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Understanding How Local 'Health Systems' Support Pregnant Women And Young Children (Up To Primary 1) To Have A Healthy Weight

HEALTH AND SOCIAL CARE

social research

Understanding How Local 'Health Systems' Support Pregnant Women And Young Children (Up To Primary 1) To Have A Healthy Weight

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Ipsos MORI Scotland

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Glossary

BMI – Body Mass Index. Uses height and weight to calculate a score which indicates whether or not someone is in the healthy weight range for their height.

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.

CHW (Child Healthy Weight) - Child healthy weight is a term used in Scotland to capture both prevention and early-intervention/treatment activity aimed at supporting children to maintain a healthy weight.

Counterweight – This programme is a first line intervention to help people lose body weight. People are supported to make sustainable changes to their eating habits and activity levels so that they can lose weight and reduce their risk of chronic disease.

FNP – Family Nurse Partnership is a home visiting programme for first-time young parents. It aims to support them to have a healthy pregnancy, improve their child's health and development, and plan their futures and achieve their aspirations.

Gestational diabetes - high blood sugar (glucose) that develops during pregnancy and usually disappears after giving birth. Any woman can develop gestational diabetes during pregnancy, but women are at an increased risk if their body mass index (BMI) is above 30.

GIRFEC – Getting it right for every child (GIRFEC) is the Scottish Government's national approach to improving the wellbeing of children and young people. GIRFEC is a way for families to work in partnership with people who can support them, such as teachers, doctors and nurses.

HPI (Health Plan Indicator) – the HPI is a tool intended to reflect the needs of a child. It is used to identify children who need more support.

HENRY – the HENRY approach integrates evidence-based behaviour change models, including the Family Partnership Model, motivational interviewing and solution-focused support with information about a healthy start (nutrition, activity, etc.) that is consistent with national guidance.

Near Me – a video consulting service that allows people to attend appointments from home.

NHS (National Health Service) – the umbrella term for the government-funded healthcare systems of the UK.

Living with obesity – a category used to define individuals with high BMI scores, above a certain value. For the purposes of CHW interventions, a child is considered

at risk of obesity if their BMI measure is at or above the 98th centile (based on UK 1990 growth charts). An adult is considered obese if they have a BMI of 30 or above.

Living with overweight – a category used to define individuals with high BMI scores, above healthy weight but below the range for 'obese'. For the purposes of CHW interventions, a child is considered at risk of overweight if their BMI measure is at or above the 91st centile (based on UK 1990 growth charts). An adult is considered overweight if they have a BMI of 25 or above.

PHS (Public Health Scotland) - Scotland's national agency for improving and protecting the health of people in Scotland. It is a partnership between national and local government.

SIGN guidelines (Scottish Intercollegiate Guidelines Network guidelines) - aim to improve the quality and consistency of health care in Scotland by developing and disseminating national guidelines promoting best practice.

UHVP (Universal Health Visiting Pathway) - this was introduced in 2015, and is a programme of 11 home visits to all families of young children in Scotland pre-birth to pre-school.

UNICEF – United Nations Children's Fund

WHO – World Health Organisation

Executive summary

Background and methods

This report presents the main findings from a research study on child healthy weight systems, conducted by Ipsos MORI Scotland on behalf of the Scottish Government. Fieldwork was conducted between March 2020 and September 2021, during the COVID-19 pandemic, the impact of which is acknowledged throughout the report.

In 2019/20, 23% of children were at risk of overweight/obesity by Primary 1. Children with higher BMIs are more likely to experience mental and physical health issues and to experience obesity as adults. The 2019/20 data also shows that 27% of Primary 1 children in the most deprived areas are at risk of overweight/obesity, compared with 17% of those in the least deprived areas[1].

The Scottish Government's strategy for reducing overweight and obesity is contained in A Healthier Future: Scotland's Diet and Healthy Weight Delivery Plan (2018).

The overarching aim of this research was to enhance the Scottish Government's understanding of how effectively local health systems seek to support pregnant women[2] and children up to Primary 1 to have a healthy weight. The research comprised two stages:

- Stage 1: overview of the local health systems in place within health boards across Scotland (13 of 14 territorial health boards participated, with a total of 17 interviews undertaken. Participant roles included child weight management lead, nutrition/infant feeding lead, and dietician).
- Stage 2: case study research with five selected health boards to gather more in depth information (a total of 41 participants took part, including midwives, health visitors, family nurse practitioners, school nurses, public health/dietetics professionals).

Prevention

Professionals identified challenges in undertaking prevention work in relation to a woman's weight, particularly pre-conception but also during pregnancy (with the

[1] Primary 1 Body Mass Index (BMI) statistics Scotland, school year 2019 to 2020

[2] This document will use the term 'women'/'woman' throughout. It is important to highlight that it is not only those who identify as women who require access to women's health and reproductive services. For example, some transgender men, non-binary people, and intersex people or people with variations in sex characteristics may also experience menstrual cycles, pregnancy, endometriosis and the menopause.

primary focus at this stage being on identification of a high BMI, managing any associated risks and promoting healthy weight gain).

Professionals felt confident, on the whole, supporting pregnant women and new parents on infant feeding, the introduction of complementary foods and having healthy lifestyles during toddler and pre-school years. This was primarily undertaken via core midwifery and health visiting services. However, additional support for breastfeeding and weaning was provided by others, for example, third sector organisations.

School nurses felt that they were less involved in preventative work since their role had changed. There was evidence of other preventative work being delivered in schools, including links with leisure services and delivery of prevention work by teachers.

Identification and referral

Identification of a high BMI in pregnancy happened at the 8-12 weeks booking-in appointment. A BMI of 25 or 30 would generally trigger gestational diabetes monitoring. Referral thresholds to other interventions varied.

Babies and children were weighed and measured at every core Universal Health Visiting Pathway (UHVP) visit, with each one providing an opportunity for a high BMI to be picked up. A BMI in the 91st centile or above was generally used to identify a weight issue.

Identification in Primary 1 happened at the Primary 1 health review. There was variation in health board approach to the measurements (generally using an opt-out approach, with a small number asking parents to opt-in) and how (if at all) parents were contacted after a high BMI was identified.

When raising the issue with parents, health professionals stressed the importance of not appearing judgemental. Midwives, health visitors and school nurses used similar tactics to approach conversations with parents:

- using existing relationships to their advantage (particularly for health visitors who benefitted from strong relationships through the UHVP)
- using a direct, factual tone and neutral language with families
- assessing parents' motivations and understanding of the issues, following their cues, and helping them make small goals

Healthcare professionals with more experience and relevant training found it easier than others to raise the issue. It was more challenging for professionals to raise a weight issue with a family when the family's circumstances were complex or when their own workload meant they would find it difficult to support the family.

Midwives encountered varied reactions from expectant women – feelings of wanting to 'just get through' pregnancy, feelings of guilt, or feelings of motivation to

make changes. Health visitors reported that families were often open to advice but did not accept referral, and that there were families that denied there was a weight issue. School nurses reported having little opportunity to build relationships with parents and so felt they experienced more resistance from parents.

Intervention

Professionals decided on referral options based on parents' preferences, the nature of the issue, past experiences, and available provision. Provision varied across health boards but examples of interventions in pregnancy and the early years are illustrated in the diagram below.

Interventions in pregnancy

Midwife-led interventions
- Vitamin supplements
- Gestational diabetes tests
- Referral for extra scans
- Informal support at appointments
- Group interventions
- Leisure services referral
- Interventions for those with gestational diabetes

Clinician-led interventions
- Multidisciplinary services may involve dieticians, psychiatrists, gestational diabetes experts etc.
- May replace (to some extent) midwife care, or sit alongside it

Intervention from early years – Primary 1

Health visitor-led interventions
- Monitoring and support at UHVP appointments
- Additional appointments
- Information and support to make small changes

Programmes aimed at the whole family
- Around 8-10 weeks, sometimes with follow-up afterwards
- Mix of family and parent only sessions
- May include education, cooking, exercise, mental health support

Dietician-led intervention
- Often involves food diaries, education, support
- Can be more intensive, delivered in family homes

Support provided by other services and professionals
- Third sector support and family support groups/classes
- Local authority and ELC support
- Private sector e.g., baby/toddler activity classes

Overall, health professionals were generally positive about existing interventions but recognised that their effectiveness depended on parental engagement. They also noted that it was hard for them to comment on effectiveness as they would not always be informed about the engagement or progress of those they referred.

Consistency and coherence

Consistency of support and referral was perceived by staff on the ground to be high, and higher where staff had relevant training, where referral pathways were clear, and where there were services to refer to. It was felt to be harder to achieve where health boards were very large, where they included remote areas, where they had a skills mix, and where caseloads were very high. COVID-19 had also caused inconsistency as, for example, those who were shielding may have completed all their visits by phone (or 'Near Me' if available), while others continued to visit families face-to-face.

On the whole, boards did not have coherent pathways, nor any overall leadership, for child healthy weight that ran from pregnancy through to Primary 1. Different strategic teams generally dealt with different parts of the system, meaning that health boards may have a strong offering in pregnancy (for example) but little on offer for the early years.

There did not appear to be a consistent handover protocol around child healthy weight (from midwives to health visitor, and health visitor to school nurse).

Key factors influencing current practice

At the system design level, strengths included the committed and knowledgeable workforce, and the core provision, with the UHVP, Family Nurse Partnership (FNP) and UNICEF Baby Friendly Initiative all working well. Challenges at the system design level included short-term funding cycles, perceived low levels of funding, a lack of monitoring, a lack of focus on healthy weight in pregnancy, lack of join up across the system, the need to target support at more deprived areas and the need for more holistic support.

At the system implementation level, strengths included the strong relationships built through UHVP and FNP, the relatively high levels of confidence among professionals, and broad adherence to referral thresholds. Challenges included high caseloads, continued use of centiles as opposed to the recommended use of BMI, and varying knowledge on available services among healthcare professionals.

Levels of parental engagement with services were perceived to be affected by wider societal issues including: poverty, cultural norms, complex family circumstances, and parenting skills.

Key findings and issues for consideration for policy and practice

The research has shown that there are many elements of child healthy weight systems that appear to be working well. However, considerable variations existed and boards were committed to making improvements. A number of issues for consideration for the provision of healthy weight support in pregnancy and the early years have been identified.

Local health board level

- Increased focus on prevention at the preconception stage – and on prevention among pregnant women more generally.
- Improved pathways/co-ordination of services from preconception to Primary 1 - greater strategic oversight of child healthy weight across the system as well as practical improvements e.g., handovers between professionals (midwife to health visitor, and health visitor to school nurse).
- Increased capacity for treatment services to accommodate those who are eligible.
- Increased focus on deprived areas, including greater time available for health professionals to work with families with more challenging circumstances.
- Maximising the potential of the strong existing relationships health visitors have built with families.
- Work with families to understand better what might engage them to work with health professionals and services, and to sustain this engagement.
- Better auditing and evaluation of service engagement and effectiveness.
- Greater knowledge sharing, both within and between health boards, on service engagement and effectiveness. The Public Health Scotland Healthy Weight Leads Network, which was considered a useful means of sharing learning, may offer one way of facilitating this.
- Increased join up with other parts of the system – for example, local authorities, third sector organisations.
- Facilitating healthcare professionals to refer directly to exercise facilities (rather than having to go via a weight management service).
- Further consideration of the training needs of midwifery and health visiting workforces. For example: ensure health visitors are using BMI centiles and have a means of calculating BMI while out on visits; increase the prominence of the role of sleep hygiene and screen time in childhood obesity; and ensure healthcare professionals are aware of the current guidance on healthy weight gain in pregnancy and kept informed of any subsequent changes to this.

National level

- Establish whether increased and longer term funding could be provided for child healthy weight activities.
- Explore whether factors that limit the work school nurses are able to do on child healthy weight (e.g. workload, few existing relationships with families) could be addressed to allow them to take on a greater role in this.
- Consider whether health visitor caseloads can be reduced, allowing them to spend more time on healthy weight, particularly with families who require more intensive support

1. Introduction and methods

Policy background

In 2019, two-thirds (66%) of adults in Scotland were living with overweight, including 29% who were living with obesity[3]. These levels of obesity and overweight are problematic, both for the health of individuals affected and for the Scottish economy as a whole. Health risks from living with overweight or obesity include, among others, type 2 diabetes, certain cancers and cardiovascular disease. Treating such conditions places significant strain on the NHS (the annual cost has previously been estimated to range from £363 million to £600 million) and the annual cost to the Scottish economy (e.g. from lost productivity) has previously been estimated to be between £0.9 billion and £4.6 billion[4].

Living with overweight or obesity also carries risks during pregnancy. As well as immediate risks to the mother and unborn baby[5], there is an increased risk of the child going on to have an unhealthy weight[6].

Indeed, the proportion of children already at risk of overweight/obesity by Primary 1 (23% in 2019/20[7]) is a particular concern. As well as the known risks to their physical health, there is increasing evidence to suggest that children who are at risk of overweight/obesity are more likely to experience mental health concerns, bullying[8] and stigmatisation[9,10]. Furthermore, they are more likely to experience obesity and related conditions as adults[11].

Despite significant efforts to reduce childhood obesity, these rates have remained stable in Scotland since 2001/2. What has changed is the distribution of overweight and obesity (Figure 1.1). In 2001/2, rates were virtually the same in the most and

[3] Scottish Health Survey 2019, Chapter 6: Diet and Obesity

[4] A Castle (2015) Obesity in Scotland. SPICe Briefing, 15/01. 7 Jan 2015. Obesity in Scotland (parliament.scot)

[5] Increased risks include: thrombosis, gestational diabetes, high blood pressure, pre-eclampsia, induction of labour, caesarean birth, anaesthetic complications and wound infections, miscarriage, giving birth early, having a big baby or having a stillbirth. See: Being overweight in pregnancy and after birth (rcog.org.uk)

[6] Report of the commission on ending childhood obesity by WHO

[7] Primary 1 Body Mass Index (BMI) statistics Scotland, school year 2019 to 2020

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

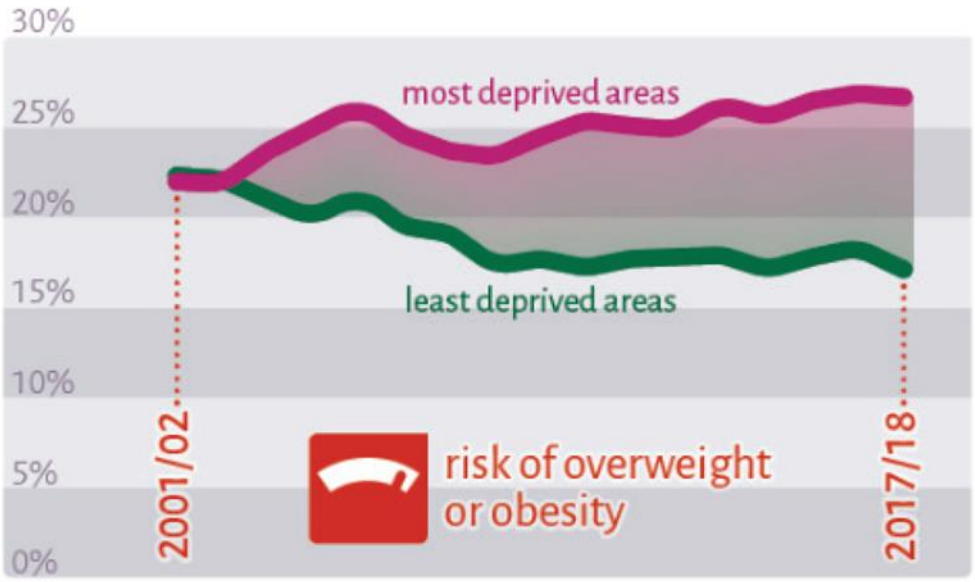
[9] World Health Organization (2017). Weight bias and obesity stigma: considerations for the WHO European Region.

[10] Health, The Lancet Public (2019). Addressing weight stigma. e168.

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

least deprived areas. However, the 2019/20[12] data shows that substantial inequalities now exist, with 27% of Primary 1 children in the most deprived areas at risk of overweight/obesity compared with 17% in the least deprived areas (and for obesity specifically, 13% in the most deprived areas compared with 6% in the least). Inequalities in the Scottish diet were also highlighted in the 2018 update of the Food Standards Scotland Situation Report[13]; those in the most deprived areas were consuming less healthy foods and cost was reported as a barrier.

Figure 1.1: Primary 1 risk of overweight and obesity rates from 2001/2 to 2017/8[14]



Reducing overweight and obesity

Commitments relating to healthy weight in children are embedded in several key Scottish Government policies and frameworks including: The Public Health Priorities[15], Improving Maternal and Infant Nutrition Framework[16] and the Scottish National Performance Framework[17]. Getting it Right for Every Child (GIRFEC) [18], which recognises that every child has the right to expect appropriate support to allow them to reach their potential, also underpins the Scottish Government's overall approach.

[12] Primary 1 Body Mass Index (BMI) statistics Scotland, school year 2019 to 2020

[13] Food Standards Scotland - The Scottish Diet - It needs to change 2018 update

[14] NHS National Services Scotland, Information Services Division 2018

[15] Scotland's Public Health Priorities

[16] Improving maternal and infant nutrition: a framework for action

[17] National Performance Framework

[18] Getting it right for every child (GIRFEC)

Wider prevention work being undertaken in Scotland also includes the adoption of a whole systems approach to diet, healthy weight and physical activity[19] and the consideration of restrictions on promotion of foods high in fat, sugar or salt, which have been put on hold due to the COVID-19 pandemic[20,21].

The detail of the Scottish Government strategy for reducing overweight and obesity is contained in A Healthier Future: Scotland's Diet and Healthy Weight Delivery Plan (2018)[22], which replaced Preventing Overweight and Obesity in Scotland: a route map towards healthy weight (2010)[23].

The Delivery Plan recognises the need to address issues related to weight at an early age and, as such, has a focus on prevention at its core. It sets out an ambitious aim of halving the number of children at risk of overweight/obesity by 2030 as well as significantly reducing health inequalities. It also recognises that interventions that require behavioural change at the individual level are less likely to be effective, particularly at reducing inequalities, than population-wide interventions to change the environment. The document contains more than 60 actions that are shaped around the following five key outcomes:

- children have the best start in life, they eat well and have a healthy weight
- the food environment supports healthier choices
- people have access to effective weight management services
- leaders across all sectors promote healthy weight and diet
- diet-related health inequalities are reduced

Acknowledging the influence of physical activity in healthy weight, A More Active Scotland: Scotland's Physical Activity Delivery Plan[24] provides further actions specifically related to this component of healthy weight.

Addressing inequalities

There are already several measures in place across a range of settings explicitly aimed at tackling inequality in the early years and improving health outcomes (including healthy weight) for young children and their parents. These include:

- Scotland's Baby Box

[19] Scotland's Public Health Priorities - Eat well, have a healthy weight and are physically active

[20] Consultation responses on the restrictions on the marketing of junk foods

[21] BBC article - Junk food promotion ban 'paused' by coronavirus

[22] A healthier future: Scotland's diet and healthy weight delivery plan

[23] Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight

[24] Active Scotland Delivery Plan

- Free vitamins for all pregnant and breastfeeding women and children up to 12 months in Scotland
- Best Start Foods smart card
- Best Start Maternity Grant
- The expansion of the Family Nurse Partnership (FNP)
- The transformation of both maternity care (through the Best Start five year plan[25]) and Health Visiting (through the Universal Health Visiting Pathway (UHVP)[26])
- The expansion of free Early Learning and Childcare, from 600 hours (in place since August 2014) to 1,140 hours a year for all 3 and 4 year-olds and eligible 2 year-olds.

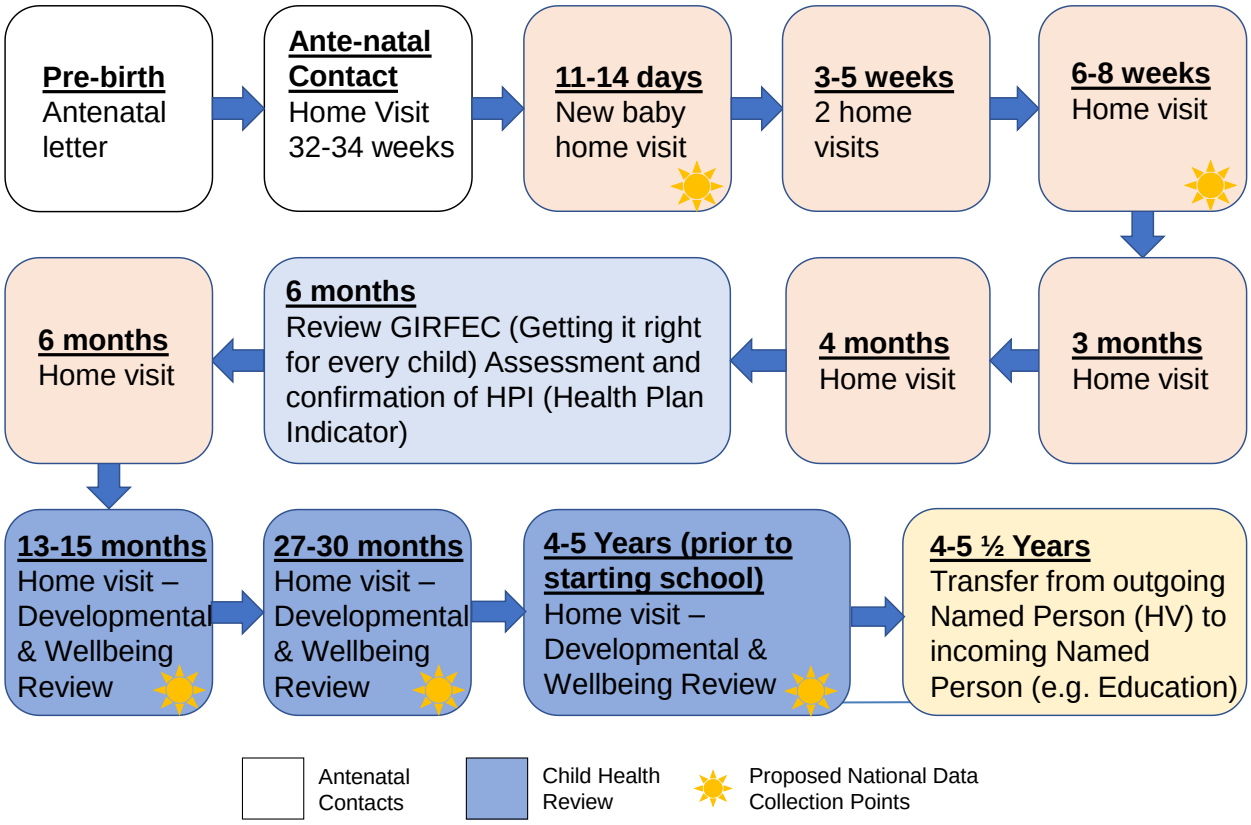
Local health systems

The current study is focused on the local health systems in place from pre-birth to Primary 1. Maternity services and the UHVP form the backbone of the contact between families and health systems in the preschool period and there are numerous contact points between the identification of pregnancy and the Primary 1 Health Review. In the case of identifying children with a high BMI, these contact points offer opportunities for health professionals to play a role in the prevention of child overweight and obesity – by offering support and information on healthy eating and physical activity from an early stage – and in identifying and referring children who are at risk. Figure 1.2 shows the UHVP contact points.

