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General practice views of managing childhood obesity in primary care: a qualitative analysis

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Summary

Objective: To explore general practice staff views of managing childhood obesity in primary care.

Design: A qualitative study to elicit the views of clinical and non-clinical general practice staff on managing childhood obesity.

Setting: Interviews were conducted at 30 general practices across England. These practices were interviewed as part of the Quality and Outcomes Framework Pilot Study.

Participants: A total of 52 staff from 30 practices took part in a semi-structured interview.

Main outcome measures: Key themes were identified through thematic analysis of transcripts using an inductive approach.

Results: Three themes were identified: lack of contact with well children, sensitivity of the issue, and the potential impact of general practice. Identifying overweight children was challenging because well children rarely attended the practice. Interviewees felt ill equipped to solve the issue because they lacked influence over the environmental, economic and lifestyle factors underpinning obesity. They described little evidence to support general practice intervention and seemed unaware of other services. Raising the issue was described as sensitive.

Conclusion: General practice staff were unconvinced that they could have a significant role in managing childhood obesity on a large scale. Participants believed schools have more contact with children and should coordinate the identification and management of overweight children. Future policy could recommend a minor role for general practice involving opportunistically identifying overweight children and signposting to obesity services.

Keywords

primary health care, general practitioner, family practice, qualitative research, adolescence, obesity

girls.² General practice is viewed as an appropriate setting to offer a brief weight management intervention by the Department of Health in England.³ National Institute for Health and Care Excellence guidance recommends that general practitioners should be involved in obesity management including raising awareness and referring children to weight management services.^{4,5}

Evidence on the effectiveness of treating childhood obesity in general practice is mixed. However, a systematic review found improvements in body mass index and behavioural outcomes following various multicomponent interventions.⁶ The two most useful components were training for health professionals and encouraging behaviour change through individually tailored interventions.

Some qualitative studies have explored general practice staff views of managing child obesity.^{7–11} Practitioners described how the complex social and family causes of obesity limited their influence on addressing the issue. They also lacked time and resources to work with the family effectively. Interviewees in one study stated obesity was not a medical problem and outside their professional domain.⁷ Some felt that they did not have relevant knowledge and expertise to treat obesity, and a systematic review showed many lacked confidence in their ability to manage the issue.¹² However, these studies were limited to specific states within Australia and America and small geographical areas in England. The three English studies were also undertaken prior to the publication of National Institute of Health and Care Excellence public health guidance.⁵

The present study aimed to explore the views of general practice staff of managing childhood obesity in general practices across England. This was conducted as part of a wider study developing and pilot testing potential new indicators for the Quality and Outcomes Framework.

Introduction

Childhood obesity is a growing global health problem associated with increased risk of long-term health issues.¹ In England, prevalence has increased over the past 20 years to 16% for boys and 15% for

Methods

Quality and Outcomes Framework pilot study

Quality and Outcomes Framework is a pay for performance scheme for general practices in England which has been in place since 2004. Since 2008, National Institute of Health and Care Excellence have been responsible for developing and testing potential new quality indicators. Indicators are piloted in general practices for six months prior to inclusion, and data are collected evaluating their acceptability, reliability and validity. Between October 2014 and March 2015, seven indicators were piloted for serious mental illness, adult obesity, immunisations, vulnerable patients, depression and anxiety. Practices did not pilot indicators for childhood obesity; however, we elicited their views of managing this in general practice. This issue was explored because National Institute of Health and Care Excellence and Public Health England had expressed an interest in developing indicators related to obesity management.

General practice recruitment

We aimed to recruit 34 general practices across England for the Quality and Outcomes Framework pilot study.¹³ Our sampling frame was initially constructed from all English practices ($n=8123$) from which we excluded those with clinical Quality and Outcomes Framework scores less than or equal to the 10th centile

and those with missing Index of Multiple Deprivation scores. The remaining 7303 practices were stratified into a 3×3 matrix with nine recruitment strata by Index of Multiple Deprivation score (low/medium/high) and practice list size (low/medium/high), resulting in recruitment targets of between three to five practices per cell (Table 1). Practices in each strata were grouped into batches and approached in a random list order to take part in the study. Recruitment continued until the strata target was reached.

Data collection

Semi-structured interviews with practice staff were conducted by two researchers (JOD and RFT) in March and April 2015, either in the interviewee's workplace or by telephone. Interviews lasted around an hour and were conducted individually or in small groups. All participants gave informed consent. The topic guide included two questions related to childhood obesity:

- their perceptions of the barriers and enablers to general practitioners taking a more active role in childhood obesity
- their views on what was needed to improve integrated local pathways to manage childhood obesity.

