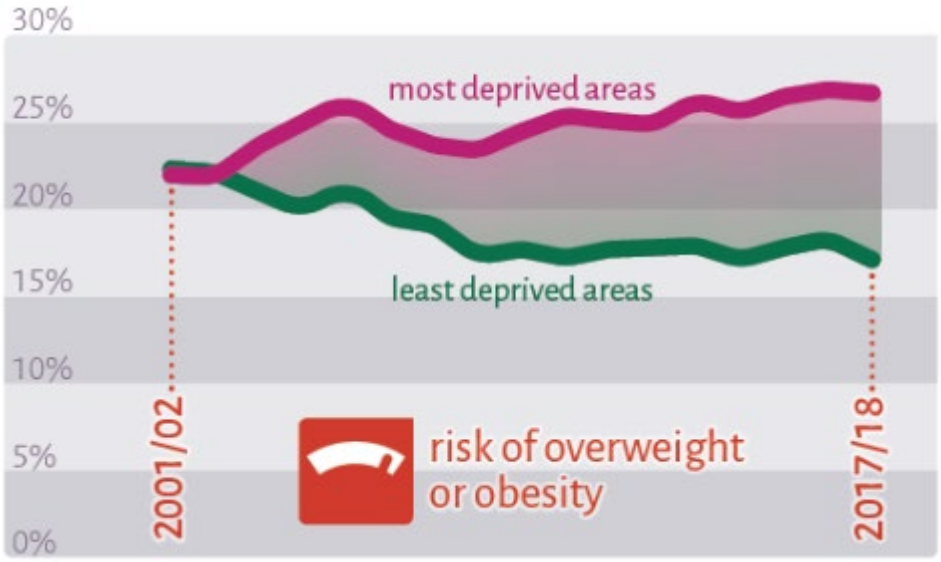
1 South Gyle Crescent
Edinburgh EH12 9EB

Contents

Background

In Scotland, the rates of overweight and obesity for both children and young people are among the highest in the developed world.[1] The 2018 Scottish Health Survey estimates that 28% of children are at risk of overweight (including at risk of obesity) – of which approximately half (13%) are at risk of obesity specifically.[1] The latest figures from NHS National Services Scotland, Information Services Division (ISD)[2] show that in the school year 2017/18, of more than 50,000 children in the first year of primary school (P1) measured across Scotland, 12% of children were at risk of overweight and a further 10% were at risk of obesity.*

Percentage of P1 children at risk of overweight or obesity by deprivation



Source: NHS National Services Scotland, Information Services Division 2018

There are substantial inequalities in the risk of overweight and obesity between children living in the least and most deprived areas in Scotland – and

* The stats represented here are based on epidemiological thresholds as opposed to clinical thresholds (see Glossary for more information).

there is evidence to suggest that this gap is widening.[3] ISD (2018) report that the 'proportion of Primary 1 children at risk of overweight or obesity has gone up in the most deprived areas but gone down in the least deprived areas'. The report goes on to say that findings from the National Child Measurement Programme (NCMP) for England 'also show a strong, and increasing, association between deprivation and risk of overweight and obesity in childhood'.[4] Wood (2019) writes that further examination of the latest ISD figures show that 'very high body mass index (BMI) in early childhood is increasingly a problem concentrated in Scotland's most deprived areas'.[5]

Studies have demonstrated a relationship between the occurrence of adverse childhood experiences and adult obesity.[6,7] It is now well evidenced that survivors of trauma are at higher risk of a range of health, mental health and social difficulties[8,9,10] and are almost three times more likely to experience morbid obesity.[11]

There is mounting evidence to demonstrate that children who are living with overweight and obesity are more likely to experience bullying, mental health concerns[12,13] and stigmatisation.[14,15,16,17] Childhood obesity also puts children and young people's physical health at risk. Children with obesity are more likely to develop type 2 diabetes in childhood[18] and to experience obesity and a host of related conditions, as adults.[19]

Purpose of the standards

The purpose of these standards is to ensure a consistent, equitable and evidence-based approach to the treatment of overweight and obesity for children and young people up to the age of 18 years across weight management services in Scotland. The standards model a tiered approach to weight management services which broadly mirrors The UK Obesity Care Pathway.[20]

Policy context

The pervasiveness and health and economic consequences of obesity mean that reducing its prevalence is a key priority and a major challenge for government, delivery partners and public health professionals.[1,21]

Most recently, the Scottish Government's Healthier Future: Scotland's Diet and Healthy Weight Delivery Plan,[22] published in July 2018, set out a national ambition to halve child obesity in Scotland by 2030 and to significantly reduce diet-related health inequalities. The plan, which has over 60 actions, has a strong focus on primary prevention, including population-wide approaches that will impact everyone in Scotland. In addition to preventative actions, the delivery plan also recognises the need for 'targeted and tailored support specifically to those children and families who are most at risk'. This includes a commitment to working with NHS Health Scotland and partners to 'develop evidence-informed and cost-effective minimum standards and pathways for weight management programmes'.[22]

The approach set out in the delivery plan is underpinned by a number of other key national policies and work streams. The Public Health Priorities,[23] published in 2018, which the Scottish Government, COSLA and a range of partners have committed to, include a priority to create 'a Scotland where we eat well, have a healthy weight and are physically active'. Sitting alongside the diet and healthy weight delivery plan, the Scottish Government published A More Active Scotland: Scotland's Physical Activity Delivery Plan[24] in July 2018. This recognises the importance of both diet and activity in promoting and maintaining healthy weight. The Health and Social Care Delivery Plan (2016) also calls on NHS Boards to integrate the National Physical Activity Pathway into all appropriate clinical settings, including weight management services.

Getting it Right for Every Child (GIRFEC) recognises that children and young people will have different experiences in their lives, but that every child and young person has the right to expect appropriate support to allow them to grow, develop and reach their full potential. Improving maternal and infant nutrition: a framework for action[25] and regulations[26] on food provided in

schools also aim to promote healthy weight among children and young people. Furthermore, reducing overweight and obesity prevalence contributes to the new Scottish National Performance Framework,[27] which includes a national indicator on healthy weight for children.

Also pertinent for the evolution of weight management services in Scotland is Scotland's Digital Health and Care Strategy[28] which stresses the growing imperative for digital to support the way that services are delivered, and to empower people to more actively engage with and manage their own health and wellbeing.

Child Healthy Weight programmes in Scotland

All NHS Health Boards in Scotland have established Child Healthy Weight (CHW)* programmes, with most offering a range of preventative and treatment services. Beginning in 2008, this work has been supported by evidence-based guidance issued by the Scottish Government. Later iterations included updated guidance and targets to improve CHW as part of the Scottish Government's Health, Efficiency, Activity and Treatment (HEAT) performance framework. Following the removal of HEAT targets in March 2014, NHS Boards have continued to be supported to deliver CHW programmes through the Outcomes Framework, which sets out clearly defined outcomes against which NHS Boards are monitored.

Guidance and targets notwithstanding, considerable variation has arisen in how weight management services for children and young people are designed and delivered in Scotland and this has been identified as something which

* CHW is a collective term, commonly used in Scotland, to refer to services and interventions (one-to-one, group or school) for the prevention (tier 1) and treatment of overweight and obesity (tier 2 and tier 3) among children and young people. However, these standards cover tier 2 and tier 3 aspects of services and interventions only.

needs to be addressed.[29,30] The Scottish Public Health Obesity Special Interest Group (SPHOSIG)[30] called on the Scottish Government to draw on the experience of the existing weight management programmes for children and young people and research-based guidelines to develop national guidance, to aid development of clear pathways to appropriate behavioural interventions and treatment of overweight and obesity. The report also draws attention to the growing inequality gap in obesity risk between the least deprived and the most deprived among Scottish children. Similarly the Royal College of Paediatrics and Child Health (RCPCH) has recommended that the Scottish Government works to ensure that 'children and young people who are already overweight or with obesity have access to the support and treatment they need to reduce their weight'.[31,32]

About the standards for weight management services

Informed by local discussion with NHS Boards and the recommendations from SPHOSIG[30] and RCPCH[31] in 2017–18, NHS Health Scotland carried out a mapping of weight management services across Scotland with the aim of providing a more up-to-date overview of current services. Again, this exercise highlighted the need for a more consistent and equitable approach to the provision and delivery of weight management services for children and young people.

With broad consensus for the need for development of standards for weight management services, NHS Health Scotland convened an expert reference group which included representation from service leads, dietitians, clinical psychology, physical activity professionals, various NHS Health Scotland staff, Scottish Government policy leads and academics. The group also undertook consultation on working drafts of the standards (see Appendix 1 for a list of those involved in the development and peer review of the standards).

These standards have been informed by best available evidence, including the National Institute for Health and Care Excellence (NICE), Scottish

Intercollegiate Guidelines Network (SIGN) guidelines, Public Health England (PHE) work on commissioning and delivering tier 2 weight management services, learning from good practice across Scotland and emerging evidence.

To support this work, NHS Health Scotland conducted a review of highly processed evidence published since the NICE guidance[33] in 2013. This review has been used to inform the development of these standards and will be made available on the NHS Health Scotland website. These standards have also been subject to peer review by the British Dietetic Association (BDA) and are endorsed by the BDA and the British Psychological Society (BPS).

Health Inequalities Impact Assessment

In March 2019, NHS Health Scotland facilitated a Health Inequalities Impact Assessment (HIIA) workshop to identify impacts likely to be affected by the proposals set out in a draft of the standards. Participants included representatives from Scottish Government, Obesity Empowerment Network (OEN)*, Obesity UK (formerly HOOP UK), the Minority Ethnic Health Inclusion Service (MEHIS), academics, service leads from weight management and NHS Health Scotland.

The findings from the HIIA workshop have been used to further inform and shape the development of the standards. A final report of the workshop will be made available on the NHS Health Scotland website.

* OEN were unable to attend the workshop on the day but provided feedback to the group ahead of the session.