[25] Scottish Government (2017) The Best Start: a Five-Year Forward Plan for Maternity and Neonatal Care in Scotland

[26] Universal Health Visiting Pathway in Scotland: pre-birth to pre-school

Figure 1.2: UHVP contact points (pre-birth to pre-school)



All health boards also have child healthy weight[27] programmes which comprise both preventative and treatment services. Although the Scottish Government had previously issued guidance on these programmes, it was recognised that variation in their design and content existed. As one way of addressing some of these inconsistencies, the Diet and Healthy Weight Delivery Plan[28] included an action around the development of standards for weight management services for children and young people.

NHS Health Scotland (now Public Health Scotland (PHS)) undertook a mapping of weight management services across Scotland. The findings supported the need for greater consistency in service provision. Using the best available evidence and through convening relevant professionals, NHS Health Scotland developed a set of standards for tier 2 and tier 3 (treatment) aspects of child healthy weight services and interventions[29].

[27] Child healthy weight is a term used in Scotland to capture both prevention and early-intervention/treatment activity

[28] A healthier future: Scotland's diet and healthy weight delivery plan

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

This tiered approach (summarised in Figure 1.3), which is broadly consistent with The UK Obesity Care Pathway[30], is intended 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".

Figure 1.3: summary of standards tiered approach

Research aims and objectives

The overarching aim of the research was to enhance the Scottish Government's understanding of how effectively local health systems seek to support pregnant women[31] and children up to Primary 1 to eat well and have a healthy weight.

[30] Department of Health (2013) Developing a Specification for Lifestyle Weight Management Services: Best Practice Guidance for Tier 2 Services.

[31] This document will use the term 'women'/'woman' throughout. It is important to highlight that it is not only those who identify as women who require access to women's health and reproductive services. For example, some transgender men, non-binary people, and intersex people or people with variations in sex characteristics may also experience menstrual cycles, pregnancy, endometriosis and the menopause.

The overall objectives of the project were to:

- Describe the local points of contact within health systems that seek to identify weight issues and support healthy weight.
- Understand how the risk of overweight and obesity is identified and acted on throughout the different opportunities for contact in the formal health pathways.
- Understand current culture and practice in engaging with, supporting and empowering pregnant women, parents and carers to eat well and have a healthy weight and encourage their children to do the same.
- Understand how consistent and coherent local health systems are and if there is continuity of care/messaging across the different contact points.

In addressing these, the research sought to answer the following research questions:

- How local health systems seek to support healthy weight in the early years.
- The extent to which these local systems align with national standards/guidance.
- What actually happens in practice – and the extent to which there is consistency and coherence within local systems.
- What the barriers and challenges are to effective implementation of local systems.
- What supports effective implementation of local systems.
- How pregnant women and parents engage with/react to the local systems.
- What are the opportunities for improvement?

Scope of the research

There are numerous factors, across the whole system, that contribute to child healthy weight. This piece of research did not attempt to explore practice across the whole system but is focused specifically on the local health systems in place and, rather than attempting to cover the full childhood period, it is focused on pre-birth to Primary 1 (the period considered by the World Health Organisation (WHO) to be most critical for obesity prevention[32]).

Methodology

The research was qualitative in nature (in-depth interviews) and was undertaken by Ipsos MORI between March 2020 and September 2021, while the COVID-19 pandemic was ongoing. It comprised two main stages:

[32] Report of the commission on ending childhood obesity by WHO

- Stage 1: overview of the local health systems in place within health boards across Scotland
- Stage 2: case study research with five selected health boards to gather more in depth information, from a wider range of professionals involved in maternal and child healthy weight systems.

Stage 1 sample

Letters were sent jointly by the Scottish Government and Ipsos MORI to Directors of Nursing and Directors of Public Health in all health boards asking them to identify an appropriate individual (or individuals) who would be best placed to describe their local systems in place to support healthy weight from pregnancy to the early years.

Thirteen of the fourteen health boards participated in this stage, with a total of 17 interviews undertaken. In nine health boards, one individual was interviewed, while in four health boards, two were interviewed (typically one covered the early years and one covered maternity services). Participants' roles included child weight management lead, nutrition/infant feeding lead/coordinator and dietician.

Stage 2 sample

Following initial analysis of Stage 1 findings, five case study health boards were selected[33]. Selection was designed to ensure a spread of health boards in terms of a number of factors including: geographical location; urbanity/rurality; size of board; and current child healthy weight provision.

In selected case study boards, the individual who had participated in Stage 1 was re-contacted by Ipsos MORI and asked to assist in the recruitment of Stage 2 participants within their board by forwarding an invitation from Ipsos MORI.

A total of 41 participants took part in Stage 2 and the sample profile is shown in Table 1.1.

Table 1.1: Stage 2 sample profile

Job title	Number interviewed
Midwife manager	2
Midwife	7
Health visitor manager	6
Health visitor	10

[33] One case study board had to be replaced due to lack of capacity linked to the COVID-19 pandemic after two interviews had already been conducted

Family Nurse Practitioner supervisor	1
Family Nurse Practitioner	1
School nurse	6
Public health/dietetics professional	8
Total	41

Interviews

Interviews were undertaken by telephone or Microsoft Teams and each lasted around an hour[34]. Stage 1 interviews were conducted between September 2020 and February 2021. Due to recruitment difficulties, a small number were undertaken after work on Stage 2 had begun. Stage 2 fieldwork ran from December 2020 to August 2021. The fieldwork period was longer than intended due to the additional burden placed on health boards by the COVID-19 pandemic.

All interviews were conducted by members of the Ipsos MORI Scotland project team, using flexible discussion guides (Appendix 1) to ensure that key issues were covered with each participant.

Analysis

Qualitative interviews were summarised into thematic matrices[35] developed by the research team and drawing on the research questions. These thematic matrices were then reviewed to identify the full range of views and experiences on each issue.

Challenges and limitations

All research is subject to challenges and limitations. The following were encountered as part of the current study, and should be borne in mind when interpreting the findings.

First, it should be noted that the current study was not designed to be a service audit or service mapping exercise. The information gathered about the services delivered or planned within a given health board was very much dependent on the role and knowledge of the individual/s interviewed for that board. Indeed, it was often the case that the individual we interviewed during Stage 1 was very knowledgeable about their board's systems for either pregnancy or the early years/Primary 1 rather than both. Therefore, while the data gathered provides a

[34] In one health board, four midwives took place in a mini group due to their preference for this method.

[35] Using Excel, with each column representing a theme and each row an individual interview, so that the data can be sorted in different ways for further analysis.

sound overview of current provision and practice, it cannot be guaranteed that full details of all programmes in all boards will have been gathered. For example, at various points in the report, examples are given of programmes or practices that happened in one health board. It may have been that similar programmes operated in other boards but, particularly when boards were not case studies, this did not emerge – either because the individuals being interviewed were unaware or because they simply omitted to mention it.

The additional burden placed on health boards as a result of the COVID-19 pandemic resulted in delays to the project – during points at which the pandemic restrictions were at their highest, and boards were under greatest pressure, it was not considered appropriate to ask healthcare professionals to give up their time to participate in this research. This meant that a substantial amount of time had passed between the Stage 1 interviews being conducted (Sept-Dec 2020) and the publication of this report. It may then be that some of the information presented in this report is already out of date, although, in saying that, professionals recognised that reducing overweight and obesity in the early years was a long-term task. The COVID-19 pandemic had also led to a number of delays in planned roll outs of new programmes and, in some boards, planning work was also put on hold due to staff being redeployed in other roles. This meant that there was greater uncertainty, particularly around timescales for improvement work.

The case study fieldwork, like all qualitative research, was not intended to provide an indication of the prevalence of issues but rather to capture as much breadth and depth of opinion and experience as possible. As such, qualitative samples are not designed to be statistically representative, but rather to ensure a range of different people and perspectives are included. The way in which recruitment was necessarily undertaken, however, may also have resulted in some bias, which should be acknowledged.

As described above, Stage 2 participants were recruited via those who had participated in Stage 1 (the researchers had no means of contacting them directly). As the research team had no control over the selection of participants, it is not unfeasible that those who agreed to participate had a greater interest in child healthy weight issues than their colleagues.

There were particular difficulties recruiting midwives for the research. We had intended to conduct roughly equal numbers of interviews with midwives and health visitors. However, as Table 1.1 shows, nine midwives/midwife managers were recruited compared to 16 health visitors/health visitor managers. While it is not clear why midwives were less likely to volunteer for the research, there was some suggestion that they did not see the direct relevance to them, given the project was labelled primarily as being about healthy weight in the early years. The small numbers of midwives participating in the research has led to some gaps in the data relating to support provided by midwives.

Finally, where the report discusses how pregnant women and parents experience the system, this is health professionals' perspectives, rather than their own views and experiences.

Report structure and conventions

The remainder of this report is structured as follows:

- Chapter 2 focuses on the **prevention** work undertaken by boards.
- Chapter 3 explores the **identification and referral** processes.
- Chapter 4 describes the **interventions** available to those identified as having a high BMI.
- Chapter 5 examines levels of **consistency and coherence** across child healthy weight systems.
- Chapter 6 draws together findings from other chapters to identify the **key factors influencing child healthy weight provision.**
- Chapter 7 provides the **main findings and implications** of the study.

As already discussed, the majority of findings are based on qualitative interviews, which aim to establish the range of views and experiences rather than their prevalence. As such, as far as possible the report avoids the use of quantifying language (including terms like 'most' or 'a few').

When referring to those working in non-clinical roles, the term 'public health professional' is used.

2. Prevention

This chapter provides a detailed look at how the key stages of local systems from pre-birth to Primary 1 operate in practice. It first covers support for women before they conceive, then goes on to discuss support on infant feeding, weaning, and the remainder of the early years and Primary 1.

In summary:

- Significant challenges of undertaking prevention work in relation to a woman's weight, both pre-conception and during pregnancy, were identified.
- Professionals felt confident, on the whole, supporting pregnant women and new parents around infant feeding, the introduction of complementary foods and healthy lifestyles during toddler and pre-school years.
- School nurses felt they were less involved in preventative work relating to child healthy weight since their role had changed.

Preconception prevention for women

The WHO recognises that targeting women's weight preconception plays a role in efforts to reduce childhood obesity[36]. However, the significant challenges of doing this type of preventative work were acknowledged by participants in this research. They noted that there is little or no opportunity for contact with the target audience until they are pregnant – they are essentially the 'general public'.

While this was recognised as a challenge, it did not appear to be something that health boards were actively addressing as a priority. One health professional did, however, mention services accessible to adults more widely, whereby primary care professionals could refer people onto physical activity programmes. It may be that these more general services are available across other health boards, but were not mentioned as part of the research.

There was a view that there needed to be more of a drive on the role of healthy weight in fertility and pregnancy, at a national level. It was suggested this could include covering it as part of sexual health education in secondary schools.

As things stand currently, the first time at which health boards are able to intervene before women become pregnant is when they are referred to services due to fertility problems. This type of intervention could take the form of dietician referral (to qualify for IVF); goal setting and motivational sessions; or a twelve week NHS weight management programme.

The other opportunity identified for undertaking preventative work pre-pregnancy was engagement with postnatal women who may be planning future pregnancies.

[36] Report of the commission on ending childhood obesity. Implementation plan executive summary by WHO

Indeed, one midwife described a particular need for postnatal intervention, having seen a pattern of pregnant women presenting with higher BMIs in subsequent pregnancies.

> Another area I think we fail with is recurrent pregnancies. A woman comes with her first pregnancy, BMI is 27, a year later, her BMI is suddenly 33, then her third pregnancy 38 – and that support for – not pushing women to get back to their pre-pregnancy size, but how do you support that.
>
> Midwife

Again, this type of intervention tended to be discussed as something under consideration rather than services currently in place. However, one midwife did report that she would always speak to postnatal women about looking to improve future pregnancies, while another board was offering a postnatal programme to women who have had gestational diabetes, aiming to prevent the development of type 2 diabetes. Their evaluation had shown positive results, with the education received via the programme helping to motivate women to make changes that reduced their need for medication.

Pregnancy

In relation to a woman's weight in pregnancy, the primary focus was not on prevention but instead on identifying that there is a high BMI, managing any associated risks in pregnancy and minimising weight gain. This is discussed fully in Chapters 3 and 4. However, it should be noted that some of the approaches and interventions described in these later chapters were also considered to have a preventative element – for example, gestational diabetes interventions, given the links with type 2 diabetes and childhood obesity. Midwives also felt that the information and support on healthy lifestyles they provided universally to pregnant women had a preventative element, both for the women and for the child in the future.

Area for consideration (local health board level):

Increased focus on prevention at the preconception stage – and on prevention among pregnant women more generally

Infant feeding

The provision of information on feeding babies in the early weeks and months and, in particular, support and encouragement to breastfeed was seen as a key preventative strand both during pregnancy and postnatally. Benefits for both the child's future weight and the mother's weight were highlighted. Provision was often discussed in the context of the UNICEF Baby Friendly Accreditation[37], including

[37] UNICEF Baby Friendly Accreditation website

standards, training for health professionals and assessment of progress, about which participants were very positive.

Increasing breastfeeding rates remained a priority. However, there had also been a move towards widening out the information and support on infant feeding to incorporate advice on responsive feeding, regardless of how babies are fed. This approach is also part of the UNICEF Baby Friendly Initiative and is described below.

Midwives played a key role in the provision of information to inform women's feeding choices during pregnancy while health visitors were the main group supporting them postnatally, as part of the UHVP. This core provision is discussed first, before going on to discuss additional support.

Core provision

During pregnancy, the provision of information and support on infant feeding tended to be provided through both routine midwife appointments and antenatal parent education classes. Midwives started discussing feeding options at an early stage, with one describing breastfeeding as something she would 'drop into conversations' whenever she could. Midwives talked about their role in terms of helping women make an informed choice about feeding and normalising breastfeeding. They felt confident in this area of their work and did not identify any specific training needs. Public health professionals spoke positively about the additional training available to midwives as part of the UNICEF Baby Friendly initiative.

Health visitors described supporting new mothers with feeding choices from their early visits. They were clear on the benefits of breastfeeding and would encourage and support women who were doing so to continue. They also described discussing feeding in relation to weight and height centiles from the outset, showing parents where their baby was and the curve they would expect them to follow. As well as helping parents to understand their babies' growth and be reassured they were getting enough milk, they felt these early discussions made it easier to raise any future concerns about weight.

Responsive feeding advice was a move away from the idea of having a feeding routine and, instead, feeding on demand. Health visitors described: explaining to parents that their babies' tummies can be stretched by overfeeding; helping them to tune into their babies' hunger cues, encouraging feeding little and often (and explaining that this may include during the night); advising them to feed their baby upright and to allow them to pause during feeds; and explaining that babies don't need to finish their bottles. They would also advise parents against using 'hungry baby' milks[38]. The extent to which parents were receptive to this approach varied and is discussed below.

[38] This type of formula contains more casein than whey, and casein is harder for babies to digest. Although it's often described as suitable for "hungrier babies", there's no evidence that babies settle better or sleep longer when fed this type of formula.

> We have discussions around appropriate types of milk to use, quite a lot of parents can be keen to move on to hungry baby milk quite early because they want them to sleep longer and things like that and we kind of discourage that.
>
> Health visitor

As part of the FNP[39], family nurses provided support to their clients on breastfeeding and responsive feeding both during pregnancy and during the early stages after their baby was born. Due to the nature of the programme, they were able to provide more intensive support than midwives and health visitors. They described linking their discussion on feeding to attachment theory, explaining that, due to their bond with their baby, they (rather than grandparents, for example) would be best able to recognise their babies' hunger cues.

> Yes, I will say that our clients are really interested in information on responsive feeding, where it can be more difficult is where the voice of their parent or grandparent or supportive adult, who hasn't really been brought up that way, they kind of maybe struggle with that a wee bit more. Alongside that is their work within attachment. So, actually, if we can support our client to be the main caregiver and support that early attachment then they are responding much better to the baby cues. So, they gain in confidence, so actually their ability to read their baby and they feel confident then they are not reliant on their own parent.
>
> Family nurse supervisor

Additional support for breastfeeding

Across health boards, there were a number of other ways in which breastfeeding was supported. These included:

- breastfeeding champions within midwifery teams who provided support to their colleagues and kept teams up to date on new information/guidance
- support for new mums on post-natal wards
- support provided by third sector organisations
- peer support
- (mentioned in one health board) work with other parts of the system including commitments from local authorities to have breastfeeding friendly cafes and restaurants, workplaces and schools (by teaching it at that stage)

[39] The Family Nurse Partnership (FNP) is a programme in which specially trained nurses aim to improve the outcomes for young first time mothers (aged 19 and under across Scotland and aged 25 and under in some parts of Scotland). The programme is offered from pregnancy until the child is two years old.

- (mentioned in one health board) a breastfeeding programme specifically for women with gestational diabetes involving hospital midwives contacting women before their baby is born to show them how to hand express.

While participants spoke positively about the additional support mentioned, they were generally unable to reference evaluations of any impacts on breastfeeding rates[40].

Challenges

Although practitioners were generally positive about their own knowledge and skills, as well as individual sources of infant feeding support available in their boards, they acknowledged there remained a number of barriers to increasing breastfeeding rates and receptiveness to responsive feeding approaches. They felt that there should be a continued focus on increasing breastfeeding rates as a priority.

Barriers reported included:

- Cultural barriers (both to breastfeeding and responsive feeding), including the influence of grandparents
- A lack of time and funding for greater breastfeeding support
- The COVID-19 pandemic making it more difficult to provide in-person support (although an opposing view was that new mums having fewer visitors and being home more in the early days may actually have helped them to breastfeed)
- Women who want to breastfeed not always being prepared for the fact that it can be difficult
- (for responsive feeding for formula fed babies specifically) Packaging on formula feeding stating the maximum amount per feed, which parents interpret as what their baby *should* be having. This was compounded by the fact that bottle preparation machines (which many parents owned) only make large bottles, resulting in waste if babies don't drink the full bottle.

Introducing complementary food (weaning)

Weaning is the next key prevention stage. The provision of information and support on weaning was largely undertaken by health visitors (or nursery nurses in one health board) via one-to-one appointments, as part of the UHVP, and appeared to be broadly consistent across Scotland.

Common themes in weaning support included:

- advice to wait until their baby is six months before weaning

[40] Breastfeeding rates in Scotland have been steadily increasing. More than half (53%) of babies were being breastfed at 10-14 days of age in 2019/20 compared with 44% in 2002/03.

- discussing/providing resources at three/four month appointments and then again at eight month appointment (there were health visitors who felt this gap was too long and made an additional contact at six months)
- talking about weaning in relation to family meals rather than foods specifically for babies such as baby rice and porridge
- discussing portion sizes
- advising on healthy eating habits/building health habits for life – and how what they do now is linked to health and weight later in life
- advising on how much milk babies should have during weaning

Resources provided to parents included both national materials (Ready Steady Baby, Fun First Foods, and signposting First Steps Nutrition website) and those developed locally (for example, in one local authority a recipe resource reflecting the foods available in local shops had been developed). Another health board was in the process of developing a child healthy weight app, which would incorporate weaning. Health visitors also had their own crib sheets and resources such as healthy food plates, a visual desk stand on portion sizes, an eat well guide and physical activity guides to use in discussions with parents. Again, both national and locally developed resources were mentioned.

It was noted that, since the introduction of the UHVP, weaning support had moved from being group based to one-to-one. In some cases, group based weaning support still existed, particularly in more deprived areas (e.g. in early years centres), but tended to be delivered by others such as community food workers. In line with this, there were health promotion professionals who were delivering training on weaning/healthy lifestyles to those in other sectors, for example those working in family/Surestart centres and in early years settings, to enhance the support they can provide.

The Family Nurse Practitioner interviewed talked about the intensive support on weaning provided as part of the programme. While they covered the same themes as health visitors, they were able to provide additional support. This included teaching their clients how to make healthy meals such as soup and going food shopping with them to show them nutritious options and ways to buy reduced fruit and vegetables. This was considered particularly important given the financial barriers they generally faced.

On the whole, health visitors were confident in the current information and support they were providing on weaning and felt they had the necessary training and resources to do so. In addition to the training received as part of their health visiting qualification, some health visitors had received other training, such as capacity building or motivational interviewing training, which they were able to draw on. There were some slight exceptions to this. For example, one health visitor felt the information she was providing was more focused on safety and routine rather than approaches such as baby led weaning and another would have liked more information about what further support is available for parents.

Health visitors noted that the extent to which parents were receptive to advice on weaning varied. There were parents who health visitors found very difficult to engage. Pressure from peers and grandparents to wean before six months was perceived to be one of the main barriers, although there was some suggestion that this was improving. The fact that packaging on baby foods often states it is suitable from four months also hindered getting across the message that they should wait until six months. As with all the work they delivered with families, health visitors also acknowledged that families were often facing challenges, for example living in poverty, that affected their ability to take on board and implement advice.