Follow-up questions were used in response to issues raised by interviewees.

Table 1. Target number of practices in each recruitment strata and the number of practices actually recruited.

		Practice list size		
		Low (range 290 to 4562)	Medium (range 4563 to 8375)	High (range 8377 to 44,030)
IMD score		Practice recruitment		
Low (range 0.61 to 14.97)	Actual recruitment	2	3	2
	Planned recruitment	3	4	5
	Eligible practices	664	848	925
Medium (range 14.98 to 30.77)	Actual recruitment	4	5	4
	Planned recruitment	3	4	4
	Eligible practices	753	806	873
High (range 30.78 to 82.00)	Actual recruitment	6	4	3
	Planned recruitment	4	4	3
	Eligible practices	1019	781	634

Higher scores indicate greater levels of deprivation. IMD = Index of Multiple Deprivation.

All interviews were audio taped, professionally transcribed verbatim and checked for accuracy. Copies of transcripts were available to interviewees, although none requested to see them.

Data analysis

A thematic analysis was performed following the framework of Braun and Clarke.¹⁴ This involved six steps to identify and report patterns in the data: (1) familiarisation with the data, (2) generation of initial codes, (3) initial identification of themes, (4) reviewing these themes, (5) naming of themes and (6) writing up. All transcripts were read and coded independently by two of the authors (JOD and RFT) using an inductive approach aiming to generate an analysis from the bottom up (the data).¹⁵ Initial codes were discussed and combined to form themes which were discussed until agreement was reached that these reflected the data. Results are based upon a synthesis of all the interviews.

Results

A total of 32 practices were recruited to the study, of which 30 identified staff to participate in the end of pilot interview. These were distributed across 17 Clinical Commissioning Group (CCG) areas (see Table 2). A total of 52 practice staff were interviewed: 29 general practitioners, 14 practice managers, 7 nursing staff, 1 healthcare assistant and 1 administrative staff. Twenty nine (56%) interviewees were female (see Table 3). The findings are based on a synthesis of all the interviews.

Almost all interviewees identified childhood obesity as an increasingly important issue with potential long-term health implications. However, most did not frame it as a medical problem in itself or view its management as a general practice responsibility. The themes are organised into three interrelated areas: lack of contact with children, sensitivity of the issue and can general practice make a difference.

Theme 1: lack of contact with well children

All interviewees commented on their limited interaction with children in the absence of an acute illness or long-term condition. This resulted in a lack of awareness of the extent of obesity amongst the well children in their practice and limited opportunities to identify and address the issue (Box 1).

Many questioned the appropriateness of discussing a child's weight in the fringes of a consultation when the patient was attending for an acute illness. Interviewees felt the primary focus should be the

Table 2. Distribution of interviewed practices across PCRN and CCG areas.

PCRN area	CCG
Central England	NHS Birmingham Crosscity CCG
	NHS Sandwell and West Birmingham CCG
	NHS Birmingham South and Central CCG
East of England	NHS Walsall CCG
	NHS Great Yarmouth and Waveney CCG
	NHS Cambridgeshire and Peterborough CCG
South East	NHS Oxfordshire CCG
	NHS Bedfordshire CCG
South West	NHS Northern, Eastern and Western Devon CCG
	NHS Somerset CCG
	NHS Bristol CCG
North West	NHS Bath And North East Somerset CCG
	NHS Cumbria CCG
	NHS Stockport CCG
Northern and Yorkshire	NHS Oldham CCG
	NHS Liverpool CCG
	NHS Durham Dales, Easington and Sedgefield CCG

PCRN = Primary Care Research Network; CCG = Clinical Commissioning Group; NHS = National Health Service.

patient's stated reason for attending. Raising weight would distract from this which could be detrimental to the doctor-patient relationship. For children with a long-term condition, this was viewed as less of an issue because of the relationship was more established and weight may impact on their condition. A lack of time to explore obesity during consultations was also noted as a barrier to broaching the subject (Box 2).

Due to a lack of interaction with children, interviewees considered other healthcare professionals and organisations who saw children more frequently.

Table 3. Demographic characteristics of general practice staff interviewed.

	Staff role					Total staff
	GP	Practice nurse	Practice manager	Healthcare assistant	Other admin staff	
Total interviewed, <i>n</i> (%)	29 (56)	7 (13)	14 (27)	1 (2)	1 (2)	52
Gender <i>n</i> (%)						
Male	21 (72)	0 (0)	2 (14)	0 (0)	0 (0)	23 (44)
Female	8 (28)	7 (100)	12 (86)	1 (100)	1 (100)	29 (56)
Years since qualified ^a						
≤ 5	0					
6–10	2					
11–20	8					
21–30	14					
31–40	4					
41–50	1					

GP = general practitioner.