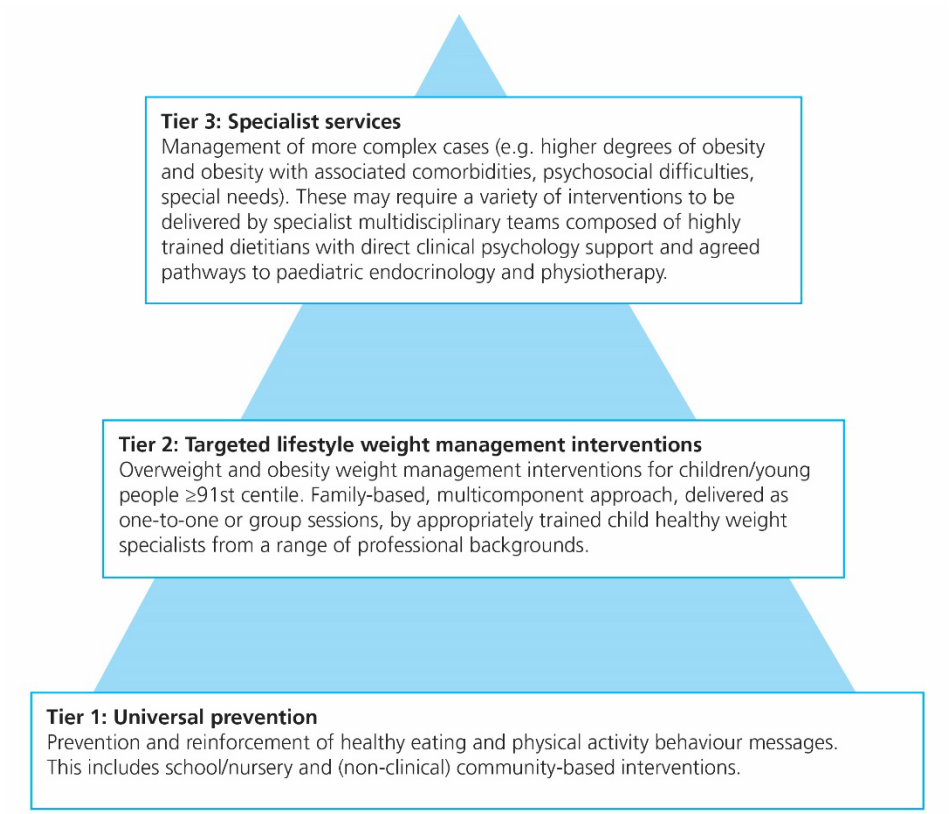
Standards for weight management services: expected outcomes

- Improved consistency, equitability and effectiveness of weight management services to support better outcomes for children and young people across Scotland.
- Improved early identification of child and family needs, allowing timely and appropriate responses.
- Improved long-term resource planning to support the development, implementation and delivery of these services.
- Services designed for and delivered to those who need it most – focused on reducing health inequalities, improving health equity and health literacy.
- Children, young people and families are supported and empowered to make positive and sustainable changes to their health and wellbeing.
- Improved monitoring and evaluating of weight management services for children and young people.
- Promotion and facilitation of continual improvement, forward planning and shared learning across NHS Boards.

Scope

This document sets out the expected standards for the delivery of tier 2 and tier 3 weight management services for children and young people – as described in Figure 1 below.

Figure 1: Tiered approach to overweight and obesity prevention and management for children and young people.



Adapted from *The UK Obesity Care Pathway* (Department of Health, 2013)[34]

The standards are not intended to replace SIGN[35] and NICE[33,36] guidance on obesity and weight management for children and young people. These guidance documents should be used to support the implementation and delivery of these standards.

The standards will be reviewed in light of emerging evidence and to reflect any significant changes in NICE, SIGN, or other related national guidance.

The standards do not cover:

- universal prevention (tier 1 services)
- pharmacological approaches
- surgical treatments for obesity (tier 4 services)
- adults (>18years of age).

Who are the standards for?

The standards are for Health and Social Care Partnerships, NHS Boards and the wide range of professionals involved in the planning and delivery of weight management services for children and young people in Scotland.

Where delivery of weight management services is contracted out, for example, to leisure services, it is the responsibility of the commissioning service to ensure that the contracted service fully complies with the standards.

Format

Each standard set out in this document includes a statement of the expected level of care or action, criteria describing structures, processes and outcomes necessary to meet the standard, additional considerations and a list of resources for further learning and information. Within these standards, criteria are designated as ‘essential’ or ‘desirable’.

- Essential criteria are the **minimum** required for an effective and equitable weight management service.
- Desirable criteria include some suggested **additional** actions which NHS Boards should consider undertaking to improve the quality of services offered.

Beyond what is signalled in this document, NHS Boards are strongly encouraged to continue to innovate to develop and test more efficient,

responsive, and family-centred approaches to continually improve the quality of the services provided.

Core dataset

Additionally, all NHS Boards will be required to record standardised core data. The core dataset will provide a list of data collection criteria and supporting guidance for collecting high-quality information that will help to support local evaluation, planning and any future national evaluation of weight management services across Scotland.

The Scottish Government is currently working with NHS National Services Scotland Information Services Division, NHS Health Scotland and experts around the requirements for data collection. Separate guidance will be issued in due course.

Standards* for weight management services for children and young people

1. Designing services to meet the needs of local populations

Standard statement

Each NHS Board has a written policy which takes a strategic, coordinated and human rights-based approach to ensure children and young people living with overweight or obesity have access to effective and high-quality weight management support when needed.

Weight management services should:

- ensure programmes and support are tailored to local need. To do this, services should undertake a robust assessment of local need and consult with their local population and frontline staff to better understand their needs. This will help to identify any barriers and facilitators to uptake and completion of programmes and ensure that services are designed in a way that better meets the needs of the local populations.[37] **(Essential)**
- focus on engaging with and delivering services to 'excluded, marginalised, or otherwise vulnerable population groups'.[38] Services therefore must be flexible to ensure that they are able to accommodate issues relating to equality and diversity in local populations which might otherwise act as barriers to participation. With a view to improving services in this regard, all services should carry out a Health Inequalities Impact Assessment (HIIA) (or equivalent) and update

* The standards detailed in each section apply to both tier 2 and tier 3 unless otherwise specified.

annually. Findings should be used to target and tailor programmes and support to better meet the needs of the local population. It is paramount that delivery partners (outwith the service) place a special emphasis on reducing inequalities when planning and delivering programmes. This should be in line with the Health and Social Care Standards. **(Essential)**

- consider how 'best to provide services for children and young people with special needs or disabilities who are living with overweight or obesity. For example, through specific programmes where these are available. Or by making reasonable adaptations to mainstream programmes (including training staff) and evaluating them'.[37] **(Essential)**
- offer 'programmes at a range of times that are convenient for families with children of different ages and for working parents and carers. For example, some sessions could be offered in the evenings or at weekends'.[36] Where appropriate, services should 'adopt a flexible approach so that participants can accommodate other commitments'.[36] Services may also wish to consider 'the use of "rolling programmes" that allow participants to start at different points and cover the same material but not necessarily in the same order'.[33] The kind of services offered and the method/mode of delivery will be informed by and through consultation with local populations (see section 1 above). **(Essential)**
- be delivered without stigma or discrimination. **(Essential)**
- give consideration to the potential for individuals within weight management services to have an increased likelihood of exposure to trauma. Services should consider adopting a trauma-informed approach within its policies and service delivery practices.[39] **(Desirable)**

Considerations

- The NHS Education for Scotland (NES) National Trauma Training Framework[39] emphasises that those who would most benefit from support and services are often the least likely to access or maintain contact with them. There can be difficulties in establishing trust across a range of services, difficulties with procedures that require touch, not feeling understood by services, difficulty in attending services, and frequent disengagement.
- NHS Boards may also wish to consider engaging with organisations such as Obesity Empowerment Network (OEN) and Obesity UK when considering how best to design their services from a user perspective.

Resources for further learning and information

- NHS Health Scotland has produced a briefing on human rights and the right to health. It sets out what the right to health is, what a human rights-based approach (HRBA) to health looks like and gives some suggestions as to how the approach can be used. The PANEL principles of an HRBA offer a way to help the public sector, the third sector, communities and individuals to put rights into practice.
- The ScotPHO Profiles Tool provides access to a range of public health related indicators at different geographies including NHS Boards, council areas and Health and Social Care Partnerships in Scotland.
- Analysis Grid for Environments Linked to Obesity (ANGELO) model is a useful tool for engaging with communities to help them to identify their priorities for healthy weight.[40,41]
- The Scottish Health Council has produced the Participation Toolkit to support health and social care staff to more effectively involve patients and service users, carers and members of the public in decisions about their own care and in the design and delivery of local services.

- The Scottish Co-Production Network provides a collection of useful reports, examples, guides and training resources about co-production in Scotland.
- ISD has produced a Primary 1 Dashboard which facilitates exploration of the data included in the Primary 1 BMI publication.
- NHS Health Scotland has produced a publication: Maximising the role of NHS Scotland in reducing health inequalities, which explores the practical actions staff can put in place to reduce health inequalities.
- The NHS Health Scotland Learning opportunities to reduce health inequalities brochure details the current online courses on offer which relate to health inequalities.
- The Scottish Public Health Network produced a report: Polishing the Diamonds – Addressing Adverse Childhood Experiences in 2016, which summarised the research and set out a number of areas for action in Scotland. You can read more about ACEs in the report.
- For more information on Health Inequalities Impact Assessments (HIIA) visit NHS Health Scotland.
- The Scottish Health and Inequalities Impact Assessment Network (SHIIAN) is open to anyone working or planning to work on health impact assessments (HIA) and HIIAs in Scotland.
- The Health and Social Care Standards set out what people should expect when using health, social care or social work services in Scotland. They seek to provide better outcomes for everyone; to ensure that individuals are treated with respect and dignity, and that the basic human rights we are all entitled to are upheld.
- The Scottish Public Health Observatory (ScotPHO) has created a tool called Informing Interventions to reduce health Inequalities (Triple I). This allows users to compare the estimated health and inequality impact of different interventions.