On the other hand, health visitors described this as a time when parents could be particularly motivated to make changes, wanting to do the best for their young baby, and that they were particularly receptive to advice. Family nurses also noted that their clients were generally receptive to their advice on weaning.

> A lot of them are very grateful, yes, and a lot of our clients will actually say to their mum, you know, this is my baby, and this is what I'm going to do, because my family nurse has suggested this, so it can be something that they become quite passionate about.
>
> Family nurse supervisor

Health visitors and health promotion professionals identified the following as being particularly important to continue or start in order to engage parents with weaning:

- Ensuring that support is positive and achievable, leaving parents feeling empowered to make changes. As an example, this might involve focusing on small changes such as suggesting adding some frozen vegetables to their current meals rather than making very different meals.
- Providing more focused advice rather than generic 'eat healthy' messages. It was hoped that the planned introduction of training in the HENRY programme[41] would help with this.

There was also some enthusiasm for the continuation/re-introduction of group weaning sessions as they were felt to stimulate discussion more than one-to-one health visitor appointments.

One health visitor discussed the role and influence that budget supermarkets can have in the form of offering their own, more affordable, brands of additive-free baby food pouches and in making popular weaning books more accessible to those who wouldn't normally buy them, by stocking them as part of baby events.

The influence of social media was also acknowledged, with a public health professional suggesting her health board could make more use of platforms such as Facebook to get their messages out.

[41] HENRY programme website

Beyond weaning

Health visitors described continuing to discuss healthy diets and lifestyles at subsequent UHVP appointments. Specifically, this tended to include: the family's diet; portion sizes; foods that may contain hidden sugars; physical activity and screen time. There were also health visitors and public health professionals who talked about the specific role of milk overconsumption, post-weaning, in obesity. They noted the importance of covering this in the 12-15 month appointment.

> Thirteen months, we would be actively encouraging exercise and talk a bit about screen time, and also go over milk requirements as well, because quite often some babies are still having quite a lot of milk as well as three meals a day.
>
> Health visitor

Similar to their experiences of supporting parents with the weaning stage, health visitors generally felt confident about the advice they were providing at this stage. One raised the point of wanting to ensure that health visitors were using the same terminology (consistency is discussed in Chapter 5) while another noted that parents of fussy eaters tended to want advice and she would like more information on what is available to them.

Outwith the support provided by the health system, partner organisations (local authorities, childcare providers and third sector organisations) were also involved in supporting healthy lifestyles for toddlers and pre-schoolers. It appeared that physical activity programmes for this age group were not, however, currently commonplace across Scotland. One board had a particular focus on prevention which had started in the school setting and been more recently introduced for pre-school children. Their tier 1, universal programme, offered six weeks of sessions, designed around behaviour change theory and incorporating both physical activity for the child and the provision of advice on healthy habits for the parents. It was delivered via other services such as local authority leisure facilities and nursery settings but had been on hold since the COVID-19 pandemic. Another board was considering extending the prevention programme currently run in schools to include pre-schoolers, while others had active play sessions delivered via nurseries or third sector organisations.

Prevention in Primary 1

School nurses did not feel their role allowed them to undertake a great deal of preventative work. The main point at which they had contact with Primary 1s in this capacity was the Primary 1 health review[42] (described in more detail in Chapters 3

[42] A Primary 1 review is offered to all children in mainstream and special state schools as part of the wider child health programme. Height and weight measurements are conducted by health staff and are entered into the Child Health Surveillance Programme - School (CHSP-S) national information system to support the production of national statistics. Although surveillance is the

and 4), although in some boards these were undertaken by healthcare assistants. When they visited schools to undertake these, they tended to include a talk with the class about healthy eating behaviours, dental health and physical activity.

Although the measurements were undertaken in Primary 1, there was little distinction made between Primary 1 and other year groups when school nurses and health promotion professionals spoke about prevention work in schools. Given the other demands on their time, prevention work in relation to healthy weight was not generally high priority. They spoke about a change in role[43] over recent years meaning that, on the whole, they no longer visited schools (other than the short talk as part of the Primary 1 measurements) to speak to pupils about healthy eating. A school nurse in a case study board which appeared to be particularly focused on prevention did, however, still make visits to schools to talk to pupils about healthy diets, physical activity and sleep. School nurses in other boards could see the benefit in being more involved in health promotion, including work with both pupils and parents and support for teachers, but did not feel their current job description and caseload allowed for this.

> School nurses could do things like coffee mornings at schools where they can offer parents advice on topics like sleeping, eating and anxiety but doing that is dependent on how busy you are. Some school nurses just have too much else.
>
> School nurse

Area for consideration (national level):

Consider whether there is merit in increasing the remit of school nurses in relation to child healthy weight (currently very minimal)

There were examples of preventative work being delivered in schools by other parts of the system, with input from those working within health promotion. These included:

- links with leisure service to provide afterschool clubs offering physical activity as well as family food skills
- development of approaches, resources and training for teachers to deliver preventative work
- introduction of elements of the HENRY programme.

primary purpose of the reviews, some boards contact parents when a child is identified as having a high (or low) BMI.

[43] School nurses' roles have changed in recent years as part of a wider programme of work to transform the roles of several health professions. They are less directly involved in Primary 1 health reviews but do still have a focus on prevention and early intervention.

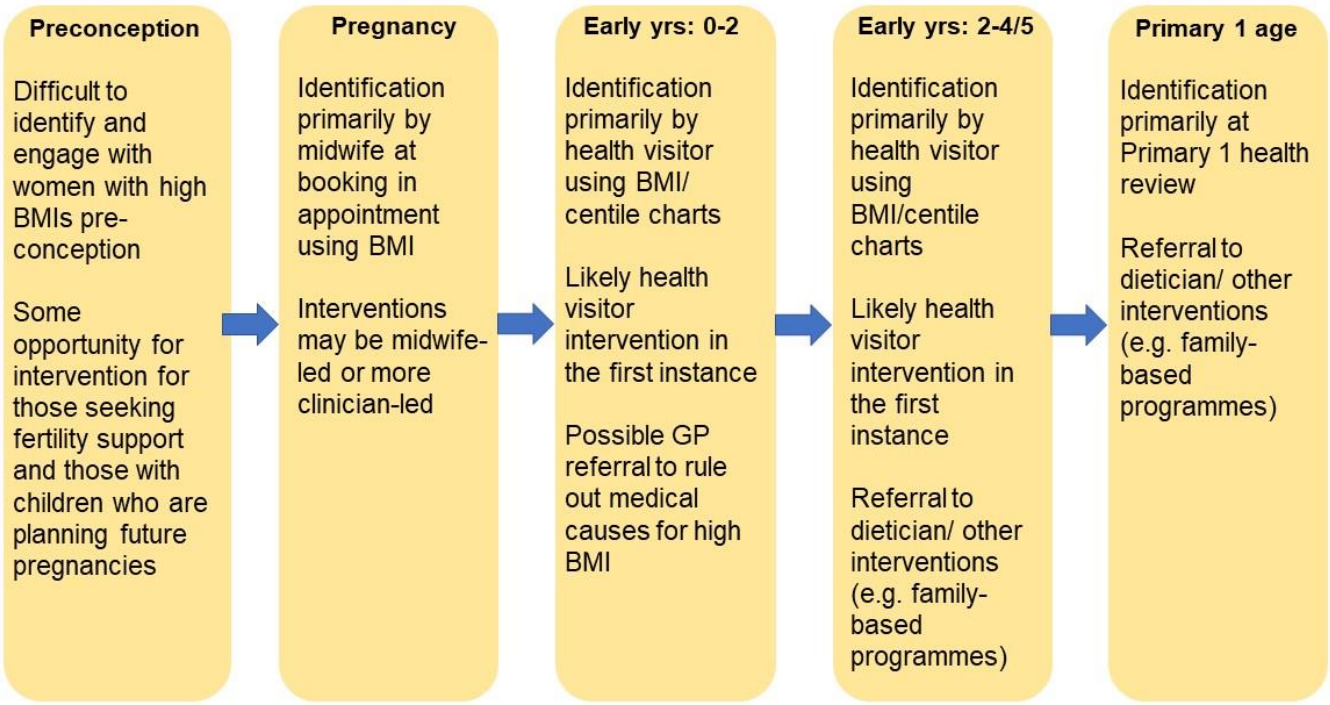
Another board had plans to change their approach to the Primary 1 weight and height measurements to a less targeted programme, due to their current method of engagement not being felt to work well. Rather than sending letters to only those parents whose children were identified as having a high BMI, they planned to send letters to all parents offering them the chance to take part in a family programme focusing on healthy eating and physical activity. The intention was that this more universal approach would reduce any stigma parents felt from being referred. An initial screener would still be used to determine whether families were likely to benefit from the intervention.

3. Identification and referral

This chapter addresses the points at which pregnant women and children are weighed, how weight issues are identified, and how health professionals approach raising the issue and referring families.

The main points of potential identification, and brief descriptions of possible interventions, are summarised in Figure 3.1.

Figure 3.1: Points at which a weight issue may potentially be identified and ways in which it may be addressed



Across the health boards, and across different health professions, confidence was high when it came to:

- weighing children and pregnant women accurately
- calculating BMI or using centiles to assess weight
- determining whether a patient meets a clear intervention threshold
- providing general advice on healthy eating and physical activity

Areas felt to be more challenging included:

- determining whether families were in a position to make a change
- raising the issue in situations where the health professional did not have an existing relationship with the family (mainly school nurses)

- supporting weight management in pregnancy, while acknowledging that weight loss during pregnancy is not recommended

These issues are considered in more detail throughout this chapter.

Identification in pregnancy

In all health boards, pregnant women had their BMI calculated at their booking-in appointment at 8-12 weeks. Midwives would identify whether an intervention was required based on this initial BMI measurement. In cases of high BMI, midwives would first explain the associated risks for pregnancy and delivery. In island health boards they would also explain that women may have to travel to a mainland hospital, which is better equipped to deal with a high-risk delivery. They favoured mentioning it at this early appointment as it tended not to be the women's preference and gave them more time to adjust to it.

> With a BMI over 35 we'd be recommending that they give birth in the mainland, just because of the increased chance of difficulty monitoring the baby in labour, increased chance of bleeding, difficulty with anaesthetics if needed. So, I try and have that conversation early on because if you're recommending someone leaves their home to give birth, it's a big intervention, so you want people to know that's going to be your recommendation from early on really… most people want to stay here.
>
> Midwife

Across the health boards, a BMI of 30 or above would generally trigger monitoring for gestational diabetes, although there were health boards who tested women with a BMI above 25. For other types of interventions (such as referral to weight management services), BMI referral thresholds varied at either 30, 35 or 40. There were health boards that also made a distinction between different levels of high BMI – for example, a BMI of 30 might trigger referral to extra scans, but referral to weight support only happened for a BMI of 40 or above. One health board used colour-themed pathways to indicate level of risk - women with an elevated BMI would be on a 'purple' pathway and receive a mix of clinician and midwife care, and more scans than those on the 'green' pathway. Those with the highest BMIs would be put on a 'red' pathway and receive mainly clinician-led care as well as more scans and tests.

Opportunities and challenges for referral

Where women met intervention thresholds, midwives used a range of approaches to raise the issue sensitively and effectively.

Midwives described taking a person-centred approach, meaning that they made efforts to understand the woman's circumstances and needs, and starting from there. Where midwives had received training on motivational interviewing, they

reported finding this useful in helping them assess a woman's level of motivation and empower them to make small, positive changes.

> We're trying to move from the 'giving advice' and [move to] exploring where they're at and what they need- like a guided move? That's what I would try to do with feeding is explore their own experiences, and obviously I've got an agenda, but it's finding out what they know and maybe adding in information.
>
> Midwife

They focused on building a relationship with women, to work together on what small changes they could make.

> The main thing is to try and build up a relationship with these women because I have to see these women […] right through to delivery. And if I'm phoning them every week, I need them to trust me, I need to have a relationship with them. So, it's not a blame game, it's […] drawing a line under where we are, we're starting from where we are just now, and let's see what we can do to change things as we go on.
>
> Midwife

Midwives stressed the importance of expectant parents not feeling judged by them. They would therefore avoid phrases that focused on what parents were not doing or what they should be doing, and instead use more neutral language.

> I tend to use the phrase 'We notice a lot of pregnant women struggle with…certain food types/drinking water' rather than 'You're not/you should' I try to be wishy washy.
>
> Midwife

Another approach was to strike a very direct, factual tone when introducing the issue. This may involve showing women their BMI on a chart, and explaining that, because their BMI had reached a certain threshold, it was standard procedure to offer them a referral. Again, they felt this may help women feel less judged as it seemed like more of an automatic process, rather than the midwife making a judgment that they needed a certain type of care.

> To some extent it's quite easy when you're physically sitting in front of the computer with the BMI calculator and you can show them what their BMI is.
>
> Midwife manager

> I would just say that because their weight was above a certain weight, that the guidelines mean that they should be monitored for gestational diabetes or referred to the [service].
>
> Midwife

There were a number of factors which affected a midwife's ability to raise the issue of weight, including:

- level of experience – midwives who had been initiating difficult conversations with pregnant women for decades were more comfortable doing so, while those newly qualified were more apprehensive
- training – midwives spoke about how receiving relevant training (on raising the issue or motivational interviewing) had increased their confidence
- caseloads – where midwives had very high caseloads, they didn't always feel there was time to give healthy weight issues due attention.
- support from management – there was some desire for greater managerial support around child healthy weight issues, but a feeling that their team was too busy for it to happen

> Women with a raised BMI – it's huge – we see how it affects people's health and birth, but it's not prioritised in terms of our training or offering support with it. I feel I don't have much to offer. For me personally I don't feel supported to do it.
>
> Midwife

When midwives raised the issue of weight, reactions from pregnant women varied. Midwives reported that often the women already know that they are overweight and, while they are not surprised that their midwife has raised this issue, they may not have realised what this means for their pregnancy. Women already aware that they were overweight reacted to midwives raising the issue in two main ways.

First, they may tell the midwife that they are aware of the issue and how to address it, but feel they have enough going on without trying to manage their weight. They may brush off the risks, and focus on their pregnancy and all the life changes associated with pregnancy. They may say that they were overweight (albeit often less overweight) during past pregnancies which went well. It may also be the case that women are already taking steps to manage their weight (through attending local weight loss groups or making changes themselves), and feel that the issue is in hand.

Second, they may feel guilty and find it upsetting to learn about the risks associated with being overweight during pregnancy/the impact their weight could have on their baby. They may have tried to lose weight in the past, and blame themselves or feel embarrassed where it hasn't worked.

> Some people are a bit shocked, saying ‘I didn’t realise how much more risk it would be that I’m slightly overweight’. […] They probably knew they were overweight, but maybe didn’t realise the impact it would have on their pregnancy.
>
> Midwife

Midwives also reported that pregnant women who were overweight but on the lower end of the threshold were sometimes less receptive to the conversation. They did not always see themselves as overweight or feel like they needed intervention.

> For some people who are just over the 30 mark they think ‘well, I’m only just over.’
>
> Midwife

Midwives recognised the complexities involved in a woman’s relationship with food, exercise and their weight and were aware that health behaviours are influenced by past traumas and complex life circumstances.

> Certainly, some of them have got quite significant histories as well – it’s not just a case of an isolated overweight happy person, there’s usually something or lots of things they’ve disclosed in their history.
>
> Midwife manager

Given this complexity, midwives reported having thought about whether pregnancy is, in fact, an appropriate time to raise weight issues. The fact that weight loss is not recommended during pregnancy (although small healthy changes are encouraged) also contributes to this feeling. Furthermore, they stressed that they had so much information to cover in appointments that there was little time to address weight fully anyway. This meant that any conversation on healthy weight management risked raising a difficult issue without being able to fully address it.

> I sometimes think these young midwives are so focused on getting the computer systems all done, that they actually don't ever get the opportunity to look at the women eye to eye and say, ‘how are you feeling? Tell me about what your thoughts are about the pregnancy. What your thoughts are about your weight, about diet, about exercise’. I think, as the caseloads have risen, these things sometimes take a back seat and I think, at a time when these things should be really important, should be something we should be focusing on.
>
> Midwife

Midwives reported that they would always raise the issue with women, but recognised that it was difficult when a woman’s pregnancy was fraught in other ways – for example, if she was experiencing poverty or a relationship breakdown. Although women may not be in a position to address their weight at that point,

midwives would still raise the issue in order to follow referral pathways and introduce the possibility of addressing it in the future.

> You have a very limited time to intervene and there are lots of things happening so it's not a time women are particularly receptive. It's not a high priority for a number of women. In a way, it's more about planting a seed for after the baby is born.
>
> Public health professional

On the other hand, midwives suggested that anticipating a baby makes for a window of opportunity, as women want to ensure that their family has a healthy active lifestyle for their child.

> I would say for talking about healthy weight, [..] we have quite a timely platform there because when the women are pregnant, they are very motivated to do their best for their baby. It's probably a bit easier when they're pregnant that they'll engage easier.
>
> Midwife manager

Identification in the early years

Identifying babies and children with a high BMI

In the early years, babies and children are usually weighed and measured at every core UHVP visit. For the most part, these core visits will be carried out by health visitors. However, there were reports of some core visits (for example the 27-30 month review) being routinely conducted in the 'skills mix' team, usually by nursery nurses. This 'skills mix' approach allows for other health professionals to work as part of the health visiting team and ease health visitors' workloads.

Although children were normally weighed at least at every UHVP core visit, this was disrupted by the COVID-19 pandemic, with some appointments being undertaken by phone instead. Health visitors raised concerns about the weights and measurements missed as a result.

> A lot of our work had to move to be just video or phone call… and I think that's quite a difficult way of bringing up weight issues with somebody. And it means also that children weren't always weighed, so we would possibly have not weighed these kids for a long, long time because the only visits they really wanted us to continue with was the birth visit and the 6-8 week check. And then they could go right to 13 months without ever being seen face to face and being measured again… I think that is an issue.
>
> Health visitor

At in-person visits, health visitors reported taking the child's measurements, recording them in the red book (the personal child health record), and plotting their

measurements on the centile charts. These would then be recorded in the system upon returning to the office. Health boards used different software for recording these measurements.

Health visitors' use of BMI measurements varied across the different health boards. Where BMI was used, a BMI above the 91st centile was generally the threshold at which health visitors would identify an issue. In younger infants (under two years), health visitors tended to use the centiles and did not calculate a child's BMI. There were also boards in which health visitors used only centiles, for all ages. Health visitors spoke in different ways about how they used these centiles to identify potential weight issues – either looking at a child's weight centile and comparing it to their height centile (with a weight two or three centiles above their height indicating a disproportionately high weight), or looking at change over time (with a quick rise up the weight centiles causing concern)[44].

Even in health boards where BMI was routinely calculated, health visitors did not feel they had the tools in place to do this easily. They noted that the 'red book' does not commonly include a BMI chart, meaning that they had to either bring a BMI chart printout, calculate it on an app, or calculate it once they returned to the office. Health visitors felt that this made it less likely that staff would carry out this part of their job consistently. Calculating it in the office meant that health visitors sometimes had to call parents after an appointment to talk about their child's BMI, missing out on the chance to do it in person as part of the visit.

> It sounds silly but something as simple as having BMI charts on a laminated chart – it would let us do the calculation and show parents in the appointment rather than having to do it over the phone later – you've missed an opportunity.
>
> Health visitor

Area for consideration (local health board level):

Ensure health visitors are using BMI centiles and have a means of calculating BMI while out on visits

One health visitor also raised the issue of their scales not measuring high enough to capture an accurate weight for all children.

> In fact, I have just made a request to my manager actually to get us some scales that measure higher than 20 kilos because so many children…we are not actually able to weigh because our portable

[44] Note that the 2010 SIGN Guidelines recommend the use of BMI centiles: Scottish Intercollegiate Guidelines Network (2010). Management of obesity: a national clinical guideline.

> scales don't go up high enough, which is not great when you are trying to make a referral and you don't have a weight, but you know that it is over 20 kilos.
>
> Health visitor

Opportunities and challenges for referral

When a weight issue was identified, health visitors reported that they would generally always raise it with a family, but confidence managing that conversation varied. Confidence was higher among those with more experience, those who felt particularly passionate about the issue (and therefore gave it more focus in appointments), and those who had better relationships with staff in relevant roles (for example, health visitors who had friends in dietetics, who had been on relevant steering groups, or who had worked in health improvement in the past). In at least one health board, a 'conversational toolkit' had also been developed to improve health professionals' confidence and consistency of approach.

When health visitors initiate a conversation with parents about their child's weight, they may have several goals:

- to make parents aware of the issue
- to get a greater understanding of the child's lifestyle – how they are eating, moving and sleeping
- to offer intervention either themselves or through referral to another service (for more detail on interventions, see Chapter 4)

Health visitors' approach to the conversation

One factor health visitors used to their advantage when approaching weight issues was the relationship they had built with families throughout the UHVP. They emphasised to parents that their relationship needed to be an honest *partnership* and this helped promote a feeling that health visitors *were* working together with parents to reach a shared goal, rather than the health visitor judging or telling parents what to do.

> I think it's all about relationships for us. If you go in and be dictatorial with a family, you're going to get nothing. But if you go in and you're almost in a partnership and you celebrate the highs and commiserate the lows and think 'well, what can we do about this then…'
>
> Health visitor

> I would say that the universal pathway that we do, all the visits, helps because it means that you know the families a lot better, which makes conversations easier. […] I always have a conversation at the start of the relationship about us being honest

> with each other, and then when I bring something up like [child healthy weight issues] I always start by saying 'we always said we'd be honest with each other, so I'm just going to say what I think then you can tell me what you think'.
>
> Health visitor

Area for consideration (local health board level):

Maximise the potential of the strong existing relationships health visitors have built with families

Where 'skills mix' staff carried out visits, they did not have such a strong relationship with parents. This may have consequences for how (or if) referral is approached. It is particularly notable that the 27-30 month review was routinely conducted by 'skills mix' staff in at least one health board, as this was identified as a key referral point.