- NHS Health Scotland (2017) published an updated health needs assessment of people with learning disabilities in Scotland. The health needs assessment takes into account the growing research evidence base regarding the health of people with learning disabilities, covering a number of health needs, including diet and healthy weight.
- Public Health England has published guidance (2016) on making reasonable adjustments to weight management services for people with learning disabilities. However, it is worth cautioning that the reasonable adjustments guidance case studies provided were solely focused on the management of weight through diet only or exercise only and not multicomponent interventions.
- The Transforming Psychological Trauma Framework is a whole of Scottish workforce document offering defined parameters according to the particular role a service or individual may have in working with people who may have experienced trauma. The Transforming Psychological Trauma Training Plan offers structure and suggestions around the fulfilment of training needs and organisational readiness in adopting a trauma-informed approach.
- The Education Scotland Paper – Nurture, Adverse Childhood Experiences and Trauma informed practice – explores the joins between adverse childhood experiences, trauma and Getting It Right For Every Child (GIRFEC) approaches.

2. Equipment and environment considerations

Standard statement

Weight management services for children and young people are delivered in a suitable environment which promotes equality and avoids prejudice and stigma that those experiencing obesity often face.

Weight management services should:

- ensure that the practical and environmental needs of children and young people with higher body weights and their families are met. The BDA Obesity Specialist Group (2018) suggest (for adult populations but pertinent for children, young people and their families) that services should 'anticipate the patient's possible needs and attempt to create a physical environment that welcomes rather than challenges' as it is an important aspect of the care of people with higher body weights.[42] Suggestions include ensuring adequate numbers of bariatric chairs with arm rests or regular chairs without arm rests and with sufficient space between chairs to allow easy movement.[42] **(Essential)**
- have a documented health and safety risk assessment regarding the availability of facilities/equipment to care for children and young people with higher body weights. Any service-level agreements should also be compliant with these standards. This risk assessment should give consideration to:
    - accessibility – this should include lifts, toilets, and changing facilities, with considerations for transgender/non-binary young people. Consideration should extend to toileting facilities e.g. wall mounted toilets have lower safe working loads than floor mounted and the need for grab rails to assist with standing.
    - safe working loads of equipment, in particular exercise equipment. **(Essential)**

Note: The training of healthcare professionals and considerations around the language and images used when marketing weight management services are important considerations and are addressed elsewhere in this document.

Resources for further learning and information

- The National Association of Equipment Providers has produced guidance for the case management, assessment, prescription and delivery of bariatric equipment for people with higher body weights.

3. Referral pathways and criteria

Standard statement

All NHS boards have an explicit weight management pathway for children and young people with a BMI ≥91st centile.

Weight management services should:

- include both tier 2 and tier 3 services as described by Figure 1: Tiered approach to the prevention and management of overweight and obesity for children and young people (see above). Further details are given throughout this document regarding referral criteria and suitable interventions for each service tier. **(Essential)**
- adopt the following referral criteria:
    - Body mass index (BMI): services should make provisions so that children and young people with a BMI ≥91st centile are eligible for referral to weight management services. **(Essential)**
    - Age range: weight management services are suitable for children and young people up to 18 years.**(Essential)**
- give consideration locally to the services offered and delivered to those aged 16–18 years. There may be circumstances where, due to type of service provision or developmental age, it may be more appropriate to refer a young person to an adult weight management service. Local child and adult weight management services should work jointly to agree the best approach.[*] **(Essential)**

[*] Where young people below the age of 18 years are referred to adult weight management services their needs may be different from those of adults aged 18 years and above. Justification for this on an individual basis will be needed, and ongoing evaluation to ensure that their needs are being met.

- ensure that there is no gap in provision of services between children and young people's and adult services. Appropriate pathways should be put in place to ensure, where needed, the continuation of weight management services when a person reaches the age of 18 years. Support and management should be reviewed throughout the transition process and clarity between weight management teams (in the case of separate child and adult services) about who is leading, to ensure continuity of care.[36] **(Essential)**
- include both the option for self-referral and referral from health and social care and education professionals, including nutrition and dietetic teams, general practitioners, paediatricians, school nurses, health visitors, social work, dental and education professionals and so on. **(Essential)**
- ensure when referrals are made by professionals, the child or young person and parent/carer have consented to the referral. The informed consent process requires that the individual possesses both the means and the information necessary to make a meaningful decision, is made aware of the risks and benefits, has reasonable expectations, understands what success looks like, what they can reasonably expect for follow-up support and 'what to do when standards fall short of these expectations'.[43] **(Essential)**
- use standardised referral forms for self-referral and professional referral. Links to sample forms are provided (see Resources for further learning and information, below) which can be amended to fit local need. These forms have been developed based on NICE and SIGN guidelines and local learning. **(Desirable)**
- offer a single point of access to weight management services for children and young people for each NHS Board area*. Learning from

* In some areas it may be more appropriate to have a central point of access in a Health and Social Care Partnership.

good practice in Scotland suggests that a single point of access helps to streamline the referral process and remove barriers to access by minimising confusion among professionals referring into services and those wishing to self-refer. **(Essential)**

- actively engage with and promote awareness of weight management services locally with health and social care and other professionals as described above. This should also include awareness raising around the option for self-referral. **(Essential)**
- put in place a programme to 'raise awareness of weight management services among the local target population, with age-specific and appropriate marketing. Where possible service users should be consulted in the development of resources and messaging'.[37] Marketing materials and resources should use people-first language[44], avoid the use of any stigmatising language or images[14] and should be developed in line with the Scottish Government's Health Literacy Action Plan.[45] They should be easy to read, in the 'most appropriate language and disseminated through media that your target audience engage with'.[37] **(Essential)**

Considerations

- Rurality issues may dictate that services in some NHS Board areas may not have the capacity to deliver tier 2 services as group/community-based sessions. In these circumstances it would be appropriate to deliver as a one-to-one intervention – face to face or with digital components. In cases where group sessions are not feasible, services may wish to consider facilitating or signposting to appropriate peer support networks so as to 'ensure participants are able to experience the beneficial effects of peer support'.[46]
- Current NICE guidance suggests that BMI centiles should be used to diagnose overweight and obesity in children. Waist circumference should not be used to diagnose overweight and obesity in children.[36]

For children under four years of age UK-WHO growth charts should be used and for children and young people over four years of age, UK 1990 reference charts should be used.[47]

- Current NICE guidance suggests that 'any publicity should clearly describe: who the programme is for (age range, any eligibility criteria and the level of parental involvement needed); how to enrol (including whether participants can self-refer or need a formal referral from a health professional); programme aims, type of activities involved (to alleviate any anxieties about the unknown and to ensure expectations are realistic): 'healthy living' and any fun aspects should be emphasised; time and location; length of each session and number of sessions'.[33]

Resources for further learning and information

- A number of resources currently exist for professionals to assist with conversations about weight. Online training on general health behaviour change related to long-term conditions and weight management conversations is currently available to all NHS Boards through NHS Health Scotland.
- NHS Health Scotland has also developed an online module: Raising the issue of child healthy weight.
- Public Health England (PHE) has developed Let's Talk About Weight – a resource which aims to supports health and care professionals to identify children who are above a healthy weight, to sensitively discuss weight with families, and to signpost families to weight management services.
- PHE has produced a guide which aims to support school nurses, their teams and other professionals to have supportive and constructive conversations with parents about their child's weight status. It describes the reasons why some parents react in a range of ways, including experiencing distress and feeling anger after receiving

feedback about the weight status of their child, and provides a framework for practitioners to respond to such distress in a helpful and sensitive manner. The supporting annexe will be of particular interest.

- For further information on best practice guidance on measuring overweight and obesity for children and young people visit the Royal College of Paediatrics and Child Health to access growth charts and training/resources for healthcare professionals about the charts and how to use them.
- The Association for the Study of Obesity has produced a position paper on weight bias and stigma and detailed recommendations for the presentation of information about obesity.
- A number of 'obesity image banks' have been created to facilitate free access to non-stigmatising images:
  - www.imagebank.worldobesity.org
  - www.uconnruddcenter.org/media-gallery
  - www.obesityaction.org/oac-image-gallery/oac-image-gallery-categories
  - www.obesitynetwork.ca/images-bank
- Other helpful resources and tools can be found on the Health Literacy Place – a knowledge network hosted by NHS Education for Scotland.
- See sample forms for self-referral, professional referral and referral form which cover referral for children under five years of age. These forms have been developed based on NICE and SIGN guidelines and local learning.

4. Triage and assessment

Standard statement

When a child or young person is referred to a weight management service, a systematic process of triage and assessment is carried out by an appropriately trained member of staff. A care plan is developed, implemented and evaluated.

Weight management services should:

- ensure all referrals to weight management services are received at a central triage point within a designated Health Board*, where individuals are then referred to the weight management programme best suited to their needs or receive further assessment. **(Desirable)**
- ensure referrals are triaged in a systematic process by appropriately trained staff with advanced clinical knowledge, for example by a registered dietitian or registered nurse with specialist training in weight management. Good practice in Scotland suggests that this is necessary given the increasingly complex needs of those referred to weight management services and to ensure that those referred receive the appropriate level of care. **(Essential)**
- seek to make initial contact with people in a timely manner. Time from referral to starting the programme† should ideally be no more than 18 weeks in line with National Waiting Time Standards in NHSScotland. This standard represents the upper limit of how long a person should expect to wait. Where possible, services should aim to see people much sooner. **(Desirable)** Where a time lag is unavoidable,

* In some areas it may be more appropriate to have a central point of triage in a Health and Social Care Partnership.

† 'Start of the programme' is defined as attendance at an initial one-to-one assessment or group session.

consideration should be ‘given to putting in place a plan to maintain engagement until the service can be accessed. This could include signposting individuals to other lifestyle activities and services in their local area, such as leisure services and walking groups’.[37] **(Essential)**

- schedule an initial one-to-one meeting as soon as possible with the parent/carer, so that referral details can be confirmed and suitability and readiness for services assessed. Please note that depending on the age and stage of development of the child, in some cases the initial appointment may be with the young person, rather than their parent/carer. Again this appointment should be conducted by an appropriately trained professional and in a timely manner (see above). **(Essential)**
- ensure the following groups of children and young people should only be seen by a specialist in childhood obesity management and should be referred to or consulted with hospital or specialist paediatric services as treatment is being considered or commenced:
    - Children who may have serious obesity-related morbidity that requires weight loss (e.g. benign intracranial hypertension, sleep apnoea, obesity hypoventilation syndrome, orthopaedic problems and psychological morbidity).
    - Children with a suspected underlying medical (e.g. endocrine) cause of obesity including children of short stature.
    - All children under 24 months of age with severe obesity (BMI ≥99.6th centile).
    - Children with Prader-Willi syndrome or where this is suspected. **(Essential)**
- seek to ‘identify whether the child or young person’s mental wellbeing is affected by their weight. For example, whether there are any signs of psychological distress, depression, bulimia, self-harming, symptoms indicative of binge-eating disorder or other mental health problems related to their weight. Identify whether their weight is a consequence

of circumstances that have affected their mental wellbeing. (For example, if they have experienced bereavement or have caring responsibilities.) If concerns about their mental wellbeing are identified refer the child or young person to their GP for assessment and treatment, or discuss with the psychologist supporting the weight management services to be seen by them or for onward referral to child and adolescent mental health services (CAMHS). (Note: such concerns may be identified at any stage of a weight management programme)'.[37] **(Essential)**

- ensure that local, wider referral pathways and signposting procedures are in place for families in need of additional support, including social care services, GPs, housing support, income maximisation and debt advice services, smoking cessation, drug and alcohol services, mental health and so on.[37] These pathways should be written and clearly available within each service and should include what to look for, an outline of support offered, and details of how to refer/signpost. This would help ensure that families in most need receive timely support. **(Essential)**
- consider referral to tier 3 in the following circumstances:
    - BMI >3.5 standard deviations (SD).
    - Under 24 months of age.
    - Children and young people who have emotional or behavioural issues (e.g. some autism spectrum disorder and attention deficit hyperactivity disorder and/or a documented history of violent behaviour).
    - Learning disability.
    - Prader-Willi syndrome.
    - Children and young people who have previously accessed a tier 2 service and subsequently identified as requiring more intensive support.

- Parent/carer has a history of an eating disorder.
- Complex medical history including co-morbidities.
- Complex social history. **(Essential)**

- inform parents/carers of how they can enrol in the future (including the fact that they have the option to self-refer into the service) if they have identified that they are not ready to attend a programme or have disengaged with the programme. Services should point them to information and advice on healthy eating, physical activity and how to reduce sedentary behaviour.[37] **(Essential)** Services may also wish to consider offering a follow-up appointment in three or six months.[37] **(Desirable)**

Resources for further learning and information

- Helpful resources and information for families can be found on the following websites: NHS inform, Parent Club, Active Scotland, Eatwell Guide, and the Change4Life.
- Food Standards Scotland offers some useful tips for parents on the use of treats and rewards.
- A Local Information System for Scotland (ALISS) is a programme and digital system to help people find and share information about local resources which can help people live well.

5. When obesity is a cause for escalating concerns about wellbeing and risk of harm

Standard statement

When severe obesity (BMI ≥99.6th centile) is a cause for escalating concerns about wellbeing and risk of harm,* NHS Boards should support an approach to safeguarding the child or young person which is informed by the Getting It Right for Every Child practice model in which assessment is proportionate, holistic, coordinated and multi-agency.

Weight management services should:

- be aware that the child or young person's health condition and sustained recovery is likely to be influenced by a complex interaction of factors such as physical, emotional and cognitive abilities, environmental, familial and social issues. **(Essential)**
- contribute as appropriate (within your role) to assessment and planning which considers and addresses the interaction of risk, needs and strengths in the child or young person's world. **(Essential)**
- be aware that if efforts by health services to provide information, guidance and support have been unsuccessful due to avoidance, hostility, denial, inability or unwillingness to follow essential clinical advice to prevent harm, these would be strong indications of the need to escalate concern. It will be essential to understand and address the

* 'Harm' means the ill treatment or the impairment of the health or development of the child, including, for example, impairment suffered as a result of seeing or hearing the ill treatment of another. 'Development' can mean physical, intellectual, emotional, social or behavioural development. 'Health' can mean physical or mental health.

barriers to teamwork* around the child's or young person's needs, without delay. **(Essential)**

- be aware if claims that clinical recommendations have been implemented over an extensive period of time but the child's BMI centile continues to escalate, this would be a strong indication of the need to escalate concern. **(Essential)**
- record and share in line with current guidance what steps have been taken to engage, share understanding, support, and agree goals within the single agency†. **(Essential)**
- consider and address any cultural, language or comprehension barriers to partnership and consent to share information. **(Essential)**
- be aware that young people aged between 16 and 18 are potentially vulnerable to falling 'between the gaps'. Guidance on support for vulnerable adults will apply. Local services must ensure that processes are in place to enable staff to offer ongoing support and protection as needed, via continuous planning for the young person or young adult. **(Essential)**

Considerations

- Severe obesity (BMI ≥99.6th centile) is likely to affect all aspects of a child or young person's wellbeing. It may be associated with some forms of neglect. Severe obesity can cause risk of significant harm and

* Barriers to teamwork might include lack of parental motivation or ability to work collaboratively towards shared goals; lack of access to services that might support collaboration and teamwork (such as independent advocacy for parents with learning disabilities); intransigent differences between parental and family perspectives on risk, need and recommended course of action; or differing professional perspectives on risk, need and recommended course of action.

† Single agency refers to the agency which had the original concern about risk of harm to a child or young person.

premature death. The Getting It Right for Every Child approach outlines shared inter-agency principles and core components to support children and young people's wellbeing and safety in partnership with parents and carers. This underpins the current National Guidance for Child Protection in Scotland (2014), which outlines key definitions and concepts of child abuse, neglect and harm or significant harm.

- National Guidance for Child Protection and the National Guidance on Child Protection for Health practitioners will be reviewed in 2019. These documents are key reference points for local inter-agency child protection procedures. Revisions will update advice on the conditions for information sharing with and without consent.
- There is evidence that children with obesity have poor school attendance due to bullying, low self-esteem and physical health issues. Health services should collaborate with education to implement supportive measures for families to ensure that obesity is not adversely impacting on the child's education and attendance.

Resources for further learning and information

- The Scottish Government has developed a series of wellbeing resources that practitioners can use or adapt for workshops or conversations with children, young people, parents and carers about wellbeing.

6. Intervention design and core components

Standard statement

There are formalised structures and processes in place to plan the delivery of weight management services for children and young people.

Weight management services should:

- ensure that weight management programmes are 'designed and developed with input from a multidisciplinary team and have taken into account the views of children, young people and their families. The team should include professionals who specialise in children, young people and weight management'.[33] Good practice in Scotland suggests that these should include the following professionals:
    - A registered dietitian.
    - A physical activity specialist.
    - A child psychologist to provide expertise in mental wellbeing. Health psychology/behavioural science input is also desirable for understanding general lifestyle, weight related behaviours, self-management, motivational factors and so on. **(Essential)**

    Note: Feedback from services in NHSScotland has identified psychology input both in the design of programmes, and delivery of tailored, one-to-one support, at tier 3, as a crucial and indispensable feature of a comprehensive weight management service.
- in line with the best available evidence,[8,9,11,15] provide treatment programmes for children and young people which are 'multicomponent' and incorporate the following elements: 'behaviour change, be family-based, involving at least one parent/carer and aim to change the whole family's lifestyle. Programmes should also aim to decrease overall dietary energy intake, increase levels of physical activity and decrease

the amount of time spent in sedentary behaviours (e.g. screen time)'.[35] **(Essential)**

- design interventions with the target audience in mind. Interventions should be relevant and suitable for the age range. For example, services for primary-school-age children should differ in design to those services aimed at adolescents. **(Essential)**
- draw on expert advice, evidence and experience to date when agreeing the design of individual components, and the balance between diet and physical activity interventions. However, in order to promote consistency and quality of services across NHSScotland, programmes should adhere to and incorporate the following elements:
    - Dietary approaches should be individualised, and include the following, as appropriate:
        - Total energy intake
        - Malnutrition
        - Eating habits (fussy eating, binge eating, comfort eating and parenting skills with managing these)
        - Use of food as a reward (particularly for parents of young children)
        - Portion sizes
        - Food labelling
        - Snacks
        - High fat and sugar food and drinks
        - Meal planning
        - Food skills (desirable to offer this as part of the service but at a minimum signpost to local and community organisations who may offer this kind of support)

- Physical activity should be offered to everyone and considered a core component of any treatment programme.
    - This requirement can be achieved through practical sessions embedded and delivered within the service or through sessions offered outwith the service by delivery partners, such as leisure services.
    - NHS Boards should work to integrate the core elements of the National Physical Activity Pathway into weight management services. This includes upskilling staff to raise the issue of physical activity, undertake physical activity screening to determine current activity status and provide physical activity brief advice and brief interventions as part of a long-term health behaviour change approach to weight management.[48]
    - In addition to the practical sessions, children, young people and their families should also be supported and empowered to meet the CMO's physical activity guidelines within their own lifestyles. Services should discuss with and signpost individuals to the local opportunities available to them.
    - Services should offer subsidised or free access, at the point of use, to physical activity sessions during the active intervention and in groups for the duration of the active intervention. Services may wish to consider (or trial) continuing (ideally for the maintenance period of up to one year) to offer subsided access to physical activity opportunities following the successful completion of the active intervention.
- Services should address screen time and physical inactivity.[49,50,51] The primary RCPCH recommendation is that families should be

encouraged to 'negotiate screen-time limits with their children based upon the needs of an individual child, the ways in which screens are used and the degree to which use of screens appears to displace (or not) physical and social activities and sleep.'[47]