Although an established relationship between parents and health visitor made these conversations easier, health visitors still recognised the importance of approaching the conversation carefully. They were aware that, if the conversation went badly, it could risk that carefully built relationship. In one health board which did not have a tier 2 service to refer to, there was a view that health visitors were less inclined to take that risk as they could disrupt the relationship without actually being able to offer support.

> If you've worked very hard to develop a relationship with the family and there's other things going on [it might not be health visitors' priority].
>
> Public health professional

As with midwives, health visitors spoke about trying to establish the family's circumstances and starting from there before deciding on any intervention. This means asking the family about whether they are worried about their child's weight, what they think is behind it, and how it could be improved. It also means following the parents' cues and letting them 'solve their own problems'.

> I'd ask if it's something they've had concerns about – it helps me gauge their motivation. Next, I would have an exploration of if they are willing to make a change, and what change would it be. I'd talk about the [intervention] and what it's like. Sometimes when talking to parents, the issue becomes obvious. I find it's most effective to identify one small change they want to make, then follow up – if they're at the motivated stage. If they're in denial and don't want change or referral, I'd say let's review in three months.
>
> Health visitor

Health visitors also used the approach of taking a more factual tone. They tried to use more neutral terms, and emphasise that they have to offer a referral – one health visitor would always say she had a ‘duty of care’ to raise it with parents. Health visitors would also commonly use the centile or BMI charts to show parents the issue visually. They felt that this made it easier for parents to understand and harder for them to deny the issue. As noted in Chapter 2, health visitors also reported that they showed the centile charts to parents from the very beginning of their relationship, so that by the time a problem arose, parents understood the significance of the charts.

> I use the terms 'weight and height are out of alignment' rather than 'overweight'- I’d say their BMI is this (showing them on chart), and that puts them over the 91st centile which means this. Parents can’t argue with the facts.
>
> Health visitor

> I say it in a respectful way: ‘From what I have documented, it's just above a healthy weight’.
>
> Health visitor

Another tactic health visitors took when parents appeared not to take on board the importance of addressing their child’s weight issue was to explain the likely health impacts later in life. They felt this made it harder for parents to dismiss the issue or maintain that their child will just grow out of it.

> We have to sell it to parents – ‘if he gets some more activity now, he's going to have less problems later in life.’
>
> Health visitor manager

While health visitors reported that they would always raise the issue with families, they noted that, if the family was going through complicated and difficult circumstances, they were less likely to intervene fully until their circumstances had improved.

> It can be more difficult if the family is in very difficult circumstances – for example, if they have three other children and two of them have additional needs.
>
> Health visitor

Parents’ reactions

In terms of how parents respond to the issue of their child’s weight, health visitors had experienced a real range of responses.

One type of reaction is for parents to listen fully, recognise the problem, engage in the conversation, and agree to referral. However, health visitors noted that families may be open and willing when the topic is first introduced, but not actually attend the service or implement changes. They may also accept advice happily, but not engage any further than that or accept referral.

> It's very difficult - families often stop engaging. They're all quite willing to be referred, but then engagement falls.
>
> Health visitor manager

In other cases, parents recognised the issue but responded more defensively, often blaming others in the family. These parents tended to feel they had less agency to help their child be healthier, as they weren't the only one responsible for their diet and activity.

> Parents can be defensive and can blame other family members – they say 'oh he goes to gran's for childcare and she feeds him rubbish' or it can be about the dad when the parents are separated. It can often be that the dad/gran has poor eating habits themselves.
>
> Health visitor

There were also parents who did not accept that their child was overweight, or recognise that this was a problem. Health visitors felt that this was often linked to wider influences (especially the child's grandparents).

> Some parents do not want referral, they are happy with their kid and you just cannot change their outlook. Still a lot of families will say 'we had this [when I was young], and I'm alright'. It's difficult because you're trying to change generations of poor eating habits.
>
> Health visitor manager

Health visitors were also conscious of the difference that the parents' weights and their own weight could make to the conversation. Where the child's parents were also overweight, they were particularly careful to approach the topic sensitively. Parents who were overweight themselves reacted in different ways, either feeling more criticised, or feeling that they understand the issue and want to improve things for the health of their whole family.

> It can be quite sensitive because sometimes you get parents who are very overweight as well. And sometimes they recognise that, and they don't want their child to be like that, so they'll be on board, but sometimes they get a bit miffed that it's been brought up in the first place. So, you've just got to be very careful.
>
> Health visitor manager

When the health visitors themselves were overweight, there was a feeling that it could make things difficult by showing that losing weight is not easy. A contrasting view was that it made things easier, as it showed parents that they weren't judging them, that they understood the challenges and were just trying to support them.

> When I say, 'I'm big myself, I'm not here to judge you', you can see them 'Oh OK then', they relax and as we go through pregnancy, sometimes I'll [only] see them once or twice but others I get on really well with them. You can see them relax 'she's not judging me' and we get on with it.
>
> Healthcare assistant

Identification at Primary 1

As described in Chapter 2, Primary 1 children were weighed and measured as part of the Primary 1 health review. Generally speaking, school nurses carried out the Primary 1 measurements themselves, although there were health boards in which this was done by healthcare assistants due to capacity issues.

Standard procedure tended to be for parents to receive a letter advising them that their child was due to be measured at Primary 1 assessment, but that they could opt out. Opt-out rates were reported to be generally low in health boards taking this 'opt out' approach, with the vast majority of children being weighed.

Other health boards used an 'opt-in' approach which had resulted in much lower proportions of children being measured. This approach had been introduced as a result of issues with data protection (in one health board) or due to complaints from parents (in another health board). In addition, Boards were advised by the Child Health Surveillance National User Group (made up of representatives from NHS Boards, NHS National Services Scotland, Public Health Scotland and Scottish Government) in 2018/19 to take this approach. However, the subsequent fall in responses the following year (particularly among the most disadvantaged families) meant that Boards were asked to return to an 'opt out' approach[45]. The findings of this study, however, indicate that not all boards had resumed the 'opt out' approach, and that this was reducing the numbers taking part, particularly those considered most in need:

> Things have changed, since parents are now asked to opt into the health surveillance survey. Now only 50% of kids get Primary 1 assessment (before COVID-19) – the families that are most vulnerable are missing out on this check, as they don't send the form back.
>
> School nurse

[45] Public Health Scotland – BMI in Primary 1 Children in Scotland, Technical Report, School Year 2019/20

Across the health boards, school nurses framed the assessments to children as *'just seeing how you're growing'*, and commented that the children were generally curious and happy to be measured. If a child was self-conscious about being weighed, school nurses made efforts to take an even more sensitive and friendly tone, emphasising that everyone is different. Where school nurses had someone else with them to note down the measurements, they would also try to be discreet rather than calling the weight out across the room to the note taker.

There was variation in how measurements were carried out, largely determined by the health board approach and the facilities available within the schools. The two main approaches were:

- taking the children out in small groups of up to six to be weighed
- weighing children in the class, ideally discreetly to the side while the rest of the class is focused on a health-related activity

The COVID-19 pandemic had impacted on the Primary 1 assessments heavily, with many children not being weighed in Primary 1. School nurses were conscious of the impact this would have on their ability to identify and intervene early, and that the data reported to the Scottish Government would be very incomplete.

> Last year we didn't do the Primary 1 measurements – we'd only done a handful before the pandemic, so loads last year were missed. This year we didn't do them all either, the children were out of school so much. There will be gaps.
>
> School nurse

Opportunities and challenges for referral

Once a school nurse had determined that a child had a BMI higher than intervention thresholds (typically 91st centile), they would typically contact parents either by letter (sometimes including their child's BMI chart) or phone. However, there were health boards that were moving away from this approach and were no longer using Primary 1 measurements to identify and refer children.

Where initial contact was by letter, it would either invite them to call the school nurse or advise them to expect a call from them. During that first phone conversation, school nurses would aim to discuss the child's weight with parents, assess how the parents feel about it, and explore possible next steps – either making a plan and agreeing that the school nurse would follow up or offering referral to a different service.

The approach taken by school nurses was similar to that of health visitors in that they would discuss the issue factually and openly, and would alert parents to the possible long term consequences. However, the lack of an existing relationship with

the family made the school nurses' experiences of raising the issue different to those of health visitors.

School nurses reported that they were sometimes apprehensive about raising weight issues with parents due to not knowing the parent well, and due to past experiences of parents reacting negatively.

> I've actually had a phone call that reduced me to tears once […] I got ranted at by a woman that had just opened her mail because I had measured her child at Primary 1 and sent the letter home saying, 'you realise your child's BMI is outwith the healthy range'. And she just called saying 'How dare you, the BMI is rubbish and not a good way to measure children'. And I think that impacts the way people in the team have practiced. And I'm quite keen to say well look, we send out 2000 letters and get one complaint – we shouldn't be changing our practice for one complaint. […] but that's very difficult for people to tolerate.
>
> School nurse

As discussed in Chapter 2, school nurses also felt that they had limited opportunity to do health promotion and prevention work with parents and pupils, meaning that they were only connecting with parents once a problem had already arisen.

Nonetheless, school nurses reported that, in the main, parents reacted well and understood why the conversation was necessary. They were often already aware of the issue, and appreciated the support of the school nurse. However, a small proportion reacted angrily and denied that their child was overweight, or took issue with the use of BMI to measure a child's weight. As with health visitors, parents of children who were only slightly over the BMI threshold tended to be more likely to react in this way than those whose child had a more serious weight issue.

One school nurse in a health board where a proportion of the Primary 1 assessments were carried out by healthcare assistants said that not having personally seen the child made it even harder to raise the topic with parents.

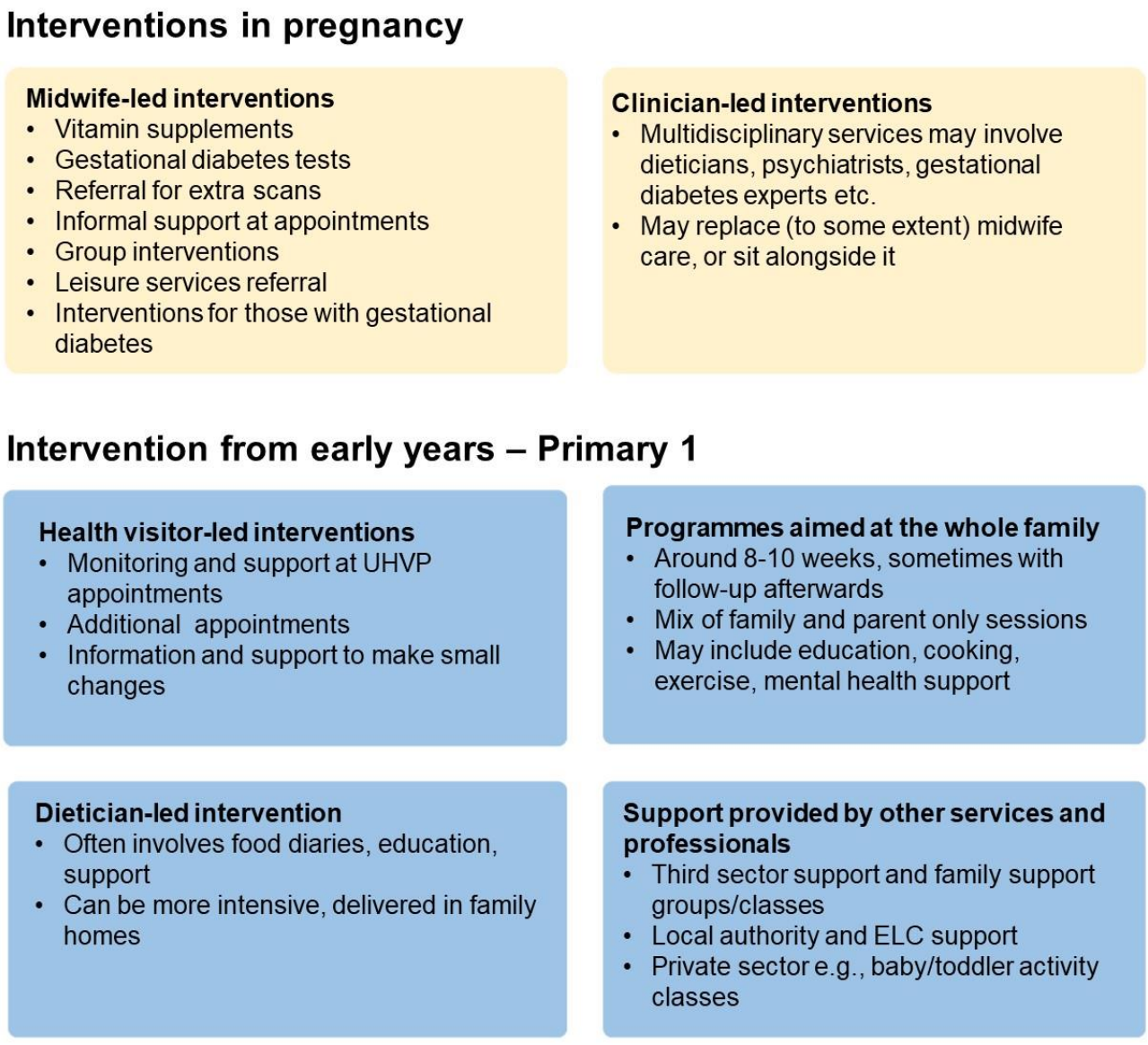
> Parents can be very defensive. They say they don't believe in BMI, that their child 'isn't the biggest', that it's puppy fat, that they're big boned, that it's muscle. It is difficult having these conversations when you're not the one who has actually seen the child.
>
> School nurse

4. Interventions

This chapter explores what happens after a weight issue has been identified. It considers how health professionals determine which intervention is most appropriate, and outlines the types of interventions on offer. It concludes by addressing the perceived effectiveness of these interventions.

Figure 4.1 (below) illustrates the types of interventions that may be available in health boards across Scotland. These interventions will be addressed in more detail later in this chapter.

Figure 4.1 Interventions available from pregnancy to Primary 1



Looking across the system as a whole, there were various interventions in place, and numerous plans for improvements. However, improvement plans appeared to have a stronger focus on the early years than interventions aimed at pregnant women and, as might be expected, awareness of improvement plans was higher among public health staff than those with a clinical caseload. The COVID-19

pandemic had slowed down planned progress and disrupted existing programmes, with many of the services mentioned in this chapter either moved online or halted.

Furthermore, there were health boards with no tier 2 interventions available. In these health boards, the only options available as part of the health system were for the health professional to intervene themselves, or to offer dietician referral (tier 3).

In health boards with dedicated services on offer, interventions varied by the following key factors:

- The type of health professional that leads the intervention – for example, do the parents have an existing relationship with them, or is it someone new?
- The duration of intervention – for example, does support provided during pregnancy continue postnatally?
- The level of specific focus on healthy weight – for example, is the service on offer dedicated only to weight management, or does it cover other areas of behaviour change? Does it take a holistic approach and consider all factors influencing a weight issue, or does it focus on one element (such as diet)?

Health professionals were relatively confident in their knowledge of the interventions available, and in determining the most appropriate one. Their main consideration was the circumstances and preferences of the family – whether they were comfortable with a group session, what they specifically needed support on, their capacity to engage with the interventions and so on. A further consideration factor was what had (or hadn't) worked so far. For example, if a health visitor's own intervention hadn't been successful, they may then consider referral to a service.

Health professionals would also consider the nature of the issue underlying a high weight when assessing which intervention was best suited – for example:

- If the child had a very sedentary lifestyle, referral to exercise classes might be most appropriate
- If the parents had low knowledge around healthy diets, they might find referral to a dietician most useful
- If the parents had difficulty managing their child's behaviour around food (for example, they were unable to say no to their child's requests), used food as a reward or as a sign of love, or had trouble managing their children's behaviour around screen time and activity, parenting classes or parenting support from a community worker might be beneficial.

However, it is worth noting that there were families facing all of these difficult circumstances, and that addressing a weight issue is not straightforward. In acknowledgement of this fact, a small number of health boards offered interventions that were more holistic, led by what the family felt they needed, and involved input from psychiatrists as well as other health professionals.

During the COVID-19 pandemic, it was more difficult for health visitors to establish these underlying issues when they were often undertaking appointments over the phone, missing the cues that they would normally pick up on from being in the home. Where parents had been able to join appointments by video using tools like 'Near Me'[46], this difficulty was mitigated to an extent. However, health professionals reported that take-up of the 'Near Me' video consulting was inconsistent among both parents and health professionals.

Interventions in pregnancy

Interventions in pregnancy aimed to support pregnant women to eat well and exercise safely and to monitor the health of them and their unborn baby. The goal was not to help women lose weight during pregnancy, but rather to:

- minimise the risks to mother and baby during pregnancy and delivery
- promote healthy weight gain during pregnancy
- improve nutrition for both the mother and the unborn baby
- support healthy behaviour change
- prevent or manage gestational diabetes

The interventions on offer were either midwife-led or clinician-led and these types of intervention are discussed in turn.

Midwife-led interventions

For those women whose BMI was above a certain level (typically a threshold between 25 and 35), there were interventions consistently available across all health boards. Midwives would:

- initiate a discussion around the risks associated with a high BMI during pregnancy, and discuss healthy lifestyle changes
- arrange for gestational diabetes tests
- refer the women on for additional scans and tests – for example, growth scans
- recommend certain additional micronutrients or vitamin supplements (such as an increased dose of folic acid)

While these interventions were universally available, beyond these, options varied by health board.

Midwife-led interventions ranged from informal support provided during regular midwife appointments to more formalised services offered by (sometimes

[46] Near Me is a video consulting service that enables people to attend appointments from home or wherever is convenient. It is a secure form of video consulting approved for use by the Scottish Government and NHS Scotland.

specialised) midwives. Midwives worked with pregnant women to help them make small changes, support them to make a plan around their own health, and discuss nutrition and infant feeding.

Midwives reported high levels of confidence around advising women on healthy lifestyles during pregnancy, but less confidence around weight management specifically. Midwives were conscious that there was little guidance around this issue, and found it difficult to advise on what constituted a healthy amount of weight gain during pregnancy[47,48].

> If someone came to me and said, 'I've put on x amount of weight' I'm not sure I would be sure 'is that ok, is that too much weight or not enough weight?' As far as I'm aware, we don't really have guidance on how much weight they should gain during pregnancy.
>
> Midwife

Area for consideration (national level):

Ensure healthcare professionals are aware of the current guidance on healthy weight gain in pregnancy and kept informed of any subsequent changes to this.

More formal examples of interventions delivered by midwives included group education sessions and phone clinics. In one health board, a specialist infant feeding midwife led a group intervention which focused on minimising pregnancy weight gain by advising on healthy eating and physical activity during pregnancy. Participants received dedicated support from the midwife, and met others in the same position.

In a different health board, midwives could offer referral to a dedicated group programme for pregnant women with a BMI of 30 or above. The programme was eight weeks long and run by a midwife. Pregnant women were motivated and supported to make small changes for a healthier pregnancy. Activities included walking, cooking, and talking together. However, one midwife reported that take-up is generally low, with women often citing work and family commitments as a barrier.

There were also midwives who discussed using elements of their Counterweight[49] training (particularly around behaviour change) in their work with overweight

[47] The 2009 Institute of Medicine guidelines are generally used to define excess weight gain during pregnancy

[48] The Scientific Advisory Committee on Nutrition is currently undertaking a review of maternal nutrition and maternal weight. The Scottish Government is awaiting the outcome of this to inform next steps on advice and training for healthcare professionals.

[49] Counterweight is an intervention that aims to empower people to lose weight through clinically proven, dietician-led behaviour change programmes. It features structured informational sessions, educational learning materials, and regular monitoring for participants. It supports people to make sustainable changes so they can lose weight and reduce their risk of chronic disease.

pregnant women. This could be delivered as a formal Counterweight service, or just as someone providing support informed by their Counterweight training.

One issue with less formal examples of support, where midwives had taken it upon themselves to intervene, is the reliance on their continued time, effort and capacity. The quote below is from a midwife who ran group sessions with pregnant women at a local swimming pool and felt that it would have required funding and training to continue it.

> It was a big miss because it was in a small pool with just other pregnant women - they felt safe, even those who wouldn't necessarily go for a walk on their own would go to that. I stopped due to a lack of training, lack of funding – it was just me doing it, I had no training, and then I had baby and I couldn't do evenings so it stopped.
>
> Midwife

There were health boards where midwives could refer women to leisure centre resources for free or at a low cost. This was done either through midwives directly or via another service. One midwife expressed a wish that they could refer to exercise facilities directly – as things stood, they could only refer on to a weight management service (which many people opted-out of), which could then refer to leisure facilities.

Area for consideration (local health board level):

Facilitating healthcare professionals to refer directly to exercise facilities (rather than having to go via a weight management service)

Midwife-led interventions targeted at those with gestational diabetes also existed. For example, in one health board, a positive gestational diabetes test was followed by group education sessions, a weekly phone clinic, and four-weekly scans with a specialist midwife (this had previously been managed by a consultant, but evaluations showed better outcomes for midwife-led care). After the baby was born, the midwives would also write to the patient's GP to inform them of their patient's care. They set up annual reviews to check their blood sugar and make sure that they hadn't developed type 2 diabetes. The service therefore had a preventative element that continued beyond pregnancy, as discussed in Chapter 2.

Clinician-led interventions

Where pregnant women with high BMIs were put on clinician-led pathways, this was less to do with providing advice on weight management and more about managing the medical risks of a high BMI pregnancy.

One health board had a specialised service, funded by a charity, which offered care to women with a BMI above 40. The service was staffed by gestational diabetes

specialists, consultants, midwives, and a specialist dietician, and offered frequent check-ups and personalised advice.

In another health board, women with a BMI over 30 were offered referral to another multidisciplinary service. Women who agreed to referral were seen by a midwife, a physiotherapist, and a dietician at every appointment. They were tested for gestational diabetes, and seen every four to six weeks. The approach was person-centred, with the support guided by what the woman felt she needed. The service aimed to prevent weight gain, maintain the health of mother and baby, and minimise risk. That support continued for up to six months after the baby was born.

Dietician support was a further option for referral. Dieticians would talk with the pregnant woman about what her diet looked like (possibly keeping a food diary) and how to eat healthily during pregnancy, and would make a plan together about changes they could make. Dietician support alone was generally considered to be less effective than approaches that were more holistic, and approaches that were multi-disciplinary and included dietician help alongside support from other health professionals (physiotherapists, psychologists, midwives, healthcare assistants and so on). There was also frustration expressed around long wait times and long periods between appointments, although this was not the case in every area.

Intervention in the early years

Where BMI was used (for children over two), a BMI above the 91st centile was generally the threshold at which health visitors would identify a weight issue. Interventions in the early years (from birth to Primary 1 age) fell into the following categories:

- health visitor-led interventions
- programmes aimed at the whole family
- dietician-led interventions
- support provided by other services and professionals

If health professionals suspected a medical reason for high weight (particularly for the youngest children and those with the highest weights), they would tend to suggest referral to the GP first, to rule out medical causes.

Health visitor-led interventions

The first line of intervention, particularly for children younger than two years, tended to be monitoring and support provided by health visitors themselves. This was especially, though not exclusively, the case in health boards where there was no tier 2 intervention to refer to. Health visitor-led interventions benefitted from the relationship already existing between parent and health professional, although high caseloads and low confidence could serve as barriers.

Typically, health visitors would initiate a conversation with parents about their child's weight (as discussed more fully in Chapter 3). Rather than suggesting large-scale changes to the family's diet or routines, they proposed small changes like walking more often or adding frozen vegetables to meals. To a lesser extent, health professionals discussed other relevant areas like sleep and screen time with parents.

> I'm also very mindful to look at the child as well and not just the numbers, and then just discussing meals and healthy eating and portion size and sometimes as well getting them to write down what their child is eating for a week, so that we can go back through it.
>
> Health visitor

Health visitors then scheduled extra visits (often three months from the core visit) to review a child's weight and check in on the family. Other instances in which they would schedule additional visits were where a parent had raised concerns, or if the family had already been referred to a dietetics or paediatrics team, who (during the COVID-19 pandemic) had requested weighing between their appointments.

Health visitors reported that they had to make a judgment as to whether to begin this type of intervention with a family. For example, a health visitor might identify a weight issue but recognise that a family was facing complex circumstances such as financial issues, relationship breakdown, or parental mental health issues. They may determine that the family was not in a position to address their child's weight. In these circumstances, a health visitor might make more frequent visits, so that they are there to support the family once they are better placed to begin making changes. As one participant put it, parents need to be *'ready, willing and able'* to make such changes – they might be ready and willing but not able, or be willing to make changes but not yet ready.

> I've found it's most effective to identify one small change they want to make, and then follow up – if they're at the motivated stage. If they're in denial, and they don't want to change, they don't want a referral, then I'd say 'let's review in three months'. I'd just want to keep in there with that family.
>
> Health visitor

Another factor influencing whether health visitors initiated their own interventions was their own confidence and capacity. Health visitors who were more newly qualified, who had received minimal training on child healthy weight, who had overwhelming caseloads, or who generally felt less comfortable addressing the issue, seemed more likely to choose to refer to a different service rather than intervene themselves.

Where health visitors did intervene themselves, their intervention generally continued for a few months, or until it became clear their intervention wasn't working. They would then refer on to other services.

Programmes aimed at the whole family

Health visitors noted that a child's weight rarely exists in isolation, but is often a family issue that is influenced by that family's circumstances. For this reason, and because it was less stigmatising for the child, they felt that a whole family approach was often most appropriate.

In one health board, children under five years had access to a ten-session family programme, involving either group or individual family sessions (parent's choice). The focus of this dietician-led service was on making small achievable goals with the family. Again, it aimed to take a more holistic approach and consider the factors contributing towards a weight issue in a family.

> We see a sibling group who all have the same challenges, and so [the new programme is] looking at how supporting families […] in their kind of day to day, basically to kind of change the sort of mind-set hopefully for the longer term benefit of all of the children within the family, but making it as the family doing it together as opposed to this is particularly about the child.
>
> Health visitor

Participants were also very conscious of the mental health aspects of child healthy weight issues. In one health board, which was about to implement a child healthy weight programme with psychologist input, a public health professional spoke about how unusual it was to have the involvement of psychologists or psychiatrists. They recognised that these professionals were very stretched, and were generally only available for the most serious issues. However, where they were involved, there was the benefit of helping families work through underlying issues and relationships, rather than focusing on an area like diet in isolation.

Another programme on offer in a different health board offered support to families and focused on developing a healthy relationship with food, enjoying physical activity, and overall positive health and wellbeing. It was a family intervention for parents of children up to age 15, and is still being improved and rolled out.

In at least four health boards, plans were underway to bring in HENRY[50] training for staff and/or the 'HENRY' programme for families. Health visitors were positive about the introduction of HENRY as it was seen to address a child's involving the whole family and recognising the various factors influencing it.

Dietitian-led intervention

Referral to dietician was an option available to health visitors across Scotland, although access varied, and those in health improvement roles reported difficulty accessing funding to recruit the dieticians needed.

[50] More information can be found on the HENRY website

The level of support provided by dietetics varied. It would typically involve a series of appointments to talk about the child's diet and make a plan together. The dietician might ask the family to keep a food diary, talk with them about what constitutes a healthy diet, and check progress at subsequent appointments.

In one health board, there were plans to offer more intensive dietetics support for children identified as being above the 98th centile at the 27-30 month development review. This would involve 1-1 dietetics support delivered in the family home, covering topics like portion sizes, sleep, play, physical activity and hidden sugars.

In more remote health boards, it was harder for health visitors to refer to a dietician who was trained on child healthy weight issues. This was because local dieticians were more generalist, and those trained in child healthy weight were based further afield.

Support provided by other services and professionals

Health visitors could also refer to professionals such as link workers, family support workers, community food workers, or nursery nurses.

In one health board, when health visitors identified that a family needed more support to help a child (or children) to maintain a healthy weight, they could request that a nursery nurse work with them over about six weeks. The nursery nurses were considered to be particularly adept at providing support with behaviour management, helping parents meet their child's emotional needs and giving them 'permission' to tell their children 'no'.

Another option was referring to local third sector. For example, toddler walking groups, free cooking classes, or referral to charities supporting families with low incomes. Referring families directly on to leisure centres for exercise (at no cost or a low cost) was also an option in health boards where there was a level of integration with leisure facilities.

Intervention at Primary 1

In the first instance, school nurses would follow up with parents of children who have a high BMI (generally over the 91st centile) after the Primary 1 assessments, and try to provide support (as discussed in the previous chapter – assessing the parents' position, discussing the factors behind the issue, making a plan of small changes or offering referral).

Professionals did not talk in detail about the options available for Primary 1 children – the research was focused largely on the early years and intervention for Primary 1s would tend to be those available for school age children more generally. They were also likely to have been more established than those for the early years. However, the following are examples of the types of interventions available:

- a family-based weight management programme for families with a child aged five to fifteen who is above a healthy weight. It was a group-based intervention and ran weekly for an hour over 8 weeks. Sessions focused on

healthy eating, physical activity and positive health behaviour change. Although the programme lasts eight weeks, ongoing support is available beyond that for up to a year.

- a programme for those aged five to seventeen placed a focus on feeling good and having fun. Families took part in physical activity together, parents received support from a coach, and children could make friends and have fun while being active. The sessions took place weekly over nine weeks. Beyond these nine weeks, support was available at regular review points.

Effectiveness of interventions

Overall, health professionals were generally positive about interventions where they existed in their health board. However, they stressed that the effectiveness of services depended greatly on parents' willingness to engage with them. Even where research participants were positive about the interventions on offer, this was sometimes followed up with a caveat about low take-up among parents. Furthermore, communication between different services varied, so that, even when (for example) a health visitor referred a family, and that family accepted the referral, the health visitor would not necessarily hear from the service about that family's engagement or progress. This (combined with the often low take-up from families) meant that participants didn't always feel sure about how effective the programmes were. This issue of parental engagement will be discussed in more detail in Chapter 6.

5. Consistency and coherence

This chapter considers the extent to which child healthy weight systems were consistently implemented, the factors that made consistency more or less likely, and the level of coherence across key transition points.

Consistency of implementation

The dominant perspective was that, overall, levels of consistency were fairly high. However, there was recognition that it was very difficult to establish consistency – levels of auditing and monitoring varied across health boards but were not, on the whole, systematic or comprehensive. Furthermore, professionals with clinical caseloads only knew what they and their immediate team did (and even then, only if there had been low staff turnover).

In relation to consistency of referrals, for example, there was a slight disconnect between public health professionals (who perceived greater inconsistency) and clinical employees (who perceived greater consistency). This could mean that the research sample (which was voluntary and opt-in, as discussed in Chapter 1) was skewed towards those who were more confident that they were following referral pathways correctly. It could also be the case that the perception of public health staff was not accurate – as mentioned, it was very challenging for any individual to know exactly how consistently processes are followed on the ground when there is little regular monitoring of referral patterns, for example.

Prevention

In relation to preventative advice, participants were confident that consistency was high and that parents were not being provided with conflicting advice. Consistent, clear national guidelines made it easier for health professionals to give the same advice. For example, participants were very comfortable implementing the guidance that weaning should happen at six months. They were less comfortable (and therefore likely less consistent) advising on how to manage weight during pregnancy, as they felt they did not have clear national guidance.

Where health professionals had a particular interest in child healthy weight, they may go above and beyond what their colleagues with other interests would do, thus introducing some level of inconsistency of support.

> I think you can put as much or as little into that as you wish, depending on your passion. You know, I am extremely passionate about feeding, so that's my focus. So, if somebody was extremely passionate about weight or about drugs or about smoking, you know, then you tend to find you put more in.
>
> Midwife

Those who had existing relationships with relevant colleagues (public health employees, dieticians, dental teams, GPs and so on) were also more able to seek professional advice and support, again giving rise to inconsistency in support. This is illustrated by the two contrasting quotes below, from health visitors in the same health board.

> All the time I've worked in [health board], I know there's dieticians in [health board], but I've never met them, I don't know the names of them. They don't seem to have a part to play in our world of healthy eating for children – it just seems to be an adult based thing.
>
> Health visitor

> We would refer to dietician for advice even – we might not actually see them, but we would speak to them for advice. And usually, we've got such good links with the paediatric dieticians that they'll contact the families. It's excellent, they're a really good service that we have here.
>
> Health visitor

In relation to breastfeeding advice specifically, the UNICEF 'Baby Friendly Initiative' was mentioned repeatedly by midwives and public health professionals, as it offers standards of best practice helping with consistency of breastfeeding support.

Identification and referral

Turning to consistency of weighing, the UHVP meant that every child was weighed and measured at the same point. This in itself facilitates greater consistency, but also enables more consistent opportunities for a weight issue to be identified and addressed.

There was consensus that, where clear referral pathways existed, they were consistently followed. As discussed in previous chapters, health professionals were confident in weighing and measuring, and assessing weight against BMI or centile-based referral thresholds, although there was a level of inconsistency in whether they used BMI centiles, weight or weight and height centiles. Where referral pathways were *'woollier'* or relied more on professional judgment, inconsistency was perceived to be higher. Professionals also drew on the advice of their colleagues to ensure they were suggesting the most appropriate referral option.

One factor that facilitated greater consistency of referral was simply having somewhere to refer to: an established child healthy weight service which broadly met the Standards. There was less consistency in areas without a dedicated tier 2 service as those identifying weight issues may have different levels of awareness of other types of support (such as third sector groups), different levels of confidence initiating their own interventions, or may not raise the issue at all if they did not feel they had anything positive to offer families.

Other barriers to consistency

Across the strands of child healthy weight, there were other factors which made consistency harder to achieve. These included:

- Size of health board – there was a view that it was more difficult to achieve in very large health boards.
- Rurality – the more remote areas were generally less well-served by interventions.
- COVID-19 – had disrupted service provision in a number of ways, with some services moving to online programmes and others not running. In relation to health visiting provision, it had introduced inconsistency in the way visits were undertaken. For example, those who were shielding may have completed all their visits by phone (or 'Near Me' if available), while others continued to visit families face-to-face.
- Having a skills mix (for example nursery nurses undertaking 27-30 month checks) – this meant a greater range of professionals with different skills and training involved in weighing, identifying, and referring, which risked greater inconsistency.
- High caseloads – changes in workload week-to-week, as child protection issues for example arose, meant that the level of focus professionals were able to give weight issues varied.

Coherence across transition points

The literature states that intervention at each stage (preconception, pregnancy, infant feeding/breastfeeding, weaning, toddlerhood) tends to have only a small effect, and that achieving a substantial impact in obesity prevention requires the additive effect of interventions across multiple life stages in the early years[51]. Furthermore, both Scottish Intercollegiate Guidelines Network (SIGN) Guidelines[52] and the Standards recommend monitoring of progress in weight (adults) and BMI centiles (children). To do so requires enough time to see patients and families multiple times and/or for a family identified by one part of the system to be handed over comprehensively to the next (e.g., from health visitor to school nurse).

On the whole, however, boards did not have coherent pathways, nor any overall leadership, for child healthy weight that ran from pregnancy through to Primary 1. At a strategic level, there were distinct teams and individuals responsible for the different stages (pregnancy, early years and Primary 1) with limited integration between them. This could lead to boards having a particularly strong offering for one part of the system but much less for another. Regardless of the extent of the

[51] Early-Life Obesity Prevention: Critique of Intervention Trials During the First One Thousand Days (2017)

[52] Scottish Intercollegiate Guidelines Network (2010). Management of obesity: a national clinical guideline.

services in place within a board, there did not appear to be a great deal of join up between the different stages.

> I don't necessarily think healthy weight is a big focus throughout that whole area [pregnancy to Primary 1]. I don't think there is consistency right across all the age groups. There are some bits where it is Healthy Start Vitamins and other bits on literacy and they look at it a little bit in 15 to 18 months, a little bit 27 to 30 months, and again age four to five, and it is kind of tacked on to a lot of people's remit in supporting a healthy lifestyle throughout the early years and the formative years I don't think it is consistent, particularly not with healthy weight across all those years.
>
> Public health professional

A consistent handover protocol around child healthy weight did not appear to exist. When handovers (from midwives to health visitor, and health visitor to school nurse) did happen, information about past child healthy weight issues or interventions might be included on shared systems or via paper handover. However, the child healthy weight aspect was not highlighted specifically in any verbal handovers and was not prioritised. Health professionals identified these handover processes as an area for improvement.

In relation to the handover from midwives to health visitors specifically, the antenatal visits introduced as part of the UHVP, regular meetings between health visitor and midwife teams and the involvement of parents were all considered to improve the handover. However, even where these happened, weight issues were not generally a priority. The focus tended to be more on delivery and recovery. At its worst, communication between midwives and health visitors could be very poor, as illustrated by the quote below.

> I often don't even hear when a baby in my caseload has been born.
>
> Health visitor

Similarly, child healthy weight issues were not a focus of handovers between health visitors and school nurses. Indeed, there were health boards where school nurses only received information on pupils who were under child protection or being looked after. There was also evidence of handover processes varying at the individual school nurse level.

> When we pass on to school nurses we really only highlight the children that are causing concern or had child planning meetings ongoing for things like autistic spectrum disorder.
>
> Health visitor

Area for consideration (local health board level):

Improved pathways/co-ordination of services from preconception to Primary 1 - greater strategic oversight of child healthy weight across the system as well as practical improvements e.g., handovers between professionals (midwife to health visitor, and health visitor to school nurse)

6. Key factors influencing current practice

Earlier chapters have described current practice in relation to the different strands of child healthy weight provision (prevention, identification, referral and intervention) from pregnancy through to Primary 1, and the extent to which there is consistency and coherence in this provision. This chapter pulls together themes that cut across the different strands, to identify what appears to be working well and where the key challenges lie.

It is clear that there are a huge number of factors influencing rates of overweight and obesity in pregnancy and the early years. Within the confines of this study, on the role of health systems only, there are three key stages at which the intended processes can fall down. This chapter considers what is working well and what challenges remain at the following levels of the system:

- System design - systems not in place to support healthy weight at key stages and not being aligned with national standards/guidelines
- System implementation - local systems being aligned but not being implemented in practice
- Engagement with systems - local systems being aligned and implemented, but not being effective (e.g., because parents do not engage).

System design

Strengths and opportunities

Core provision

Although provision varied significantly, there were clear examples of best practice and innovative services which professionals felt were working well. There was also evidence of both the UNICEF Baby Friendly Initiative and the UHVP helping to improve consistency of support. As discussed further below, the design of the UHVP also seemed to be showing real benefits in terms of facilitating greater continuity of care and, in turn, stronger relationships between health visitors and families. The FNP was also considered an effective approach for engaging with, and supporting, its target population.

A committed and knowledgeable workforce

Those involved in the design of services spoke knowledgeably and passionately about their area of work. Furthermore, they were united in recognition that, regardless of how effective they perceived their board's current system to be, there was room for improvement. They demonstrated commitment and enthusiasm towards achieving this. To varying degrees, plans were already in place to implement new and improved services – indeed some had been close to implementation before being paused due to the COVID-19 pandemic – and there was evidence of the Minimum Standards being used to shape early years provision. To improve coherence, some boards also described plans to create clearer pathways across the system.

> I don't think it has been great up to this point, as in we have identified gaps and we have absolutely brilliant colleagues who are on the same page as us from a dietetic team to [CHW programme], I think the relationship between professionals is amazing, we work really, really, well together, and we all want the same things. So, I think it is just about making sure that we have those opportunities to progress our work and roll that out.
>
> Health visitor manager

In planning improvements, boards also displayed an openness to new approaches that incorporated preventative elements as well as interventions - for example the HENRY programme. At the heart of these more preventative approaches was an acknowledgement that there were no 'quick fixes' and that it would take time for improvements in obesity rates to happen. In line with the standards, professionals recognised that health systems cannot work in isolation on child healthy weight and expressed a desire to work more with other parts of the system. Similarly, boards described a need to move towards a more societal approach rather than targeting provision at an individual level.

Key challenges and opportunities for improvement

As described above, boards were clear that improvements to their systems were required. Key challenges and opportunities for improvement are discussed in turn below.

Funding cycles

Although both the Standards and participants in this research recognised that long-term resource planning is required to make real differences, funding was perceived to be too short-term to allow for this. Public health professionals described cycles of short-term funding which they felt posed a number of challenges, including:

- Difficulty designing services and programmes with a longer-term strategy.
- Ongoing concern about funding being discontinued and programmes having to stop.
- Problems recruiting high calibre staff due to contracts being temporary.
- Challenges retaining staff employed on temporary contracts as they often moved on to other, permanent, roles for greater job security.

Those in smaller health boards considered current funding practices to be particularly challenging for them as they felt the risk of employing staff on permanent contracts when funding was not guaranteed. They also discussed differences in funding distribution, compared to larger boards, in that the funding was not ring-fenced in the same way.

Participants suggested that the Scottish Government should commit funding for much longer periods, for example the lifetime of their term. Comparisons were

made to FNP, which had benefited from long-term funding commitment. In boards that had received funding for the HENRY programme, there was optimism that this would go some way to remedying these funding concerns.

Resources

Linked to the above, there were also those who felt that current funding was insufficient to allow boards to deliver the required services. This included having adequate numbers of staff in public health roles to support their design and evaluation as well as frontline staff to deliver them.

> It all comes down to funding, I mean the team could develop more training if we were funded adequately and we are not.
>
> Public health professional

Area for consideration (national level):

Establish whether increased and longer term funding could be provided for child healthy weight activities

For example, one participant noted that their child healthy weight service referral threshold was the 91st centile, but that their board would not have capacity to deliver it to all in that category while another made a similar point in relation to capacity to support pregnant women.

> If we were looking at supporting all women at a BMI over 25, at booking, that's half the women... That is definitely a challenge, just the sheer number of women who are presenting at that weight.
>
> Public health professional

Area for consideration (local health board level):

Increased capacity for treatment services to accommodate those who are eligible

It was also noted that services did not typically incorporate longer-term follow up of those who had attended, again, at least in part, due to resourcing and budgetary constraints.

Furthermore, as described below, even when capacity exists to offer programmes to those who need them, the extent to which midwives, health visitors, and school nurses had capacity to dedicate sufficient time to matters of child healthy weight was affected by the way in which their roles had been shaped. Professionals described wide ranging remits, high caseloads and competing demands on their time, with child protection matters, in particular, often taking priority.

Monitoring, evaluation and sharing of best practice

Effective monitoring and evaluation of services and the sharing of knowledge and best practice across boards is an effective way of informing future planning. However, it appeared that this was not always happening, at least not in any systematic, empirical way. Evaluations of individual programmes were reportedly often solely qualitative and focused on participants' self-reported experiences of them. This appeared to be, at least in part, due to a lack of resources to conduct more comprehensive evaluations, particularly as it was recognised that to see whether any positive results have been sustained – both at a population level (e.g., breastfeeding rates) and at an individual level – evaluation must be conducted over the medium to long-term.

Area for consideration (local health board level):

Better auditing and evaluation of service engagement and effectiveness

It was also apparent that there was limited knowledge sharing both between health boards and between different life course stages within health boards. This includes the sharing of ideas as well as findings from audits and evaluations. However, in saying this, there were very positive comments about the Public Health Scotland Healthy Weight Leads Network, suggesting there is scope to build on the impact this can have.

Area for consideration (local health board and national level):

Greater knowledge sharing, both within and between health boards, on service engagement and effectiveness. The PHS Healthy Weight Leads Network, which was considered a useful means of sharing learning, may offer one way of facilitating this.

Ensuring a focus on all parts of the system

In the discussion of both current provision and improvement plans, it appeared that there was a greater focus on the early years than on interventions aimed at pregnant women. As described in Chapter 4, much of the focus in pregnancy was on gestational diabetes and risks for the women and baby, rather than on weight itself and, indeed, there was a reported lack of guidance on what constituted acceptable weight gain in pregnancy.