- Services should be aware that sleep is often an issue in its own right. Reviewing sleep hygiene should be part of the assessment process and onward referral to appropriate services, as needed.
- Services should focus on behaviour change and self-management principles throughout the programme, encouraging the adoption of sustainable strategies and learning self-management skills from the outset. Behavioural intervention for children and young people must incorporate the following aspects:
    - stimulus control
    - self-monitoring
    - goal setting
    - rewards for reaching goals
    - problem solving
    - although not strictly defined as behavioural techniques, giving praise and encouraging parents to role model desired behaviours are also recommended.[36] **(Essential)**

Considerations

- As stated previously, SIGN 115 (2010) and NICE (2013) also recommend involving at least one parent/carer and aiming to change the whole family's lifestyle. All weight management interventions for children and young people must therefore seek to involve parents/carers/the wider family. However, in view of experience delivering interventions during the previous HEAT target – older adolescents (which identified involving parents/family as a barrier to successful intervention) – considerable flexibility is allowable in respect

of the way the parents/carers of young people are involved. However it is fundamental that parents/carers are involved in some manner. It is for NHS Boards to devise meaningful forms of engagement with parents/carers/families which enhance, rather than detract from or have no positive effect on, the impact of the intervention.

- Services may wish to consider the findings from a recent systematic review (2018)[46] which aimed to identify critical features of successful lifestyle weight management interventions for children (0–11 years) with overweight when designing interventions. Researchers found that for all three components of programmes – physical activity, healthy eating and behaviour change – that 'practical approaches were critical' for success. The analysis revealed, for example, that rather than 'simply advising that more physical activity should be undertaken, all of the most effective programmes included the delivery of sessions where children participated in physical activities together. Physical activity sessions were found to be vital for giving children both skills and confidence in, as well as enjoyment of, physical activity'. The researchers also concluded that 'not only was it important to involve both parent and child, but that programmes should focus on changing the behaviours of the whole family rather than the target child alone. Involving both parent and child allows both to have some ownership of the behavioural changes and both to develop confidence and skills'.[46]

Resources for further learning and information

- NHS Education for Scotland has developed an interactive eLearning module and resources on behaviour change skills, which is open to all health and social care staff.
- The British Psychological Society recently published a report Psychological perspectives on addressing obesity: Addressing policy, practice and research priorities[52] which looks at what psychological evidence and perspectives can add to help improve our response to obesity. The guidance builds on existing services, while identifying

areas where further resources, standards, training and staff are required.

- The current UK CMO's physical activity guidelines (2011) and supporting materials. **Note**: Please be advised that the current guidelines are due to be updated in 2019.
- NHS Health Scotland published guidance on the National Physical Activity Pathway to support health care professionals integrate physical activity into the design and delivery of existing clinical pathways.
- Moving Medicine is a resource designed by the Faculty of Sport and Exercise Medicine to support health professionals to raise the issue of physical activity in relation to a number of health conditions.
- To help you plan, deliver or assess your physical activity interventions you can join the Physical Activity Health Alliance (PAHA). It offers a wealth of shared resources and sources of good practice, including new research findings, a monthly e-newsletter, learning exchange events, and case studies of best practice.
- Visit NHS Health Scotland for a comprehensive list of the physical activity resources available.
- The World Health Organization (2019) has published guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age.
- Check out research on screen-based activities and children and young people's mental health and psychosocial wellbeing: a systematic map of reviews and the UK Chief Medical Officers' commentary on this work. This includes advice for parents and carers, and their recommendations for other stakeholders.
- The Royal College of Paediatrics and Child Health has produced a summary of existing research on the health effects of screen time on children and young people. It outlines recommendations for health professionals and families on screen time use. This includes a series of

questions and accompanying notes will hopefully also be useful to clinicians when discussing children's screen time with families.

- Sleep Scotland promotes healthy sleep in children and young people through sleep awareness, sleep counselling and education. Sleep Scotland offers a range of supports for families but also provides training courses to enable professionals to develop an understanding of sleep processes and the problems which can be encountered by children and young people, particularly those with additional support needs.

7. Treatment duration, length of consultation and frequency of contact

Standard statement

Weight management services are evidence based and provided in a way that is acceptable to children, young people and their parents/carers. Services support and empower children and young people and their families to continue to make positive changes to their health and wellbeing.

Active intervention phase

The evidence base is limited on the optimum attendance, frequency and duration of healthy weight interventions for children and young people.[53] These limitations notwithstanding, based on the past experience of the implementation of HEAT CHW interventions, on the evidence base generated by the one-to-one Scottish Childhood Overweight Treatment Trial (SCOTT) programme[54, 55], and NHS Health Scotland's high-level scoping review of the evidence, all interventions for tier 2 and tier 3 (individual or group) should seek to comply with the criteria outlined below.

Weight management services should:

- ensure all interventions (individual or group) comprise a minimum of eight sessions. Local areas are encouraged to trial and evaluate the effectiveness of longer interventions as there is some evidence to suggest that there is a dose–response relationship between volume of intervention and outcome, particularly in a group setting.[53] **(Essential)**
- ensure sessions are delivered either on a weekly or fortnightly basis. Where this is not possible, for example in more rural or remote areas, services should consider other modes of delivery, for example through peer support networks and the use of tele-health and digital approaches. At least one service in Scotland has reported successfully trialling group sessions (for adults) using Attend Anywhere. **Note:** An NHS Health Scotland Summary of Highly Processed Evidence on

Effective Components of Child Healthy Weight Interventions (in press) reports that the frequency of contact appears to have an impact on effectiveness, with *more frequent* contact associated with an increase in the effectiveness of an intervention.[53] **(Essential)**

- look to learning from good practice in Scotland which suggests that one hour is a useful guide for one-to-one assessments and a minimum for group sessions. Sessions will be longer when physical activity is delivered as part of the session. Additional sessions will be required to facilitate physical activity where this is being delivered separately. **(Essential)**

Maintenance phase and ongoing support

Weight management services should:

- send feedback to the referring GP or referring professional on completion of the programme.[36] **(Essential)**
- offer all participants and their families the opportunity for ongoing support when they have completed the active intervention phase of the programme. There is broad agreement that many people need considerably longer than the active intervention phase to develop the sustainable behaviour changes needed for weight-loss maintenance. Hence, some form of longer-term support is critical. This support should be offered for at least the first year and longer, if possible, depending on the family's needs. Good practice is to offer follow-up appointments three months after the last active appointment, with an option for further follow-up for as long as individuals and their families wish to engage. **(Essential)**
- work with their delivery partners to offer a range of options including follow-up sessions at different times and in easily accessible and acceptable venues. Participants should be signposted to other community services that can support them to achieve and maintain a

healthier lifestyle, for example local leisure services, Active Schools opportunities and coached sports clubs.[33] **(Essential)**

- work with local leisure providers and other community organisations to offer subsidised programmes and access to leisure facilities so that children, young people and their families can be empowered to continue to maintain their lifestyle changes. **(Essential)**

Considerations

- Services are encouraged to consider other modes of delivery for ongoing support. As previously stated, consideration should be given to establishing peer support networks and to the use of tele-health and digital approaches such as Attend Anywhere.

Resources for further learning and information

- Attend Anywhere is a web-based platform that helps health care providers offer video call access to their services as part of their 'business as usual', day-to-day operations.
- Active Schools is a national network of people working within schools and the wider community. See the Sport Scotland website for more information about what is happening in your area.

8. Weight management/intervention goals

Standard statement

Weight management interventions for children and young people should set appropriate goals, including weight.

Weight management services should:

- set goals for weight management interventions for children and young people to achieve a stabilisation or reduction in a child or young person's BMI and BMI standard deviation score (BMI-SDS) (also known as BMI z-score). For the majority of children and young people with a BMI ≥91st centile, weight maintenance is an acceptable treatment goal and will deliver a reduction in BMI and BMI-SDS over time. However, for some children and young people, modest weight loss may be appropriate but this will depend on a variety of factors, such as 'age and/or stage of growth'[36] (as well as the extent of their obesity). **(Essential)**
- ensure that every child or young person participating in a programme must have his/her height and weight measured by a trained professional/child healthy weight interventions worker on entry to the programme and on completion. **(Essential)**
- take additional height and weight measures at six months, nine months and one year after completing the programme, where feasible. **(Desirable)**
- in line with good practice, practitioners will be engaged in individual goal setting and monitoring of non-weight-related goals and outcomes, including but not limited to improvements to dietary intake, increased physical activity, reduced sedentary time, improved self-esteem and progress towards personal goals. NHS Boards will decide locally, using

current evidence as to the most appropriate tools for measuring progress. **(Essential)**

Considerations

- SIGN (2010) suggests that for some children and young people with a 'BMI ≥99.6th centile a gradual weight loss to a maximum of 0.5–1.0 kg per month is acceptable.'[35] The American Academy of Pediatrics (2007)[56] gives more specific weight recommendations according to age and BMI percentile, which services may wish to consider. Any treatment goals need to be individualised to the child or young person and their ability and willingness to make changes (supported by the family).

9. Staff: knowledge, skills and training

Standard statement

Staff are given appropriate education and training about weight management for children and young people.