The reasons for the apparent greater focus on the early years were unclear but there are a number of possible reasons:

- the Standards prompting improvements in support available to families in the early years
- midwifery being in a period of change due to the implementation of The Best Start [53]

[53] Scottish Government (2017) The Best Start: a Five-Year Forward Plan for Maternity and Neonatal Care in Scotland

- reported challenges in affecting healthy weight in women both pre and during pregnancy

Lack of clear pathways/lack of join up with other parts of the system

As evidenced in Chapter 5, it was clear that there were not, on the whole, coherent health system pathways for child healthy weight from pregnancy through to Primary 1. Indeed, at a service design level, it appeared that the roles of those working in maternal health were fairly separate from those working in child healthy weight roles in the early years/school age.

Concerning join up with other parts of the health system and services outside the health sphere, there was also scope for improvement. There was considerable variation in the extent to which boards worked in conjunction with other services such as third sector weaning support, local authority physical activity provision and mental health/counselling services.

Area for consideration (local health board level):

Increased join up with other parts of the system – for example, local authorities, third sector organisations

Provision of more holistic child healthy weight support and advice

When discussing provision for the early years, participants tended to focus on diet and physical activity. While these are, of course, key components, the Standards also recognise the importance of sleep hygiene and limited screen time. While there was some discussion of these topics, it was unclear how much they were routinely covered and how much prominence they were afforded.

Area for consideration (local health board level):

Increase prominence of the role of sleep hygiene and screen time in childhood obesity

Targeting support at those in more deprived areas

As discussed in Chapter 1, rates of obesity in Primary 1 are far higher in the most deprived areas of Scotland than in the least deprived, and this gap has widened over recent years. Healthcare professionals described significant challenges of effecting behavioural changes with families experiencing poverty and other challenging circumstances (discussed in more detail below). This is indicative of a need for more intensive intervention with these families and a greater targeting of resources in these areas. While there was some evidence of boards planning to use funding to specifically target these areas, other boards did not explicitly state intentions to do so.

System implementation

For systems to operate as intended, frontline professionals must have a clear understanding of their role in the process and be equipped with the knowledge and skills to undertake their roles effectively. Interventions must also be available and accessible to those eligible. Consistency is also a key element of implementation. However, as this has been fully explored in Chapter 5, it is not covered in detail here.

Strengths and opportunities

Relationships built up via the UHVP and the FNP

Health visitors play a key role in child healthy weight in the early years and, as intended by the design of the UHVP, they reported having developed close working relationships with families. These facilitate an increased understanding of a families' circumstances, allow issues to be raised more easily and make it easier for them to make a judgement on the best course of action for a family.

Due to the intensive nature of the programme, family nurses described particularly close relationships with their clients that enabled them to work with them on healthy lifestyles.

> So, the therapeutic relationship is definitely something that works really well for us. So, if you think we have known a client from being 12 weeks pregnant and being able to see them every fortnight, every week or fortnight, I mean you really get a good (relationship)…often we can be the people that they see the most in their family.
>
> Family nurse supervisor

Area for consideration (local health board level):

Maximise the potential of the strong existing relationships health visitors have built with families

Relatively high levels of confidence

Although there was variance, health professionals were, on the whole, confident in their knowledge and abilities in the maternal/child healthy weight realm and did not identify any particular training gaps. However, there were suggestions from those working in public health that more in-depth training may be required. This was not said as a criticism of frontline professionals but rather as an acknowledgement that having conversations around diet and healthy lifestyles is difficult, particularly when a weight issue had been identified.

Area for consideration (local health board level):

Further consideration of the training needs of midwifery and health visiting workforces

Broad adherence to referral thresholds

Overall, frontline professionals were making referrals in line with the thresholds stipulated by their boards and, as noted in Chapter 5, this happened more consistently when they had health services within their board to refer to. However, there was a degree of professional judgement involved. For example, when a health visitor identified that a child was at the 91st centile for weight (Standards threshold for tier 2 intervention), they tended to work with the family themselves before making a referral, feeling like their existing relationship with the family would make them more likely to engage. However, there was also some discussion of waiting lists for services, which may have influenced their decision to intervene themselves.

Key challenges and opportunities for improvement

High caseloads

As described in previous chapters, frontline professionals considered their workloads to be high, with many competing priorities. This meant that they were not always able to give child healthy weight issues as much focus as they would like, including providing more intensive support to families who required it, and that planned visits were at times delayed due to more urgent issues.

Area for consideration (national level):

Consider whether health visitor caseloads can be reduced, allowing them to spend more time on healthy weight, particularly with families who would require more intensive support

Ensuring use of BMI for identification in the early years

While SIGN guidelines state that BMI centiles should be used to identify weight issues[54], there was some evidence of health visitors using weight/weight and height centiles (Chapter 3) to do this, suggesting a need for further training on use of BMI. Providing health visitors with a way to easily calculate BMI while on visits (Chapter 3) could also help to increase use of BMI measurements, and improve consistency.

[54] Scottish Intercollegiate Guidelines Network (2010). Management of obesity: a national clinical guideline

Awareness of available services

As noted in previous chapters, there was evidence of health professionals' knowledge of available services varying, suggesting that there is room for improvement in terms of keeping them up to date on what is available in their area.

Engagement with systems

While there was some discussion around giving families choices about services, for example whether they would prefer to undertake a group or individual programme, there was little evidence of health boards having done extensive work with parents to understand what might help them to engage.

Area for consideration (local health board level):

Work with families to understand better what might engage them to work with health professionals and services, and to sustain this engagement

This section therefore focuses on the perceived wider challenges that contribute to overweight and obesity in the early years and the reasons eligible families who are offered support or referral to programmes do not always take it up. In keeping with the fact that rates of obesity are highest in the most deprived areas, the challenges described below all relate more to families in these areas. There was a view that it is very hard for health systems to effect change while these wider challenges exist, supporting the need for a whole systems approach,

> It feels like being a hamster in a wheel. Without changes at a higher level, putting a child or a family on an 8-10 week programme isn't really going to change anything. We need more of a whole systems approach at a higher level, not at a local level.
>
> Public health professional

Deprivation and poverty

Poverty was deemed to be a key barrier to healthy weight. Participants spoke of high numbers of families being reliant on foodbanks, which were not always able to provide them with nutritious food. More generally, healthier foods such as fruit and vegetables were considered by families to be more expensive than less healthy options. While there was an acknowledgement of this among professionals, it was also noted that often parents lack knowledge of how they could incorporate fruit and vegetables into their diets, within their budgets.

> They say things like, 'a pot noodle is 40p, do you think I'm going to go out and spend my money on broccoli and avocado?'. You get a bit of that. That's challenging but there are ways round it like talking about making a pot of soup, that's got a lot of vegetables in it and is a cheap way of having a nutritious meal.
>
> Public health professional

Supermarket promotions on less healthy foods and the availability and affordability of fast food outlets were also seen to contribute to less healthy diets among families experiencing poverty.

As well as being able to afford healthy food options, one professional pointed out that families also need to be able to afford the electricity to cook.

> Overall poverty is a big issue. You can do all you want to teach people how to cook but if they don't have enough electricity and gas to put the cooker on, they are not going to change their diet.
>
> Public health professional

Professionals acknowledged that these families were often encountering a number of difficulties, linked to poverty, and needed extensive support in order to be able to improve their families' diets.

Area for consideration (local health board level):

Increased focus on deprived areas, including greater time available for health professionals to work with families with more challenging circumstances

Cultural norms

Professionals described a number of cultural and/or generational norms (particularly prevalent in more deprived areas) which they felt were difficult to break down. These included:

- overweight and obesity being normalised
- generations of poor eating habits, leading to a lack of awareness of what constitutes a healthy lifestyle and a lack of cooking skills
- breastfeeding not being normalised
- sedentary lifestyles

While they felt some progress was being made, they stressed the significant role that peer pressure and family influence has in relation to health and lifestyles, and why cultural change was necessary.

Personal and family circumstances

The circumstances of individual parents and families were also deemed as a significant barrier to child healthy weight intervention. Of course, these individual situations are highly interlinked with the issues of poverty and generational cycles described above. Circumstances that made it particularly challenging for families to engage included parental mental health/previous trauma (including linked to food

and/or weight), members of the family being in poor health or having learning disabilities (meaning that this was the priority), alcohol and substance use.

> Within families that have a lot going on, when you're talking about limited income, limited ability to be cooking healthy meals and multiple children with different demands of them, potentially children who have, developmental conditions, autistic, potentially minimal communication or minimal speech, then for those families I don't think that it becomes a high priority, because for them to just get by is the priority. So, being able to afford to provide all the meals they need to, whether they are healthy or not is the priority, being able to get the kids settled to bed at night even if that means they are having a bottle of milk to go to sleep at three years old, that is the priority, the day to day coping and living is the priority as opposed to the long-term impact of that.
>
> Health visitor

The perceived lack of support for psychological issues more generally was considered to have a significant impact on healthy weight matters. One view was that there are those who would require intensive psychological support before being able to engage. As noted in Chapter 4, one public health professional was optimistic about their board's new child healthy weight intervention which included psychological support as they considered this to be an important component which was not commonplace due to a perceived shortage of psychologists.

Parenting skills

Again linked to other factors discussed above, parenting skills were identified as a further challenge. Professionals described families with a lack of routine and boundaries around factors affecting weight including food, screen time and sleep. They also described witnessing food being used as a sign of love or to allay feelings of guilt, for example if parents worked full-time. Relatedly, the busy lives of working parents were seen to be a barrier to cooking healthy family meals.

> Sometimes it is around behaviour management, you know, they are pacifying them with three bags of crisps in a row because they don't know how to deal with their emotional outbursts, and that then is a point where we would ask the nursery nurse to be coming in and supporting. So, we are kind of going to see what is behind it to try and identify what we can actually focus on as the fundamental issue so that definitely guides who we would be then trying to support them with.
>
> Health visitor

The COVID-19 pandemic

Health visitors reported that they had witnessed a number of the above-mentioned issues being exacerbated due to the implications of the pandemic. These included parents' mental health and wellbeing (with families being described as being 'in crisis'), increased screen time and more sedentary behaviours. Once more, these were felt to have disproportionately affected families in more deprived areas.

7. Key findings and issues for consideration for policy and practice

This final chapter provides a recap of the main findings before ending with a series of issues for consideration for future system design and implementation. These issues for consideration are firmly grounded in the data gathered from participants, which has been synthesised and situated in the context of existing guidelines and recommendations.

Key findings

This research has shown that there are many elements of child healthy weight systems that appear to be working well. On the whole, systems were being implemented as intended (albeit with some inconsistency) and professionals felt largely confident in their roles. The strong relationships built up between families and health professionals via the UHVP (and to an even greater extent, the FNP), which can help to facilitate open and honest conversations and build trust, appeared to be a particular strength.

It was also clear, however, that there is considerable variation in provision from pregnancy to Primary 1 between health boards. In relation to the early years specifically there is some way to go before all boards meet the Standards for this stage. Boards recognised that improvements were required and displayed a commitment to doing so. Indeed, they were all in the process of developing and/or rolling out new services – albeit often delayed due to the COVID-19 pandemic.

In saying this, professionals were very aware of the challenging circumstances of many of the families they worked with (for example, poverty and mental health conditions), particularly those in the most deprived areas. While they felt their efforts could go some way to supporting and engaging them, there was a consensus that improvements to health systems alone were unlikely to make a considerable difference to rates of overweight and obesity, given it is such a complex and multifaceted issue. Relatedly, there was support for a whole systems approach, as well as a view that change should be conceptualised as a longer term, preventative spend, which might not show results for many years.

Issues for consideration

Notwithstanding the wider societal challenges, the research identified a number of issues for consideration for the provision of healthy weight support in pregnancy and the early years which can be influenced by health systems. These have been discussed in previous chapters and are summarised here under local and national headings.

Local health board level

- Increased focus on prevention at the preconception stage – and on prevention among pregnant women more generally (Chapter 2).
- Improved pathways/co-ordination of services from preconception to Primary 1 - greater strategic oversight of child healthy weight across the system as well as practical improvements e.g., handovers between professionals (midwife to health visitor, and health visitor to school nurse) (Chapter 5).
- Increased capacity for treatment services to accommodate those who are eligible (Chapter 6).
- Increased focus on deprived areas, including greater time available for health professionals to work with families with more challenging circumstances (Chapter 6).
- Maximising the potential of the strong existing relationships health visitors have built with families (Chapters 2, 3 and 6).
- Work with families to understand better what might engage them to work with health professionals and services, and to sustain this engagement (Chapter 6).
- Better auditing and evaluation of service engagement and effectiveness (Chapter 6).
- Greater knowledge sharing, both within and between health boards, on service engagement and effectiveness. The PHS Healthy Weight Leads Network, which was considered a useful means of sharing learning, may offer one way of facilitating this (Chapter 6).
- Increased join up with other parts of the system – for example, local authorities, third sector organisations (Chapter 6).
- Facilitating healthcare professionals to refer directly to exercise facilities (rather than having to go via a weight management service) (Chapter 4).
- Further consideration of the training needs of midwifery and health visiting workforces. For example: ensure health visitors are using BMI centiles and have a means of calculating BMI while out on visits; increase the prominence of the role of sleep hygiene and screen time in childhood obesity; and ensure healthcare professionals are aware of the current guidance on healthy weight gain in pregnancy and kept informed of any subsequent changes to this (Chapters 2, 4 and 6).

National level

- Establish whether increased and longer term funding could be provided for child healthy weight activities (Chapter 6).
- Explore whether factors that limit the work school nurses are able to do on child healthy weight (e.g. workload, few existing relationships with families) could be addressed to allow them to take on a greater role in this.

- Consider whether health visitor caseloads can be reduced, allowing them to spend more time on healthy weight, particularly with families who would require more intensive support (Chapter 6).

Further research

To further understanding of how healthy weight is supported in pregnancy and the early years, future research should incorporate the views of other relevant groups that it was not possible to include in the current study. This includes: pregnant women and families with young children; professionals working in early learning and childcare settings; third sector organisations working in partnership with health and education sectors to enhance provision.

Furthermore, as discussed throughout, the research took place at a time when a number of health boards were in the process of implementing improvement plans, many of which had been delayed due to the COVID-19 pandemic. Further research to revisit these plans with boards in the future should also therefore be considered. This could include an understanding of the effect of the COVID-19 pandemic on any planned activities.

Appendix A: Discussion guides

Stage One discussion guide

Introductions (2 mins)

Note to interviewers: “support” = preventative actions but also treatment actions (e.g. specific dietary assessment and advice or eventual referral onto weight management services)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to enhance understanding of weight assessment and support for promoting healthy weight in pregnancy and for children in the early years up to Primary 1. For the first stage of the research, we are speaking to a representative from all 14 health boards across Scotland to understand how assessment and support operates from a local health system perspective.
3. The interview will last about 30 minutes
4. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
5. There are no right or wrong answers – we just want to know about what is happening in your local area
6. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government or published in any resulting reports
7. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Overview of their role (2 mins)

Interviewer note: this section is designed to briefly cover participant’s role in relation to assessment and support for healthy weight of pregnant women and children up to Primary 1 in their area. We should already have some information about them from recruitment, so this is just covered briefly as a warmup.

Thank you very much for agreeing to take part. Before we start, I’d just like to ask a bit of background about yourself:

How would you describe your role? What professional qualifications do you have? What are your main responsibilities?

- Probe: Steer specifically to early years healthy weight assessment and support if not mentioned

And how long you've been in this role?

2. Overview of assessment and support for healthy weight in pregnant women and young children (10 mins)

I'd like to start by asking…

2.1. If you could give me a broad overview of how healthy weight for pregnant women and children up to Primary 1 age is assessed and supported in your area? So, for pregnant women, babies, toddlers, pre-school and Primary 1 children.

Probe if not covered:

- **Prevention of overweight and obesity**
  What proactive steps are taken to prevent overweight and obesity among pregnant women and young children up to Primary 1 age in the local area?
  - Are any specific groups of people targeted?
  - How do you engage with them?
  - Any challenges and how manage them?

  Interviewer note: the term 'risk of obesity' can mean being at risk or becoming overweight/obese or actually being overweight/obese - depending on the Health Board approach, interventions may be initiated at early signs of risk of becoming overweight/obese as well as at having been assessed to be overweight/obese.

- **Identification of risk of overweight and obesity**
  When and how is risk of being overweight or obese assessed in your local area during pregnancy and in a child's early years?
  - What data is collected? At what points? Who collects the data?
  - How is it used? How are assessments on risk made?
  - Are there any specific groups of people that prioritised? Are there any differences in the assessment of risks for these priority groups?

- **Healthy weight interventions**
  How is risk of or being overweight and obesity acted on in the local area?
  - Are there specific points at which interventions occur?
  - What would trigger these interventions? Are there specific thresholds?

        - If there is more than one possible intervention/action available, how do professionals decide on which is the most appropriate?

    - If not already mentioned Are Primary 1 data and UHVP data used to assess and support child healthy weight? How?

    - If not already mentioned: How are transition points from pregnancy to post-natal support and from the health visiting pathway to Primary 1 and beyond managed where weight remains a concern?

2.2. Has any of what you described changed since the Coronavirus pandemic?

    - Is this likely to influence/change your approach going forwards?

2.3. How was your Board's policy/approach around assessment and support for pregnancy and early childhood healthy weight developed? Why were these elements selected?

    - How long have these elements been in place? Probe for all elements

2.4. Is there an individual responsible for the whole of pregnancy and early years healthy weight assessment and support in your Health Board?

    - Who has responsibility? Are different individuals responsible for different elements? Why is that?

2.5. Which standards/policies/guidelines were used in the development of your Board's approach to pregnancy and early childhood healthy weight support and assessment?

    - (If not mentioned) How did you decide which to use?
    - To what extent, do you think, does your approach align with national guidelines?
    - What are the key differences?
    - As far as you know, is there anything unique or innovative about your approach?

    - <u>If not based on national expectations:</u> In your view, how closely does it align?

2.6. How are relevant professionals (if necessary: those involved in implementing it) in your area made aware of the approach in your local area? Probe fully

    - If necessary: What training/support/guidance/resources are available, if any? Probe fully
    - If necessary: How are they kept up to date with any changes?

2.7. Has your Board's approach to assessment and support for pregnancy and early years healthy weight changed at all since the introduction of the UVHP? If yes, how? If no, why do you think that is?

3. Perspectives on the implementation of the local system (5 mins)

3.1. How consistently do you think the approach in your local area is implemented in practice? What makes you say that?

- Which elements are implemented more or less consistently? Why do you think that is?
- How coherent is the approach from one stage to the next? i.e. from pregnancy to post-natal and from UHVP to Primary 1.

3.2. What helps support consistent implementation? Probe fully

3.3. What measures, if any, are used to review implementation? Probe fully

- Do you collect any information about implementation across the health board? Why/why not?
- Are professionals in your area asked for their feedback on implementation? Why/why not?

4. Perspectives on the effectiveness of the local system (5 mins)

4.1. In your view, when it is implemented, how effective do you feel your local area approach is to assessing and supporting healthy weight in pregnancy and children's early years? Probe fully

If asked what is meant by 'effective', ask participant to explain what they feel would signify effectiveness.

- Are certain elements working better/more effective than others? Why do you think that is?
- And which elements are working less well/are less effective? Why do you think that is?

4.2. What measures, if any, are used to determine the effectiveness of your Board's approach to assessing and supporting healthy weight? Probe fully

- Do you collect any information about effectiveness? Why/why not?
- Are professionals in your area asked for their feedback on how effective they think the approach is? Why/why not?

5. Opportunities for improvement (5 mins)

5.1. What, in your view, are the key challenges/barriers faced in your area in relation to assessing and supporting pregnant women and young children up to Primary 1 age to have a healthy weight?

5.2. What improvements, if any, could be made?

- Probe: What should the priorities for improvement be?

- How could the approach in your area be implemented more consistently?

5.3. How could national support be improved?

6. <u>Wrap up (1 min)</u>

That's all the questions I wanted to ask you today. Before we finish off, is there anything else you would like to say or ask that we haven't covered?

Thank and close

Early Years Healthy Weight Research

Midwife manager interviews – topic guide (Stage 2)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to explore how pregnancy and early years healthy weight systems work across Scotland
3. We have conducted an initial interview with an individual in most health boards in Scotland. Following this, five areas were selected as case studies and [area] is one of them.
4. Within each case study area, we are speaking to health professionals, like yourself, to get your views on pregnancy and early years healthy weight practices in your area and experiences of supporting healthy weight in your role. We'll cover your role in general, the role of you and your team in relation into the prevention and identification of overweight and obesity and the available interventions in your area. We'll then move on to talk about training and support needs before finishing with your views on the consistency and effectiveness of the system.
5. The interview will last around an hour
6. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
7. There are no right or wrong answers – we just want to know what you think
8. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government. In the methods section of the report, we will name the health boards that participated in the case study stage. However, when we report the findings, we will not attribute any findings to individual health boards.
9. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Background (2 mins)

Thank you very much for agreeing to take part. Before we start, I'd just like to begin by asking some questions about your role.

Can I just confirm your role?

And can you sum up what your role involves?

Do you have a caseload in addition to your management role?

And how long have you been in this role?

How many midwives are in your team?

And do you work full time or part time? (if part time: How many hours per week are you contracted to work?)

2. Perspectives on role in relation to healthy weight (5 mins)

Aim not to get into too much detail on specifics of their role at this stage. Want to get their unprompted perspectives on their role.

Thanks. I'd now like to move on to ask about healthy weight for pregnant women and children up to Primary 1 age in your area.

Firstly, how much would you say you know about how healthy weight for pregnant women and children up to Primary 1 age is assessed and supported in your health board area? So, for pregnant women, babies, toddlers, pre-school and Primary 1 children.

And where have you got this information from?

And how would you describe your role in relation to healthy weight in pregnant women and the early years?

How do you feel about your role? Are you clear about it?

How much of a priority is healthy weight management for you and your team among the competing demands you face? If not a priority: What is more important?

3. Detailed understanding of their role in prevention, identification and intervention (30 mins)

I'd just like to go into a bit more detail now on some of the things we've just discussed.

First, what would you say are your main responsibilities in relation to the *prevention* of overweight and obesity in pregnancy and the early years? Prompt only if necessary: For example, do you/your team provide information or advice to pregnant women or new mothers on topics like healthy eating and physical activity and weight gain during pregnancy and feeding their baby in the first few months?

Is this provided universally or is it targeted at specific pregnant women?

Are there resources midwives can use or places they can signpost to?

Are these topics covered in parent education classes?

In your experience do pregnant women want advice on healthy diet and lifestyle during pregnancy?

i) How do they react to receiving it?

And to what extent do they want advice on feeding their baby in the first few months?

ii) How do they react to receiving it?

What support, if any, do you and your team request in relation to providing advice to pregnant women on healthy diets and lifestyles in pregnancy and feeding their babies in the first few months?

Have you and members of your team received any training on this?

iii) Do you think there is a need for (further) midwife training on this?

iv) Have midwives requested training on this?

And moving on now from prevention to the *identification* of pregnant women who may be overweight or obese or experience excessive weight gain. What is the process for identifying women in these circumstances? Probe fully

BMI

At what point or points during pregnancy is a women's BMI taken?

v) Is this always the same for all women or are there circumstances in which it differs?

What happens to the BMI data that is collect?

Are there specific points (BMI thresholds, or concerns about gestational diabetes) at which they would be eligible for referral to a weight management or other type of intervention (e.g. gestational diabetes)?

And for women who have a healthy BMI at the start of their pregnancy, how is pregnancy weight gain monitored?

vi) Is there a threshold that would trigger intervention or concern about gestational diabetes?

Referrals

Once it has been identified that a pregnant woman is overweight or obese, what happens?

Would it always be raised with the women and a referral offered?

vii) Across your team, do you know what proportion of women who are overweight or obese will be offered a referral?

viii) What reasons might there be for not bringing it up or referring them?

How do you/the midwives in your team raise the issue with women?

(a) And would you raise it differntly for different groups of pregnant women? In what way? Why?

How do they tend to react when it is raised?

Are there factors that appear to affect women's receptiveness to the referral? Probe:

ix) The age of the woman

x) The extent of overweight/obesity

xi) The type of service being offered

xii) Previous attempts to lose weight

xiii) Other health conditions

xiv) Other things going on in the woman's life e.g. poverty, work situation, language barriers

Does weight tend to be discussed again after the initial conversation? IF NOT: why not?

Interventions

What services or interventions are available in your area to refer pregnant women who are overweight or obese on to?

Are there occasions where you would like to be able to refer them to a service but you are not aware of anything suitable to refer them to?

If there is more than one possible intervention/action available, how do you decide on which is the most appropriate?

How much do you know about how well pregnant women who agree to be referred to services engage with them?

And how effective you think these services are for the women who do engage with them?

xv) Are you aware of any evaluations or audits of these services?

How has the COVID-19 pandemic affected what you and your team are able to do in relation to supporting healthy weight in pregnancy and the early years? Probe on:

Prevention

Taking BMI

Referrals

Available interventions

Staffing/resourcing

4. Confidence, support and training

Now, moving on to talk a bit more about confidence and skills and training, both your own and the midwives you manage.

How confident do you feel about the parts of your job we have just discussed? So:

Measuring pregnant women's BMI

Managing sensitive conversations with pregnant women about their weight and/or their pregnancy weight gain?

Knowing about your services/options for pregnant women in your area – where you could refer them on

Could you rank them in order from most to least confident?

Do you feel you need any further support or training? On which of the above aspects, if any, do you feel you need most support with?

And thinking now about the midwives in your team, do they come to you for support on issues relating to healthy weight?

Do you discuss healthy weight as a team?

When do these discussions happen? e.g. team meetings, supervisions

What kinds of issues do you discuss?

From your discussions with midwives, are there parts of the role they lack confidence in? Prompt if necessary:

Measuring pregnant women's BMI

Managing sensitive conversations with pregnant women about their weight and/or their pregnancy weight gain?

Knowing about your services/options for pregnant women in your area – where you could refer them on

What, if any, skills gaps are there?

What training, if any would your team benefit from?

And are there any groups of midwives who would most benefit from training e.g. newly qualified midwives

How should this training be delivered?

What are the barriers to them receiving this type of training?

Are you aware of the SIGN guidelines?

If yes: do you or your team use the SIGN 115 guidelines from 2010 in your work at all?

Are you aware of the minimum standards for assessing and supporting healthy weight in pregnancy and the early years?

5. Consistency and coherence

I'm going to move on now and ask some questions about the consistency of pregnancy and early years healthy weight systems across your health board.

As far as you are aware, how consistent is the approach taken by midwives, both within your team and across teams in your health board, in supporting healthy weight in pregnancy and the early years?

To what extent to do you think midwives are consistent in the advice they provide to pregnant women?

And to what extent do you think midwives are consistent in relation to referring eligible pregnant women to services?

(a) Is this something that is monitored, either within your team or across teams?

And is there coherence across the system as a whole so from pregnancy to the early years to Primary 1?

How are transition points from pregnancy to post-natal support and from the health visiting pathway to Primary 1 and beyond managed where weight remains a concern?

Are there any systems and/or resources aimed at ensuring consistency of approach across the health board?

6. Perceived effectiveness, barriers and opportunities for improvement

Overall, how effective do you think your health board's current system to assess and support healthy weight in pregnant women and the early years is?

Are you aware of any evaluations or audits that have been conducted?

What are the main challenges and barriers to supporting healthy weight in pregnant women and the early years in your area?

What are the main difficulties for parents in your view?

And do you have any suggestions for how your health board's system could be improved?

What should the priorities for improvements be?

Are you aware of any improvements currently being carried out?

7. Wrap up

And just before we finish…

In your experience, what is the biggest challenge to health professionals supporting healthy weight in pregnancy and the early years?

Before we finish up, is there anything else you'd like to raise about what we've discussed today? Or any questions about this research?

Thank them and remind them they can contact us again if they have any questions or concerns.

Early Years Healthy Weight Research

Midwife interviews – topic guide (stage 2)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to explore how pregnancy and early years healthy weight systems work across Scotland
3. We have conducted an initial interview with an individual in most health boards in Scotland. Following this, five areas were selected as case studies and [area] is one of them.
4. Within each case study area, we are speaking to health professionals, like yourself, to get your views on pregnancy and early years healthy weight practices in your area and experiences of supporting healthy weight in your role. We'll cover your role in general, your role in relation into the prevention and identification of overweight and obesity and the available interventions in your area. We'll then move on to talk about your training and support needs before finishing with your views on the consistency and effectiveness of the system.
5. The interview will last around an hour
6. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
7. There are no right or wrong answers – we just want to know what you think
8. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government. In the methods section of the report, we will name the health boards that participated in the case study stage. However, when we report the findings, we will not attribute any findings to individual health boards.
9. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Background (2 mins)

Thank you very much for agreeing to take part. Before we start, I'd just like to begin by asking some questions about your role.

Can I just confirm your role?

And can you sum up what your role involves?

And how long have you been in this role?

And do you work full time or part time? (if part time: How many hours per week are you contracted to work?)

2. Perspectives on role in relation to healthy weight (5 mins)

Aim not to get into too much detail on specifics of their role at this stage. Want to get their unprompted perspectives on their role.

Thanks. I'd now like to move on to ask about healthy weight for pregnant women and children up to Primary 1 age in your area.

Firstly, how much would you say you know about how healthy weight for pregnant women and children up to Primary 1 age is assessed and supported in your health board area?

And where have you got this information from?

And how would you describe your role in relation to healthy weight in pregnant women and the early years?

How do you feel about your role? Are you clear about it?

How much of a priority is healthy weight management among the competing demands of your role? If not a priority: What is more important?

3. Detailed understanding of their role in prevention, identification and intervention (30 mins)

I'd just like to go into a bit more detail now on some of the things we've just discussed.

First, what would you say are the main things you do to in relation to the *prevention* of overweight and obesity in pregnancy and the early years? Prompt only if necessary: For example, do you provide any information or advice to pregnant women or new mothers on topics like healthy eating and physical activity and weight gain during pregnancy and feeding their baby in the first few months?

Would you provide this universally or is it targeted at specific pregnant women?

Do you have resources to give women or places to signpost them for this type of advice?

Are these topics covered in parent education classes?

In your experience to what extent do pregnant women want advice on healthy diet and lifestyle during pregnancy?

xvi) How do they react to receiving it?

And do they want advice on feeding their baby in the first few months?

xvii) How do they react to receiving it?

And, as far as you know, where else do pregnant women get their information on diet and physical activity during pregnancy?

xviii) To what extent does it fit with the advice you give?

And, again, as far as you know, where else do they get their information on feeding their babies in the first few months?

xix) To what extent does it fit with the advice you give?

How confident do you feel providing advice to pregnant women on healthy diets and lifestyles in pregnancy and feeding their babies in the first few months?

Do you feel you have the support you need to carry out this part of your job effectively? Is there any other support you'd like to receive?

Have you received any training on this?

xx) Would you like any further training on this?

And moving on now from prevention, how do you identify pregnant women who may be overweight or obese? Probe fully

BMI

At what point or points during pregnancy do you measure a women's BMI?

xxi) Is this always the same for all women or are there circumstances in which it differs?

What happens to the BMI data you collect?

Are there specific points (BMI thresholds, or concerns about gestational diabetes) at which they would be eligible for referral to a weight management or other type of intervention (e.g. gestational diabetes)?

And for women who have a healthy BMI at the start of their pregnancy, do you monitor pregnancy weight gain?

xxii) Is there a threshold that would trigger intervention or concern about gestational diabetes?

Referrals

Once you have identified that a pregnant woman is overweight or obese, can you talk me through what happens?

xxiii) Would you always bring it up with the women and offer to refer them to a service?

xxiv) What reasons are there for not bringing it up? What other factors are you taking into account when making that decision?

How would you initiate that conversation?

(a) And would you initiate it differntly for different groups of pregnant women? In what way? Why?

In your experience, how do women tend to react?

Are they generally keen to take up the referral?

Are there factors that appear to affect women's receptiveness to the referral? Probe:

xxv) The age of the woman

xxvi) The extent of overweight/obesity

xxvii) The type of service being offered

xxviii) Previous attempts to lose weight

xxix) Other health conditions

xxx) Other things going on in the woman's life e.g. poverty, work situation, language barriers

xxxi) Perceived support from other family members, or their relationships with other family members in general

Would you discuss their weight again after the initial conversation?

Do pregnant women ever raise concerns about their weight with you and ask for your advice and/or to be referred to a service before you have raised it?

Interventions

What services or interventions are available in your area to refer pregnant women who are overweight or obese on to?

Are there occasions where you would like to be able to refer them to a service but you are not aware of anything suitable to refer them to?

If there is more than one possible intervention/action available, how do you decide on which is the most appropriate?

How much do you know about how well pregnant women who agree to be referred to services engage with them?

And how effective do you think these services are for the women who do engage with them?

xxxii) Are you aware of any evaluations or audits of these services?

How has the COVID-19 pandemic affected what you are able to do in relation to supporting healthy weight in pregnancy and the early years? Probe on:

Prevention

Taking BMI

Referrals

Available interventions

4. Confidence, support and training

How confident do you feel about the parts of your job we have just discussed? So:

Measuring pregnant women's BMI

Managing sensitive conversations with pregnant women about their weight and/or their pregnancy weight gain?

Knowing about your services/options for pregnant women in your area – where you could refer them on

And could you rank them in order from most to least confident?

Do you feel you have the support you need to carry out these parts of your job effectively? On which of the above aspects, if any, do you feel you need most support with? Is there any other support you'd like to receive?

And have you received training on any of these areas?

Are you aware of the SIGN guidelines?

If yes: do you use the SIGN 115 guidelines from 2010 in your work at all?

Are you aware of the minimum standards for assessing and supporting healthy weight in pregnancy and the early years?

Is there anything you would like to receive more training on?

How do you think this training should be delivered?

5. Consistency and coherence

I'm going to move on now and ask some questions about the consistency of pregnancy and early years healthy weight systems across your health board.

Do you discuss healthy weight with your team leader and/or other colleagues?

What kinds of issues do you discuss?

As far as you are aware, how consistent is the approach taken by midwives in supporting healthy weight in pregnancy and the early years across your health board?

Do you think the advice you provide is consistent with the advice provided by other midwives?

Do pregnant women ever indicate that they have received inconsistent/conflicting advice?

To what extent do you think midwives are consistent in relation to referring eligible pregnant women to services?

And is there coherence across the system as a whole so from pregnancy to the early years to Primary 1?

How are transition points from pregnancy to post-natal support and from the health visiting pathway to Primary 1 and beyond managed where weight remains a concern?

Are there any systems and/or resources aimed at ensuring consistency of approach across the health board?

6. Perceived effectiveness, barriers and opportunities for improvement

Overall, how effective do you think your health board's current system to assess and support healthy weight in pregnant women and the early years is?

Are you aware of any evaluations or audits that have been conducted?

What are the main challenges and barriers to supporting healthy weight in pregnant women and the early years in your area?

What are the main difficulties for parents in your view?

And do you have any suggestions for how your health board's system could be improved?

What should the priorities for improvements be?

Are you aware of any improvements currently being carried out?

7. Wrap up

And just before we finish…

In your experience, what is the biggest challenge to health professionals supporting healthy weight in pregnancy and the early years?

Before we finish up, is there anything else you'd like to raise about what we've discussed today? Or any questions about this research?

Thank them and remind them they can contact us again if they have any questions or concerns.

Early Years Healthy Weight Research

Health visitor manager interviews – topic guide (stage 2)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to explore how pregnancy and early years healthy weight systems work across Scotland
3. We have conducted an initial interview with an individual in most health boards in Scotland. Following this, five areas were selected as case studies and [area] is one of them.
4. Within each case study area, we are speaking to health professionals, like yourself, to get your views on pregnancy and early years weight practices in your area and experiences of supporting healthy weight in your role. We'll cover your role in general, the role of you and your team in relation into the prevention and identification of overweight and obesity and the available interventions in your area. We'll then move on to talk about training and support needs before finishing with your views on the consistency and effectiveness of the system.
5. The interview will last around an hour
6. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
7. There are no right or wrong answers – we just want to know what you think
8. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government. In the methods section of the report, we will name the health boards that participated in the case study stage. However, when we report the findings, we will not attribute any findings to individual health boards.
9. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Background (2 mins)

Thank you very much for agreeing to take part. Before we start, I'd just like to begin by asking some questions about your role.

Can I just confirm your role?

And can you sum up what your role involves?

Do you have a caseload in addition to your management role?

And how long have you been in this role?

How many health visitors are in your team?

And do you work full time or part time? (if part time: How many hours per week are you contracted to work?)

2. Perspectives on role in relation to child healthy weight (5 mins)

Aim not to get into too much detail on specifics of their role at this stage. Want to get their unprompted perspectives on their role.

Thanks. I'd now like to move on to ask about healthy weight for pregnant women and children up to Primary 1 age in your area.

Firstly, how much would you say you know about how healthy weight for pregnant women and children up to Primary 1 age is assessed and supported in your health board area? So, for pregnant women, babies, toddlers, pre-school and Primary 1 children.

And where have you got this information from?

And how would you describe your role in relation to healthy weight in pregnant women and the early years?

How do you feel about your role? Are you clear about it?

How much of a priority is healthy weight management among the competing demands of your role? If not a priority: What is more important?

3. Detailed understanding of their role in prevention, identification and intervention (25 mins)

I'd just like to go into a bit more detail now on some of the things we've just discussed.

First, what would you say are your main responsibilities in relation to the *prevention* of overweight and obesity in the early years. Prompt only if necessary: For example, do you/your team provide any information or advice to families on topics like feeding in the first few months, weaning, healthy eating, physical activity, screen time?

And are there specific stages from infancy through to age four or five that you would provide this information?

And would you provide this universally or is it targeted at specific families?

Do you have resources to give families or places to signpost them for this type of advice?

In your experience do families want advice on healthy diets and lifestyles?

xxxiii) How do they react to receiving it?

How confident do you feel providing advice to families on healthy diets and lifestyles?

What support, if any, do you and your team need to carry out this part of your job effectively? Is there any other support you'd like to receive?

Have you received any training on this?

xxxiv) Would you like any further training on this?

And moving on now from prevention, how do you identify children who may be overweight or obese? Probe fully

Weighing and measuring

At what points on the UHVP are children weighed and measured?

xxxv) And are there circumstances in which you would weigh and measure a child or refer them to a child healthy weight service at a time that is not a standard UHVP measurement point?

What happens to the weight and height data collected?

How would you assess from the measurements you take whether a child was overweight or obese?

Are there specific points (BMI thresholds) at which they would be eligible for referral to child healthy weight interventions?

Referrals

Once it has been identified that a child is overweight or obese, can you talk me through what happens?

xxxvi) Would it always be raised with the family and a referral offered?

xxxvii) Across your team, do you know what proportion of children who are overweight or obese will be offered a referral?

xxxviii) What reasons are there for not bringing it up? What other factors are you taking into account when making that decision?

How would you/the health visitors in your team initiate that conversation?

(a) And would you/they initiate it differntly for different groups of parents? In what way? Why?

In your experience, how do parents tend to react?

Are they generally keen to take up the referral?

Are there factors that appear to affect families' receptiveness to the referral? PROBE:

xxxix) Any concerns about the child's health

xl) The age of the child

xli) The extent of overweight/obesity

xlii) Your relationship with the family

xliii) The type of service being offered

xliv) Whether parents are overweight/obese

xlv) Other challenges facing the family e.g. poverty, work situation, language barriers

xlvi) Perceived support from other family members, or their relationships with other family members in general

Would you discuss their child's weight again after the initial conversation? IF NOT: why not?

Do you ever have families coming to you with a concern about their child's weight and asking for your advice and/or to be referred to a service?

Interventions

What services or interventions are available in your area to refer children who are overweight or obese on to?

Are there occasions where you would like to be able to refer them to a service but you are not aware of anything suitable to refer them to?

If there is more than one possible intervention/action available, how do you decide on which is the most appropriate?

How much do you know about how well families who agree to be referred to services engage with them?

And how effective you think these services are for the families who do engage with them?

How has the COVID-19 pandemic affected what you are able to do in relation to supporting healthy weight in the early years? Probe on:

Prevention

Weighing and measuring

Referrals

Available interventions

Staffing/resourcing

And what impact, if any, has the UHVP had on your work in relation to healthy weight in the early years?

4. Confidence, support and training (10 mins)

Now, moving on to talk a bit more about confidence and skills and training, both your own and the health visitors you manage.

How confident do you feel about the parts of your job we have just discussed? So:

Identifying children who are overweight or obese

Weighing children accurately and measuring children's BMI

Managing sensitive conversations with parents about their child's weight

Knowing about your services/options for families in your area – where you could refer them on

And could you rank them in order from most to least confident?

Do you feel you need any further support or training? On which of the above aspects, if any, do you feel you need most support with?

And thinking now about the health visitors in your team, do they come to you for support on issues relating to healthy weight?

Do you discuss healthy weight as a team?

When do these discussions happen? e.g. team meetings, supervisions

What kinds of issues do you discuss?

From your discussions with health visitors, are there parts of the role they lack confidence in?

Prompt if necessary:

Identifying children who are overweight or obese

Weighing children accurately and measuring children's BMI

Managing sensitive conversations with parents about their child's weight

Knowing about your services/options for families in your area – where you could refer them on

What, if any, skills gaps are there?

What training, if any would your team benefit from?

And are there any groups of midwives who would most benefit from training e.g. newly qualified midwives

How should this training be delivered?

What are the barriers to them receiving this type of training?

Are you aware of the SIGN guidelines?

If yes: do you use the SIGN 115 guidelines from 2010 in your work at all?

Are you aware of the minimum standards for assessing and supporting healthy weight in pregnancy and the early years?

5. Consistency and coherence (10 mins)

I'm going to move on now and ask some questions about the consistency of child healthy weight systems across your health board.

Do you discuss child healthy weight with your team leader and/or other colleagues?

What kinds of issues do you discuss?

As far as you are aware, how consistent is the approach taken by health visitors, both within your team and across teams, in your health board in supporting child healthy weight across your health board?

To what extent do you think the advice health visitors are consistent in the advice they provide to families?

And to what extent do you think health visitors are consistent in relation to referring eligible children to services?

(a) Is this something that is monitored, either within your team or across teams?

And is there coherence across the system as a whole so from pregnancy to the early years to Primary 1?

How are transition points from pregnancy to post-natal support and from the health visiting pathway to Primary 1 and beyond managed where weight remains a concern?

Are there any systems and/or resources aimed at ensuring consistency of approach across the health board?

6. Perceived effectiveness, barriers and opportunities for improvement (5 mins)

Overall, how effective do you think your health board's current system to assess and support healthy weight in pregnant women and the early years is?

Are you aware of any evaluations or audits that have been conducted?

What are the main challenges and barriers to supporting children in your area to have healthy weight?

What are the main difficulties for parents in your view?

And do you have any suggestions for how your health board's system could be improved?

What should the priorities for improvements be?

Are you aware of any improvements currently being carried out?

7. Wrap up (3 mins)

And just before we finish…

In your experience, what is the biggest challenge to health professionals supporting families with their child's weight?

Before we finish up, is there anything else you'd like to raise about what we've discussed today? Or any questions about this research?

Thank them and remind them they can contact us again if they have any questions or concerns.

Early Years Healthy Weight Research

Health visitor interviews – topic guide (stage 2)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to explore how pregnancy and early years healthy weight systems work across Scotland
3. We have conducted an initial interview with an individual in most health boards in Scotland. Following this, five areas were selected as case studies and [area] is one of them.
4. Within each case study area, we are speaking to health professionals, like yourself, to get your views on pregnancy and early years weight practices in your area and experiences of supporting healthy weight in your role. We'll cover your role in general, your role in relation into the prevention and identification of overweight and obesity and the available interventions in your area. We'll then move on to talk about your training and support needs before finishing with your views on the consistency and effectiveness of the system.
5. The interview will last around an hour
6. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
7. There are no right or wrong answers – we just want to know what you think
8. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government and we will not name the case study health boards in any reports from the study.
9. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Background (2 mins)

Thank you very much for agreeing to take part. Before we start, I'd just like to begin by asking some questions about your role.