Weight management services should:

- ensure that sufficient numbers of suitably trained and experienced multidisciplinary staff are in place to deliver weight management interventions to children and young people. Good practice suggests that regular training around childhood weight management for staff should be in place. Training needs should be reviewed on an annual basis. **(Essential)**
- ensure that the staff delivering physical activity components are 'appropriately trained and tailor the type, duration, intensity and format of activity to the population needs. This may include, for example, an individual's level of fitness, any form of disability, any pre-existing medical conditions or co-morbidities.'[37] **(Essential)**
- be aware that health professionals can struggle to talk to people about their weight in a sensitive manner. Barriers include concern about upset, time, extent of their role, lack of knowledge of what to say and of knowledge of local services.[57] NHS Boards should therefore consider providing training to support health and care professionals (and others) to have sensitive conversations about weight management. **(Desirable)**
- ensure that staff delivering services should:
    - have up-to-date knowledge and skills of behaviour change, to support weight management, maintenance and promote self-management.

- have an awareness of mental health difficulties that are prevalent among children and young people with obesity and how these difficulties influence engagement in weight management.
- recognise when individuals would benefit from professional psychological help with mental health difficulties.
- have an awareness and understanding of skills such as motivational interviewing and cognitive behavioural techniques will be beneficial in supporting children and young people to have a healthy weight. **(Essential)**

- be aware that healthcare professionals can have stigmatising attitudes and, in some cases, fail to provide appropriate advice and access to treatment.[16,17] Services should offer training and education on weight stigma and bias in order to help remove barriers that may otherwise interfere with provision of care for patients with obesity. This will help to improve treatment accessibility and reduce adverse patient behaviours such as avoiding appointments and not reporting concerns to healthcare providers.[58] **(Essential)**
- be aware that individuals living with obesity experience a range of physical and psychological challenges as a consequence of obesity. It is therefore essential that interventions in weight management integrate psychological awareness and techniques to address this. Clinical and/or health psychologists could be involved in training and supporting staff to develop psychological understanding and developing psychological practice. Appropriate training and in-service support should be used to ensure quality standards across all services.[52] **(Essential)**
- give consideration to training all staff in trauma-informed approaches to delivering weight management services. This will help staff to understand the impact of trauma on child development and learn how to effectively minimise its effects without causing additional trauma.[59] **(Desirable)**

Considerations

- Adopting a trauma-informed approach offers practitioners the opportunity to create a supportive environment with a dynamic and fundamental understanding of the factors which may have contributed directly and indirectly in relation to issues with weight management. In addition, it allows for the development of practices, policies and environmental factors which uphold the key principles of trauma-informed practice, namely:
    - Safety
    - Choice
    - Trust
    - Collaboration
    - Empowerment
- A proportion of children with obesity may suffer from eating disorders, but the prevalence is unknown. Studies suggest varying rates of binge-eating disorder among children with obesity, and in adults this is now the most commonly found eating disorder. This is an emerging field, but professionals can refer to NICE guidance on disordered eating and/or discuss with your local eating disorder experts, if this is suspected.

Resources for further learning and information

- A number of resources currently exist for professionals to assist with conversations about weight. Online training on general health-behaviour change related to long-term conditions and weight management conversations is currently available to all NHS boards through NHS Health Scotland.
- NHS Health Scotland has also developed an online module Raising the issue of child healthy weight.

- NHS Education for Scotland currently provides online and face-to-face MAP (motivation, action, prompts) behaviour change training for health and social care professionals, and others working in prevention, including local government and third sector employees.
- PHE has developed the Let's Talk About Weight: A step-by-step guide to conversations about weight management with children and families for health and care professionals. The resource supports health and care professionals to identify children who are above a healthy weight to sensitively discuss weight with families, and to signpost families to weight management services.
- PHE has produced a guide which aims to support school nurses, their teams and other professionals to have supportive and constructive conversations with parents about their child's weight status. It describes the reasons why some parents react in a range of ways including experiencing distress and feeling anger after receiving feedback about the weight status of their child and provides a framework for practitioners to respond to such distress in a helpful and sensitive manner. The supporting annexe will be of particular interest.
- For further training on awareness and prevention of weight bias, check out the free online training courses offered by World Obesity Federation.
- Obesity Action Coalition has produced a brochure which discusses the many forms of stigma and provides readers with options for dealing with stigma and ways to educate others.
- Visit ChooseLife for more information about the range of courses on the issue of mental health and suicide prevention. More information can be found on the range of training courses offered by NHS Health Scotland is available on the website.
- The Transforming Psychological Trauma Framework is a whole-of-Scottish-workforce document offering defined parameters according to the particular role a service or individual may have in working with

people who may have experienced trauma. For example, reception staff may be in the Trauma Informed category, but dietetic practitioners may require to be working at Trauma Skilled level. The Transforming Psychological Trauma Training Plan offers structure and suggestions around the fulfilment of training needs and organisational readiness in adopting a trauma-informed approach.

10. Monitoring, evaluation and reporting

Standard statement

Weight management interventions for children and young people are effectively monitored and evaluated. NHS Boards should work to continually improve services.

Weight management services should:

- record standardised core data. The core dataset will provide a list of data collection criteria and supporting guidance for collecting high-quality information that will help to support local monitoring and evaluation, planning and any future national evaluation of weight management services across Scotland. Separate guidance will be issued by the Scottish Government in due course. **(Essential)**
- report back on service delivery, funding, health outcomes for children and young people on an annual basis to Scottish Government, as requested. **(Essential)**
- evaluate their weight management services for children and young people for the purpose of continuous improvement. NHS Health Scotland will also consider, with the Scottish Government, the need for a further national evaluation. This, combined with the development of the core dataset, should enhance the potential for learning from delivery and implementation. **(Essential)**
- utilise (where possible) local resources, such as Local Intelligence Support Teams (LIST) and look to develop partnerships with academic centres to assist with data analysis and local evaluation. **(Desirable)**
- ensure participants are invited to provide feedback on services. NHS Boards should consider and explore a range of communication methods to engage with participants in order to collect feedback and these should be tailored to participant preferences, as groups may

prefer different methods. Feedback should be taken into account when considering how best to improve the service. **(Essential)**

- audit reasons for non-engagement – this is an important consideration and can help to ensure that services are being designed to meet the needs of the local service users. Feedback is essential to ensure that services are reactive to poor attendance or disengagement, to help improve engagement and impact of the service.[*] **(Desirable)**

[*] It is recognised that auditing reasons for non-engagement is likely to be difficult given that these are non-engaged individuals. However, if local user involvement in the development of services can effectively be put into place, it may be that buy-in will be improved over time.

11. Sharing learning and good practice

Standard statement

All NHS Boards actively share learning and good practice more widely.

Weight management services should:

- share learning and good practice with colleagues in other localities and more widely. This should include learning from less successful approaches, so that any replication can be minimised. Suggestions for platforms include via peer-reviewed journals, conferences and through NHS Health Scotland's Healthy Weight Leads Network. This will help to improve services overall. **(Essential)**

Glossary

Body Mass Index (BMI): BMI uses height and weight to calculate a score which indicates whether or not someone is in the healthy weight range for their height. Two sets of BMI thresholds have traditionally been used to assess children's growth[35] – epidemiological and clinical.

ISD define epidemiological thresholds as used 'primarily to assess the health of the whole child population and monitor the changes in the proportion of children at risk of unhealthy weight that have been seen in Scotland over recent years (see Table 1 below). Clinical thresholds are used to 'define children with a level of under- or overweight that may warrant clinical intervention, such as consideration of any underlying cause, advice on healthy eating and appropriate levels of physical activity, or referral to more intensive child healthy weight services.'[60]

Table 1: Thresholds used to define epidemiological categories of child (un)healthy weight: predominantly used for population health monitoring purposes

Category	Definition (used in calculations for epidemiological thresholds)
At risk of underweight	BMI less than or equal to 2nd centile
Healthy weight	BMI greater than 2nd centile and less than 85th centile
At risk of overweight	BMI greater than or equal to 85th centile and less than 95th centile
At risk of obesity	BMI greater than or equal to 95th centile
At risk of overweight and obesity combined	BMI greater than or equal to 85th centile

Source: NHS National Services Scotland, Information Services Division

Table 2: Thresholds used to define clinical categories of child (un)healthy weight: predominantly used in clinical practice

Category	Description/label in terms of rounded centile values	Definition: standard deviation (SD) score equivalent (used in calculations for clinical thresholds)
Underweight	BMI less than or equal to 0.4th centile	BMI less than or equal to -2.67 SD score
Healthy weight	BMI greater than 0.4th centile and less than 91st centile	BMI greater than -2.67 and less than +1.33 SD score
Overweight	BMI greater than or equal to 91st centile and less than 98th centile	BMI greater than or equal to +1.33 and less than +2.00 SD score
Obesity	BMI greater than or equal to 98th centile and less than 99.6th centile	BMI greater than or equal to +2.00 and less than +2.67 SD score
Severely obese	BMI greater than or equal to 99.6th centile	BMI greater than or equal to +2.67 SD score
Overweight, obese and severely obese combined	BMI greater than or equal to 91st centile	BMI greater than or equal to +1.33 SD
Obese and severely obese combined	BMI greater than or equal to 98th centile	BMI greater than or equal to + 2.00 SD score

Source: NHS National Services Scotland, Information Services Division

BMI z-score: A BMI z-score or Standard Deviation Score indicates how many units of the standard deviation a child is above or below the average BMI value for their age group. When evaluating children and young people's weight management interventions it is preferable to measure the change in a child's BMI using the BMI z-score rather than the BMI centile.

Centile/BMI centile/percentile: a measure used in statistics indicating the value below which a given percentage of observations in a group of observations fall. For example, a child whose BMI is at the 91st centile has a BMI higher than 91% of other children. It is recommended that BMI centiles are used for communication with families and clinicians.

Child Healthy Weight (CHW): collective term which is commonly used in Scotland to refer to services and interventions (one-to-one, group or school) for the prevention and treatment of overweight and obesity among children and young people. For the purposes of the standards, CHW in this context is used to refer to **tier 2 and tier 3 interventions, only**.