Can I just confirm your role?

And can you sum up what your role involves?

And how long have you been in this role?

And do you work full time or part time? (if part time: How many hours per week are you contracted to work?)

2. Perspectives on role in relation to child healthy weight (5 mins)

Aim not to get into too much detail on specifics of their role at this stage. Want to get their unprompted perspectives on their role.

Thanks. I'd now like to move on to ask about healthy weight for pregnant women and children up to Primary 1 age in your area.

Firstly, how much would you say you know about how healthy weight for pregnant women and children up to Primary 1 age is assessed and supported in your health board area? So, for pregnant women, babies, toddlers, pre-school and Primary 1 children.

And where have you got this information from?

And how would you describe your role in relation to healthy weight in pregnant women and the early years?

How do you feel about your role? Are you clear about it?

How much of a priority is healthy weight management among the competing demands of your role? If not a priority: What is more important?

3. Detailed understanding of their role in prevention, identification and intervention (25 mins)

I'd just like to go into a bit more detail now on some of the things we've just discussed.

First, what would you say are the main things you do to in relation to the *prevention* of overweight and obesity in the early years. For example, do you provide any information or advice to families on topics like feeding in the first few months, weaning, healthy eating, physical activity, screen time?

And are there specific stages from infancy through to age four or five that you would provide this information?

And would you provide this universally or is it targeted at specific families?

Do you have resources to give families or places to signpost them for this type of advice?

In your experience do families want advice on healthy diets and lifestyles?

xlvii) How do they react to receiving it?

And, as far as you know, where else do families get their information on healthy diets and lifestyles?

xlviii) To what extent does it fit with the advice you give?

How confident do you feel providing advice to families on healthy diets and lifestyles?

Do you feel you have the support you need to carry out this part of your job effectively? Is there any other support you'd like to receive?

Have you received any training on this?

xlix) Would you like any further training on this?

And moving on now from prevention, how do you identify children who may be overweight or obese? PROBE FULLY

Weighing and measuring

At what points on the UHVP do you weigh and measure children?

l) And are there circumstances in which you would weigh and measure a child or refer them to a child healthy weight service at a time that is not a standard UHVP measurement point?

What happens to the weight and height data you collect?

How would you assess from the measurements you take whether a child was overweight or obese?

Are there specific points (BMI thresholds) at which they would be eligible for referral to child healthy weight interventions?

Would anything stop you from referring a child with a BMI over this threshold?

Referrals

Once you have identified that a child is overweight or obese, can you talk me through what happens?

li) Would you always bring it up with the family and offer to refer them to a service?

lii) What reasons are there for not bringing it up? What other factors are you taking into account when making that decision?

How would you initiate that conversation?

(a) And would you initiate it differntly for different groups of parents? In what way? Why?

In your experience, how do parents tend to react?

Are they generally keen to take up the referral?

Are there factors that appear to affect families' receptiveness to the referral? PROBE:

liii) Any concerns about the child's health

liv) The age of the child

lv) The extent of overweight/obesity

lvi) Your relationship with the family

lvii)The type of service being offered

lviii) Whether parents are overweight/obese

lix) Other challenges facing the family e.g. poverty, work situation, language barriers

lx) Perceived support from other family members, or their relationships with other family members in general

Would you discuss their child's weight again after the initial conversation? IF NOT: why not?

Do you ever have families coming to you with a concern about their child's weight and asking for your advice and/or to be referred to a service?

Interventions

What services or interventions are available in your area to refer children who are overweight or obese on to?

Are there occasions where you would like to be able to refer them to a service but you are not aware of anything suitable to refer them to?

If there is more than one possible intervention/action available, how do you decide on which is the most appropriate?

How much do you know about how well families who agree to be referred to services engage with them?

And how effective you think these services are for the families who do engage with them?

How has the COVID-19 pandemic affected what you are able to do in relation to supporting healthy weight in the early years? Probe on:

Prevention

Weighing and measuring

Referrals

Available interventions

And what impact, if any, has the UHVP had on your work in relation to healthy weight in the early years?

4. Confidence, support and training (10 mins)

How confident do you feel about the parts of your job we have just discussed? So:

Identifying children who are overweight or obese

Weighing children accurately and measuring children's BMI

Managing sensitive conversations with parents about their child's weight

Knowing about your services/options for families in your area – where you could refer them on

Could you rank them in order from most to least confident?

Do you feel you have the support you need to carry out these parts of your job effectively? On which of the above aspects, if any, do you feel you need most support with? Is there any other support you'd like to receive?

And have you received training on any of these areas?

Are you aware of the SIGN guidelines?

If yes: do you use the SIGN 115 guidelines from 2010 in your work at all?

Are you aware of the minimum standards for assessing and supporting healthy weight in pregnancy and the early years?

Is there anything you would like to receive more training on?

How do you think this training should be delivered?

5. Consistency and coherence (10 mins)

I'm going to move on now and ask some questions about the consistency of child healthy weight systems across your health board.

Do you discuss child healthy weight with your team leader and/or other colleagues?

What kinds of issues do you discuss?

As far as you are aware, how consistent is the approach taken by health visitors in supporting child healthy weight across your health board?

Do you think the advice you provide is consistent with the advice provided by other health visitors?

Do parents ever indicate that they have received inconsistent/conflicting advice?

To what extent do you think health visitors are consistent in relation to referring eligible children to services?

And is there coherence across the system as a whole so from pregnancy to the early years to Primary 1?

How are transition points from pregnancy to post-natal support and from the health visiting pathway to Primary 1 and beyond managed where weight remains a concern?

Are there any systems and/or resources aimed at ensuring consistency of approach across the health board?

6. Perceived effectiveness, barriers and opportunities for improvement (5 mins)

Overall, how effective do you think your health board's current system to assess and support healthy weight in pregnant women and the early years is?

Are you aware of any evaluations or audits that have been conducted?

What are the main challenges and barriers to supporting children in your area to have healthy weight?

What are the main difficulties for parents in your view?

And do you have any suggestions for how your health board's system could be improved?

What should the priorities for improvements be?

Are you aware of any improvements currently being carried out?

7. Wrap up (3 mins)

And just before we finish…

In your experience, what is the biggest challenge to health professionals supporting families with their child's weight?

Before we finish up, is there anything else you'd like to raise about what we've discussed today? Or any questions about this research?

Thank them and remind them they can contact us again if they have any questions or concerns.

Early Years Healthy Weight Research

School Nurse interviews – topic guide (stage 2)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to explore how pregnancy and early years healthy weight systems work across Scotland
3. We have conducted an initial interview with an individual in most health boards in Scotland. Following this, five areas were selected as case studies and [area] is one of them.
4. Within each case study area, we are speaking to health professionals, like yourself, to get your views on pregnancy and early years weight practices in your area and experiences of supporting healthy weight in your role. We'll cover your role in general, your role in relation into the prevention and identification of overweight and obesity and the available interventions in your area. We'll then move on to talk about your training and support needs before finishing with your views on the consistency and effectiveness of the system.
5. The interview will last around an hour
6. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
7. There are no right or wrong answers – we just want to know what you think
8. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government. In the methods section of the report, we will name the health boards that participated in the case study stage. However, when we report the findings, we will not attribute any findings to individual health boards.
9. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Background (2 mins)

Thank you very much for agreeing to take part. Before we start, I'd just like to begin by asking some questions about your role.

Can I just confirm your role?

And can you sum up what your role involves?

How many schools do you cover?

And how long have you been in this role?

And do you work full time or part time? (if part time: How many hours per week are you contracted to work?)

2. Perspectives on role in relation to child healthy weight (5 mins)

Aim to not get into too much detail on specifics of their role at this stage. Want to get their unprompted perspectives on their role.

Thanks. I'd now like to move on to ask about your role in relation to healthy weight for children in Primary 1 age in your area.

Firstly, how much would you say you know about how healthy weight for children in Primary 1 is assessed and supported in your health board area?

And where have you got this information from?

And how would you describe your role in relation to healthy weight in Primary 1 children?

How do you feel about your role? Are you clear about it?

How much of a priority is healthy weight management among the competing demands of your role? If not a priority: What is more important?

3. Detailed understanding of their role in prevention, identification and intervention (25 mins)

I'd like to go into a bit more detail now on some of the things we've just discussed.

First, can I check do you carry out BMI assessments of Primary 1 children?

Weighing and measuring

Can you explain how Primary 1 assessments work in the school(s) that you cover?

lxi) Are all Primary 1 children weighed? Do parents need to opt on or out of the assessment? What information are they given about the purpose of the assessment and what it involves?

lxii) What proportion of parents opt in?

lxiii) Is the BMI measurement a standalone exercise or is it done as part of a wider exercise?

lxiv) How is this activity explained to the children?

lxv) Are there differences between schools with regards to how this is carried out?

lxvi) How do children respond to being weighed and measured? Do some children seem concerned or self conscious about their weight? and how does the assessment impact this? [probe for details on whether they take measures to address this]

lxvii) And are there circumstances in which you would weigh and measure a child or refer them to a child healthy weight service at a time that is not a standard measurement point?

What happens to the weight and height data you collect?

How would you assess from the measurements you take whether a child was overweight or obese? Are there standard procedures to follow? Would you take other factors into account?

Are there specific points (BMI thresholds) at which they would be eligible for referral to child healthy weight interventions? Would you do anything about a child who is just below the threshold?

Do you receive any information from health visitors on the children before they start Primary 1 or any information from the school ? For example, if a child and their family are already receiving support on healthy weight, would you be informed of that?

Referrals

If you have identified that a child is overweight or obese, can you talk me through what happens?

lxviii) Would you bring it up with the family and offer to refer them to a service?

lxix) Would you speak to their health visitor to see if they have already been referred etc.?

lxx) Can you think of any scenario/ example of a time where you identified a child, but the family was not contacted (or not referred)?

If they do not follow up:

What reasons are there for not bringing it up? What other factors are you taking into account when making that decision?

lxxi) Do you think that, even if they are obese at this age, they might grow out of it without intervention?

If they do speak to parents:

How do you contact parents? Letter? Phone conversation?

If conversation: How would you initiate that conversation?

lxxii) Would you adapt this to the family based on any prior knowledge of the family circumstances?

In your experience, how do parents tend to react to referrals?

Are they generally keen to take up the referral?

Are there factors that appear to affect families' receptiveness to the referral? PROBE:

lxxiii) Any concerns about the child's health

lxxiv) The age of the child

lxxv) The extent of overweight/obesity

lxxvi) The type of service being offered

lxxvii) Whether parents are overweight/obese

lxxviii) Other challenges facing the family e.g. poverty, work situation, language barriers?

lxxix) Perceived support from other family members, or their relationships with other family members in general

Would you discuss their child's weight again after the initial conversation? IF NOT: why not?

Do you ever have families or schools coming to you with a concern about a child's weight and asking for your advice and/or to be referred to a service?

lxxx) Would you offer information or advice or an intervention? What type? E.g. physical activity, screen time, diet.

Interventions

What services or interventions are available in your area to refer Primary 1 children who are overweight or obese on to?

Are there occasions where you would like to be able to refer them to a service, but you are not aware of anything suitable to refer them to?

If there is more than one possible intervention/action available, how do you decide on which is the most appropriate?

How much do you know about how well families who agree to be referred to services engage with them?

And how effective you think these services are for the families who do engage with them?

Do you also have a role in relation to the *prevention* of overweight and obesity in Primary 1 children? For example, providing information or advice to families on topics like healthy eating, physical activity, screen time?

Ask this section only if they provide info / other support

And are there specific times that you would provide information supporting healthy weight to Primary 1 children and their families?

And would you provide this universally or is it targeted at specific families?

Do you have resources to give families or places to signpost them for this type of advice?

In your experience do families want advice on healthy diets and lifestyles?

lxxxi) What type of advice? E.g. physical activity, screen time, diet.

lxxxii) How do they react to receiving it?

How has the COVID-19 pandemic affected what you are able to do in relation to supporting healthy weight in Primary 1 children? Probe on:

Taking BMI

Referrals

Available interventions

4. Confidence, support and training (10 mins)

How confident do you feel about the parts of your job we have just discussed? So:

Weighing children accurately and measuring children's BMI

Managing sensitive conversations with parents about their child's weight

Knowing about your services/options for families in your area – where you could refer them on

Providing advice to families on healthy diets and lifestyles [if applicable]

(a) Any difference in confidence on diet vs physical activity?

And could you rank them in order from most to least confident?

Do you feel you have the support you need to carry out these parts of your job effectively? On which of the above aspects, if any, do you feel you need most support with? Is there any other support you'd like to receive?

And have you received training on any of these areas?

Are you aware of the SIGN guidelines?

If yes: do you use the SIGN 115 guidelines from 2010 in your work at all?

Are you aware of the minimum standards for assessing and supporting healthy weight in the early years?

Is there anything you would like to receive more training on?

How do you think this training should be delivered?

5. Consistency and coherence (10 mins)

I'm going to move on now and ask some questions about the consistency of child healthy weight systems across your health board.

Do you discuss child healthy weight with your team leader and/or other colleagues?

What kinds of issues do you discuss?

As far as you are aware, are Primary 1 BMI measurements undertaken consistently across the health board?

Are they undertaken in all schools?

(b) If no: why not?

(c) Are some schools easier to work with than others?

Do you think the work you do around healthy weight is consistent with the advice provided by other school nurses in your area?

To what extent do you think school nurses are consistent in relation to referring eligible children to services?

Do parents ever indicate that they have received inconsistent/conflicting advice?

Are parents ever unhappy about the advice they have received?

Do you think there is coherence across the system as a whole so from pregnancy to the early years to Primary 1?

How is the **transition** from the health visiting pathway to Primary 1 and beyond managed where weight remains a concern?

Has this changed since the introduction of the Universal Health Visiting Pathway (UHVP)? [4-5 years old may now be assessed by Health Visitors] Is it working well or not? Why?

Are there any systems and/or resources aimed at ensuring consistency of approach across the health board?

6. Perceived effectiveness, barriers and opportunities for improvement (5 mins)

Overall, how effective do you think your health board's current system to assess and support healthy weight in the early years and Primary 1 is?

Are you aware of any evaluations or audits that have been conducted?

What are the main challenges and barriers to supporting children in your area to have healthy weight? What are the main difficulties for parents in your view?

And do you have any suggestions for how your health board's system could be improved?

What should the priorities for improvements be?

Are you aware of any improvements currently being carried out?

7. Wrap up (3 mins)

And just before we finish…

In your experience, what is the biggest challenge to health professionals supporting families with their child's weight?

Before we finish up, is there anything else you'd like to raise about what we've discussed today? Or any questions about this research?

Thank them and remind them they can contact us again if they have any questions or concerns.

Early Years Healthy Weight Research

Public health professional interviews – topic guide (stage 2)

1. Introduce self and Ipsos MORI
2. This research has been commissioned by the Scottish Government to explore how pregnancy and early years healthy weight systems work across Scotland
3. We have conducted an initial interview with an individual in most health boards in Scotland. Following this, five areas were selected as case studies and [area] is one of them.
4. Within each case study area, we are speaking to health professionals, like yourself, to get your views on pregnancy and early years weight practices in your area and experiences of supporting healthy weight in your role. This research focuses only on healthy weight management from pregnancy to Primary 1 age – so we will not be asking about how healthy weight is supported for older children and adults. We'll cover your role in general, your role in relation into CHW prevention and improvement. We'll then move on to talk about your training and support needs before finishing with your views on the consistency and effectiveness of the system.
5. The interview will last around an hour.
6. Participation is voluntary – all questions are optional, you do not have to answer anything you do not wish to, and we can finish the interview at any time
7. There are no right or wrong answers – we just want to know what you think
8. Ensure confidentiality and anonymity – no identifying information will be passed onto the Scottish Government. In the methods section of the report, we will name the health boards that participated in the case study stage. However, when we report the findings, we will not attribute any findings to individual health boards.
9. Request permission to record – will not be shared with anyone outside the research team and will be securely deleted after the research is complete

1. Background

Thank you very much for agreeing to take part. Before we start, I'd just like to begin by asking some questions about your role.

Can I just confirm your role?

And can you sum up what your role involves?

And how long have you been in this role?

And do you work full time or part time? (if part time: How many hours per week are you contracted to work?)

2. Perspectives on role in relation to child healthy weight

Thanks. I'd now like to move on to ask about healthy weight for pregnant women and children up to Primary 1 age in your area.

Firstly, how much would you say you know about how healthy weight for pregnant women and children up to Primary 1 age is assessed and supported in your health board area?

And where have you got this information from?

And how would you describe your role in relation to healthy weight in pregnant women and the early years?

How do you feel about this role? Are you clear about it?

How much of a priority is child healthy weight management among the competing demands of your role?

3. Detailed understanding of their role in prevention and CHW health improvement

I'd just like to go into a bit more detail now on some of the things we've just discussed.

First, what would you say are the main things your public health team does to in relation to the *prevention* of overweight and obesity in the early years? Prompt if necessary:

- During pregnancy
- In infancy/infant feeding
- Weaning
- Toddlerhood/early childhood
- (transition to) Primary 1

Does your work in these areas have a universal focus or are there specific population groups you target?

How much communication do you have with those working in clinical roles with pregnant women and families with young children?

- Do you provide advice and support to them?
- What kind of advice or support might you provide?

Would you say your work is primarily focused on reducing overweight and obesity overall versus reducing the inequality between more and less deprived areas?

I'd now like to mention a few different ways that public health professionals might support healthy weight in pregnancy, some of which we might have touched on already. It would be great if you could tell me whether you've been involved in each one or know of them happening in your health board.

Have you ever been involved in developing resources to inform health professionals about child healthy weight issues?

- What was the focus of these resources? Which topics did they cover?
- What was their purpose – what did you hope they might achieve?
- Did you consult with anyone else (other public health professionals, health visitors, midwives etc.) while developing them? Have you sought feedback from the people the resources are aimed at? Or have any metrics about the impact of the resources?
- Were they developed in line with any particular national standards or guidelines? Or in line with your health board's specific standards?
- Are they still in use? Do you feel they have met their intended goal?
- Do you plan to improve them or develop new resources in the near future?

Have you ever been involved in developing and/or delivering training to health professionals about healthy weight in pregnancy and the early years?

- What was the focus of this training? Which topics did it cover?
- How regularly do you provide training on healthy weight?
- What was the purpose of the training?
- Did you consult with anyone else (other public health professionals, health visitors, midwives, managers etc.) while developing the training?
- Was the training developed in line with any particular national standards or guidelines? Or in line with your health board's specific standards?
- How effective do you feel the training was?
- Do you plan to improve or develop training in the near future?

Have you been involved in developing resources for pregnant women or parents about healthy weight in pregnancy/the early years?

- What was the focus of these resources? Which topics did they cover?

- Did they target any groups of pregnant women/parents (e.g. the more deprived – were they adapted/tailored to these groups in any way?) or different ages of child, or were they more universal?
- Did you consult with anyone else (pregnant women, parents, other public health professionals, health visitors, midwives, managers etc.) while developing these resources?
- Were they developed in line with any particular national standards or guidelines?
- How effective do you feel the resources for parents were? Did they have the effect you hoped?
- Have you sought feedback from parents? If so, what did they think of the materials?
- Do you plan to improve them or develop new resources for parents in the near future?
- What are the limits of these kinds of resources / are there situations where these do not work/ are not appropriate?

And have you been involved in any other work aimed at promoting healthy weight in pregnancy and the early years in your area? Probe for details

As far as you know, where else do families get their information on healthy diets and lifestyles? To what extent is this helpful/problematic?

What impact (if any) has COVID-19 had on your role in relation heathy weight in pregnancy and the early years?

4. Confidence, support and training

I'm going to move on now and ask a bit about your confidence in this area and any training and support you might have received.

How confident do you feel about the Child Healthy Weight aspect of your role?

- Understanding the latest healthy weight standards, guidelines and models (e.g. SIGN guidelines, minimum standards)
- Communicating healthy messaging to families effectively
- Working with other health professionals (those with a clinical caseload) to improve healthy weight systems
- Knowing about services/options for families in your area

- The relative importance of diet, physical activity, screen time in healthy weight

And have you received training on any of these areas?

Is there anything you would like to receive more training on?

How do you think this training should be delivered?

Do you feel you have the support you need to carry out these parts of your job effectively? Is there any other support you'd like to receive?

5. Consistency and coherence

I'm going to move on now and ask some questions about the consistency of child healthy weight systems across your health board.

Do you discuss child healthy weight with your team leader and/or other colleagues?

- What kinds of issues do you discuss?

As far as you are aware, how consistent is the approach taken in supporting child healthy weight across your health board?

- Is there a coherent message?
- Do different groups of health professionals provide the same advice?
- Do different areas with the health board provide the same advice?

And is there coherence across the system as a whole so from pregnancy to the early years to Primary 1?

- Are there particular stages e.g. pregnancy, infancy, weaning, toddlerhood, early childhood, transition to Primary 1 which you feel are more effective in terms of intervening to prevent obesity?
- Where are the gaps and strengths within your board?

Are there any systems and/or resources aimed at ensuring consistency of approach across the health board?

6. Perceived effectiveness, barriers and opportunities for improvement

Overall, how effective do you think your health board's current system to assess and support healthy weight in pregnant women and the early years is?

Have any of the child healthy weight services been audited or evaluated?

What are the main challenges and barriers to supporting healthy weight in pregnant women and the early years in your area?

What are the main difficulties for parents in your view?

And do you have any suggestions for how your health board's system could be improved?

What should the priorities for improvements be?

Are you aware of any improvements currently being carried out?

How do you think national support could be improved?

7. Wrap up

And just before we finish…

In your experience, what is the biggest challenge to health professionals supporting healthy weight in pregnancy and the early years?

Before we finish up, is there anything else you'd like to raise about what we've discussed today? Or any questions about this research?

Thank them and remind them they can contact us again if they have any questions or concerns.

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The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.

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