CHW intervention: describes a single intervention (one-to-one or group) delivered as part of the Child Healthy Weight programme.

Comorbidity: is defined as the co-occurrence of one or more disorders in the same child or young person either at the same time or in some causal sequence.

CMO: Chief Medical Officer.

Health inequalities: The unfair and avoidable differences in people's health across social groups and between different population groups.

Health Inequalities Impact Assessment (HIIA): HIIA is a tool to assess the impact on people of applying a proposed, new or revised policy or practice. HIIA goes beyond the public sector's legal duty of the Equality Act 2010 to assess impact (EQIA) by assessing the impact on health inequalities, people with protected characteristics, human rights and socioeconomic circumstances.

Obesity: From birth to less than five years of age: weight-for-height more than 3 Standard Deviation (SD) above the WHO Child Growth Standards median.[61] From age five to less than 19 years: BMI-for-age more than 2 SD above the WHO growth reference median.[62]

Overweight: From birth to less than five years of age: weight-for-height more than 2 SD above WHO Child Growth Standards median.[61] From age five to less than 19 years: BMI-for-age more than 1 SD above WHO growth reference median.[62]

Scottish Childhood Obesity Treatment Trial (SCOTT): This is an intensive behavioural dietetic intervention for childhood obesity delivered by experienced paediatric dietitians on a one-to-one basis. The SCOTT programme is based on a randomised controlled trial funded by the Scottish Chief Scientist's Office and published in Pediatrics in 2008.[54] The programme now called SCOTT was the intervention arm of this study and the programme was initially developed based on the SIGN 69 guidelines (2003). The programme has also been evaluated through in-depth interviews with parents of children who have undertaken the programme and these results have been published in two separate papers in 2008.[63, 64]

Service Level Agreement (SLA): A service level agreement defines the provision of a service between provider(s) and purchaser/recipient.

Standard deviation (SD): A measure of the extent to which the values within a set of data are dispersed from, or close to, the mean value.

Trauma: This term is widely used but in this context refers to a 'stressful event or situation (either short or long lasting) of exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost everyone' (ICD-10 1994).

UK90 growth reference: When assessing child weight status it is important to use the UK90 growth reference, to calculate an age and sex appropriate BMI centile or z-score. The UK 1990 growth charts were compiled from measurements on boys and girls collected during 11 British surveys carried out between 1978 and 1990. They show the growth patterns of these UK children.

Appendix 1 – Consultation and peer review

Reference group membership

Vicki Bennett, Dietitian, Food & Health Team, Fife Health and Social Care Partnership

Katy Berston, Community Dietitian, NHS Grampian

Kathryn Burrows, Policy Manager, Diet and Healthy Weight Team, Scottish Government

Jonathan Cavana, Senior Health Promotion Officer, NHS Lanarkshire

Jan Chapple, Lead Paediatric Dietitian, Argyll and Bute Health and Social Care Partnership

Dr Suzanne Connolly, Senior Health Improvement Officer, Diet and Healthy Weight Team, NHS Health Scotland

Janice Frye, Senior Dietician, NHS Forth Valley

Claire Hislop, Organisational Lead, Diet and Healthy Weight Team, NHS Health Scotland

Cath Morrison, Programme Manager Child Healthy Weight, NHS Lothian

Jenny Reid, Health Improvement Specialist Dietitian – Child Healthy Weight, NHS Borders

Joanne Riach, Public Health Practitioner, NHS Grampian

Dr Laura Stewart RD, Professional Adviser, Diet and Healthy Weight Team, Scottish Government

Mary Scott Watson, Health Promotion Services, NHS Forth Valley

Sheila Wilson, Team Lead for Paediatric Overweight Service, NHS Tayside

Consulted

Sarah Anderson, Clinical Associate in Applied Psychology, NHS Lothian

British Dietetic Association (BDA)

British Psychological Society (BPS)

Dr Ruth Campbell RD, Consultant Dietitian in Public Health Nutrition, NHS Ayrshire and Arran

Child Protection Policy Team, Scottish Government

Dr Stuart W Flint, Senior Research Fellow in Public Health and Obesity, Leeds Beckett University

Smita Grant, NHS Lothian Minority Ethnic Health Inclusion Service

GIRFEC Team, Scottish Government

Obesity UK (formerly HOOP UK)

Information Services Division (ISD), National Services Scotland, NHSScotland

Flora Jackson, Health Improvement Manager (Physical Activity), NHS Health Scotland

Obesity Empowerment Network (OEN)

Dr Vivien Swanson, Programme Lead, Health Psychology, NHS Education for Scotland and Reader in Health Psychology, University of Stirling

Joyce Thompson, Dietetic Consultant in Public Health Nutrition, NHS Tayside

Melanie Weldon, Team Leader, Diet and Healthy Weight Team, Scottish Government

Kath Williamson, Manual Handling Advisor, Royal Edinburgh Hospital

Carolyn Wilson, Team Leader, Supporting Maternal and Child Wellbeing, Scottish Government

Jennifer Young, Principal Educator for Trauma, NHS Education for Scotland

Peer review

British Dietetic Association – Obesity Specialist Group

British Dietetic Association – Paediatric Committee

References

[1] Scottish Government (2018). The Scottish Health Survey 2017, volume 1, main report. Available at: www.gov.scot/Resource/0052/00525472.pdf [accessed 11 February 2019]

[2] NHS National Services Scotland, Information Services Division (2018). Body Mass Index of Primary 1 Children in Scotland School Year 2017/18. Available at: www.isdscotland.org/Health-Topics/Child-Health/Child-Weight-and-Growth [accessed 11 February 2019]

[3] Tod E et al (2017). Obesity in Scotland: a persistent inequality. *International Journal for Equity in Health*,16:135. Available at: https://doi.org/10.1186/s12939-017-0599-6 [accessed 11 February 2019]

[4] NHS National Services Scotland Information Services Division (2018). Body Mass Index of Primary 1 Children in Scotland School Year 2017/18. Available at: www.isdscotland.org/Health-Topics/Child-Health/Child-Weight-and-Growth [accessed 11 February 2019]

[5] Wood R (2019). The ongoing public health challenge of childhood overweight and obesity: a view from Scotland [blog post]. Retrieved from: www.bacaph.org.uk/blog/137-the-ongoing-public-health-challenge-of-childhood-overweight-and-obesity-a-view-from-scotland [accessed 11 February, 2019]

[6] McDonnell CJ and Garbers SV (2017). Adverse Childhood Experiences and obesity: Systematic review of behavioral interventions for women. *Psychological Trauma: Theory, Research, Practice, and Policy*, doi:10.1037/tra0000313

[7] Bellis MA, Hughes K, Leckenby N et al (2014). National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviors in England. *BMC medicine*, 12(1), p.72.

[8] Krug EG, Mercy JA, Dahlberg LL and Zwi AB (2002). The world report on violence and health. *The Lancet*, 360(9339), pp.1083–1088.

[9] Scottish Public Health Network (2016). 'Polishing the Diamonds' Addressing Adverse Childhood Experiences in Scotland. Available at: www.scotphn.net/wp-content/uploads/2016/06/2016_05_26-ACE-Report-Final-AF.pdf [accessed 18 March 2019]

[10] NHS Education for Scotland. National Trauma Training Framework (2019). Available at www.nes.scot.nhs.uk/education-and-training/by-discipline/psychology/multiprofessional-psychology/national-trauma-training-framework.aspx [accessed 18 March 2019]

[11] Bellis M, Lowey H, Leckenby N et al. Adverse childhood experiences: retrospective study to determine their impact on adult health behaviours and health outcomes in a UK population. *Journal of Public Health* (2014) 36 (1): 81–91.

[12] Puhl RM and Heuer CA. Obesity stigma: important considerations for public health. *American Journal of Public Health*. 2010 Jun;100(6):1019–28.

[13] Phelan SM, Burgess DJ, Yeazel MW et al. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obesity Reviews*. 2015 Apr;16(4):319–26.

[14] World Health Organization (2017). Weight bias and obesity stigma: considerations for the WHO European Region. Available at: www.euro.who.int/en/health-topics/noncommunicable-diseases/obesity/publications/2017/weight-bias-and-obesity-stigma-considerations-for-the-who-european-region-2017 [accessed 13 December 2018]

[15] Health, *The Lancet Public* (2019). Addressing weight stigma.e168. www.thelancet.com/journals/lanpub/article/PIIS2468-2667(19)30045-3/fulltext

[16] Phelan SM, Burgess DJ, Yeazel MW et al. (2015). Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obesity Reviews*, 16(4), 319–326.

[17] Puhl R and Suh Y. (2015). Health consequences of weight stigma: implications for obesity prevention and treatment. *Current Obesity Reports*, 4(2), 182–190.

[18] Abbasi A, Juszczyk D et al. (2017). Body mass index and incident type 1 and type 2 diabetes in children and young adults: a retrospective cohort study. Journal of the Endocrine Society, 1(5), 524–537.

[19] Simmonds M, Llewellyn et al. (2016). Predicting adult obesity from childhood obesity: a systematic review and meta-analysis. Obesity reviews, 17(2), 95–107.

[20] Department of Health (2013). Developing a Specification for Lifestyle Weight Management Services: Best Practice Guidance for Tier 2 Services. DH, London. Available at: www.gov.uk/government/publications/best-practice-guidance-for-weight-management-services [accessed 11 February 2019]

[21] Scottish Government (2018) Obesity Indicators Report. Available at: www.gov.scot/binaries/content/documents/govscot/publications/statistics-publication/2018/10/obesity-indicators/documents/00542529-pdf/00542529-pdf/govscot%3Adocument [accessed 11 February 2019]

[22] Scottish Government (2018). A healthier future: Scotland's diet and healthy weight delivery plan. Available at: www.gov.scot/publications/healthier-future-scotlands-diet-healthy-weight-delivery-plan [accessed 11 February 2019]

[23] Scottish Government (2018). Scotland's public health priorities. Available at: www.gov.scot/publications/scotlands-public-health-priorities [accessed 11 February 2019]

[24] Scottish Government (2018). A More Active Scotland: Scotland's Physical Activity Delivery Plan. Available at: www.gov.scot/publications/active-scotland-delivery-plan [accessed 3 December 2018]

[25] Scottish Government (2011). Available at: www.gov.scot/publications/improving-maternal-infant-nutrition-framework-action [accessed 3 December 2018]

[26] Scottish Government (2018) Consultation on amendments to the 'Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008' Available at: www.gov.scot/binaries/content/documents/govscot/publications/consultation-paper/2018/06/consultation-amendments-nutritional-requirements-food-drink-schools-scotland-regulations-2008/documents/00536079-pdf/00536079-pdf/govscot%3Adocument [accessed 15 February 2019]

[27] Scottish Government (2018). Scotland's National Performance Framework Available at: https://nationalperformance.gov.scot [accessed 3 December 2018]

[28] Scottish Government (2018) Scotland's Digital Health and Care Strategy: enabling, connecting and empowering. Available at: www.gov.scot/publications/scotlands-digital-health-care-strategy-enabling-connecting-empowering [accessed 2 May 2019]

[29] McConville S et al (2013). Evaluation of the Child Healthy Weight Programme: Final Report October. Available at: www.healthscotland.com/documents/22544.aspx [accessed 25 October 2018]

[30] Scottish Public Health Network (2014). Report of the Scottish Public Health Obesity Special Interest Group: Expert Group on the Development of the Child Healthy Weight Programme in Scotland. Available at: www.scotphn.net/wp-content/uploads/public/2015_01_29_CHW_Report_to_Scottish_Government_Final.pdf [accessed 11 February 2019]

[31] Royal College of Paediatrics and Child Health (2017). State of Child Health Report 2017. Available at: www.rcpch.ac.uk/sites/default/files/201809/soch_2017_uk_web_updated_11.09.18.pdf [accessed 11 February 2019]

[32] Royal College of Paediatrics and Child Health (2019). Policy response for Scotland to the State of Child Health report 2017. Available at: www.rcpch.ac.uk/sites/default/files/generated-pdf/document/Policy-response-

for-Scotland-to-the-State-of-Child-Health-report-2017.pdf [accessed 11 February 2019]

[33] National Institute for Health and Care Excellence (2013). Public health guideline PH47: Weight management: lifestyle services for overweight or obese children and young people. Available at: www.nice.org.uk/guidance/ph47 [accessed 13 December 2018]

[34] Department of Health (2013) Developing a Specification for Lifestyle Weight Management Services: Best Practice Guidance for Tier 2 Services. DH, London. Available at: http://bit.ly/20qSBZS [accessed 11 February 2019]

[35] Scottish Intercollegiate Guidelines Network (2010). Management of obesity: a national clinical guideline. Available at: www.sign.ac.uk/assets/sign115.pdf [accessed 13 December 2018]

[36] National Institute for Health and Care Excellence (2014). Clinical Guideline 189: Obesity: identification, assessment and management. Available at: www.nice.org.uk/guidance/cg189 [accessed 13 December 2018]

[37] Public Health England (2017). A guide to commissioning and delivering tier 2 weight management services for children and their families Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/649196/tier2_child_weight_management_services_guide.pdf [accessed 4 January 2019]

[38] World Health Organization (2015). Interim Report on the Effectiveness of Dietary Interventions for Children and Adolescents with Overweight and Obesity. Available at: www.who.int/end-childhood-obesity/commission-ending-childhood-obesity-interim-report.pdf [accessed 20 January 2019].

[39] NHS Education for Scotland (2017). Transforming Psychological Trauma: Knowledge and Skills framework for the Scottish Workforce. Available at: www.nes.scot.nhs.uk/media/3971582/nationaltraumatrainingframework.pdf [accessed 28 March 2019]

[40] World Health Organization (2012). Prioritizing areas for action in the field of population based prevention of childhood obesity. A set of tools for member

states to determine and identify priority areas for action. Available at: www.who.int/dietphysicalactivity/childhood/tools/en/ [accessed 22 January 2019]

[41] Gillespie J, Magee E, White A and Stewart L. (2019) Eat, play, learn well—a novel approach to co-production and analysis grid for environments linked to obesity to engage local communities in a child healthy weight action plan. *Public Health*, 166, pp.99–107.

[42] The British Dietetic Association Obesity Specialist Group (2018). Dietetic Obesity Management Interventions in Adults: Evidence Review and Clinical Application. Available at: www.bda.uk.com/regionsgroups/groups/obesity/dietetic_obesity_management_interventions_2018 [accessed 21 January 2019]

[43] NHS Health Scotland (2016). Human rights and the right to health. Available at: www.healthscotland.scot/media/1276/human-rights-and-the-right-tohealth_dec2016_english.pdf [accessed 12 June 2019]

[44] NICE (2018) NICE Style Guide. Corporate document [ECD1]. www.nice.org.uk/corporate/ecd1/chapter/using-this-guide

[45] Scottish Government (2017). Making it Easier: A Health Literacy Action Plan for Scotland 2017–2021 Available at: www2.gov.scot/Resource/0052/00528139.pdf [accessed 13 December 2018]

[46] Burchett HE, Sutcliffe K, Melendez-Torres GJ et al (2018). Lifestyle weight management programmes for children: A systematic review using Qualitative Comparative Analysis to identify critical pathways to effectiveness. *Preventive medicine*, 106, pp.1–12.

[47] Royal College of Paediatrics and Child Health (2013). Royal College of Paediatrics and Child Health UK-WHO growth charts. Available at: www.rcpch.ac.uk/Research/UK-WHO-Growth-Charts [accessed 5 February 2019]

[48] NICE Public Health Guidance (PH44). Physical activity: brief advice for adults in primary care (2014). Available at: www.nice.org.uk/guidance/ph44 [accessed 15 March 2019]

[49] World Health Organization. (2019) Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age. Available at: https://apps.who.int/iris/handle/10665/311664 [accessed 2 May 2019]

[50] UK CMO commentary on screen time and social media (2019). Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/777026/UK_CMO_commentary_on_screentime_and_social_media_map_of_reviews.pdf [accessed 12 February 2019]

[51] The Royal College of Paediatrics and Child Health (2019). The health impacts of screen time – a guide for clinicians and parents. Available at: www.rcpch.ac.uk/sites/default/files/2018-12/rcpch_screen_time_guide_-_final.pdf [accessed 12 February 2019]

[52] The British Psychological Society (2019). Psychological perspectives on addressing obesity: Addressing policy, practice and research priorities. Available at: www.bps.org.uk/sites/bps.org.uk/files/Policy/Policy%20-%20Files/Understanding%20Obesity%20Draft%20Report.pdf [accessed 12 April]

[53] Martin L and Greci S (in press). Summary of highly processed evidence on effective components of Child Healthy Weight interventions. Edinburgh: NHS Health Scotland; 2019.

[54] Hughes AR, Stewart L, Chapple J et al. Randomized, controlled trial of a best-practice individualized behavioral program for treatment of childhood overweight: Scottish Childhood Overweight Treatment Trial (SCOTT). *Pediatrics*, 2008, 121, 3, e539-46, doi: 10.1542/peds.2007–1786.

[55] Stewart, Laura; Houghton, Jan; Hughes, Adrienne R; Pearson, Dympna; Reilly, John J (2005) Dietetic Management of Pediatric Overweight: Development and Description of a Practical and Evidence-Based Behavioral Approach. *Journal of the American Dietetic Association* 105(11):1810–5 ·DOI: 10.1016/j.jada.2005.08.006

[56] Spear BA, Barlow SE, Ervin C et al (2007). Recommendations for treatment of child and adolescent overweight and obesity. *Pediatrics*, 120 (Supplement 4), pp.S254–S288.

[57] Scottish Government (2018). A Healthier Future: type 2 Diabetes prevention, early detection and intervention: framework. Available at: www.gov.scot/publications/healthier-future-framework-prevention-early-detection-early-intervention-type-2/pages/11 [accessed 15 December 2018]

[58] Flint SW (2015). Obesity stigma: Prevalence and impact in healthcare. *British Journal of Obesity*, *1*(1), pp.14–18.

[59] NHS Education for Scotland and Scottish Government (2018). The Scottish Psychological Trauma and Adversity Training Plan. Available at: www.nes.scot.nhs.uk/media/4236974/FINAL%20REVISED%20CONSULTATION%20NESD0715-NATIONAL-TRAUMA-TRAINING-STRATEGY-V7-DL.pdf [accessed 28 March 2019]

[60] NHS National Services Scotland Information Services Division (2018). Body Mass Index of Primary 1 Children in Scotland School Year 2017/18. Available at: www.isdscotland.org/Health-Topics/Child-Health/Child-Weight-and-Growth [accessed 11 February 2019]

[61] WHO Multicentre Growth Reference Study Group (2006). WHO Child Growth Standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. Geneva: World Health Organization. Available at: www.who.int/childgrowth/standards/technical_report/en [accessed 12 February 2019]

[62] World Health Organization (2006). Development of a WHO growth reference for school-aged children and adolescents. Available at: www.who.int/nutrition/publications/growthref_who_bulletin/en [accessed 12 February 2019]

[63] Stewart L, Chapple J, Hughes AR et al. (2008). Parents' journey through treatment for their child's obesity: A qualitative study. *Archives of Disease in Childhood*, *93*(1), 35–39. https://doi.org/10.1136/adc.2007.125146

[64] Stewart L, Chapple J, Hughes AR et al. (2008). The use of behavioural change techniques in the treatment of paediatric obesity: Qualitative evaluation of parental perspectives on treatment. *Journal of Human Nutrition and Dietetics*, *21*(5), 464–473. https://doi.org/10.1111/j.1365-277X.2008.00888.x

www.healthscotland.scot

6602 4/2019