^aThese data were collected for general practitioners only.

Box 1. Lack of contact with well children.

“The main barrier is seeing the children, there’s a huge spell between the ages of 5 and adulthood where we don’t see children, they just don’t come to their Doctor . . . I don’t think we can practically do it, they are a healthy group and we generally only see the children with chronic health issues.” Practice ID 2, GP

“What you’re needing is an opportunity to contact this group, because these children are usually healthy. So they are coming to the surgery when they have got some minor respiratory infection or maybe some other reason. That way you can pick it up, but you’re picking up on only a tiny segment of that problem . . . If you are taking only 10 to 15% of this group of patients, where is that going to lead onto? You’re not achieving much.” Practice ID 19, GP

Most identified a greater role for schools and school health services due to their daily contact with children. It was noted that if general practice was to be primarily responsible for identifying overweight children then they would need to be invited to the surgery during school hours (Box 3).

Box 2. Lack of contact with well children.

“They wouldn’t come in specifically for obesity in which case it’s then quite difficult to bring up obesity. And the time factor as well, the ten minute obviously limits how much you can ask or talk about.” Practice ID 12, GP

“On the very rare occasions when you do see them rather than following their agenda to help build up a relationship . . . let’s just check your weight while you’re here.” Practice ID 4, GP

Box 3. Lack of contact with well children.

“It’s very easy to line a classroom full of kids and weigh them all whereas for those 30 kids going to the GP it might not happen over six years.” Practice ID 10, GP

“These kids are being seen by school nurses anyway, so I’m not sure there’s a huge amount of additional benefit to us doing it in addition to the schools doing it . . . it’s a school problem, because that’s where these kids are.” Practice ID 8, GP

Theme 2: sensitivity of the issue

Potential sensitivities surrounding discussing a child's weight arose from interviewees' perceptions and feelings, anxieties about parental response, the consequences of this and the potentially negative impact upon the child. Most discussions about a child's weight were practitioner initiated because most parents did not approach their GP with these concerns (Box 4).

It was felt that parents may not welcome discussions about weight, and it could jeopardise relationships with the family. Interviewees identified parents as being both responsible for contributing to their child's obesity and the success of any weight management attempts. Limitations in parental supervision of diet and exercise were identified as a key contributing cause of childhood obesity possibly due to a lack of knowledge, money or time. Collaborating with parents to identify reasons and solutions for the obesity was described as essential (Box 5).

Despite viewing parents as key to tackling obesity, interviewees felt raising the issue would upset them and cause defensiveness. Parents may also deny a problem, and it was often viewed as something children would grow out of (Box 6).

Often parents were also overweight, making the issue more challenging to address. Interviewees felt parental guilt over being criticised and being

Box 4. Sensitivity of the issue.

"No. As a general rule you have to mention it. No, I can't remember the last time a parent brought it up, 'I think my child's a bit overweight. Can we do something about it, please?' No." Practice ID 24, GP

Box 5. Sensitivity of the issue.

"Often you're dealing with parents, not the children, if you stick a bar of chocolate in their lunch box every day, and give them crisps and pizza for tea, then the children are going to end up overweight... It's up to parents making good choices about what they buy, what they put in their fridge, and what they put in their kid's lunch boxes. So I think there's lots of needs for parental education." Practice ID 26, GP

"Some families can't afford healthy food. They can't afford food waste. So they won't buy fresh fruit or vegetables, if they're gonna go off, because they're expensive. So that's a real issue we've discussed locally, that sometimes they just won't buy it because if the children don't eat it, it's a waste of money." Practice ID 13, GP

held responsible for the child's weight could result in negative emotional responses (Box 7).

Discussing weight when the child was present was described as a particularly sensitive issue. Children may not view themselves as overweight, and it was feared categorising them as such could be detrimental to their self esteem. Weight monitoring could also exacerbate this. Interviewees acknowledged children may be experiencing weight-related bullying, making this even more delicate for a GP to explore (Box 8).

Box 6. Sensitivity of the issue.

"From a personal perspective I've seen a lot of young people who were quite chubby growing up who as soon as they hit puberty they changed." Practice ID 9, Practice Nurse

"You'll notice that they're a bit overweight or quite overweight, and Mum's reaction is, 'He's fine; he's healthy. He's healthy looking.' And that's not unusual. It was quite off-putting actually, to hear it. And I had to say, 'No. This is not healthy. He's actually obese.' Practice ID 18, GP

Box 7. Sensitivity of the issue.

"It's an incredibly delicate conversation with parents, particularly mothers, because there's an awful lot who come up about weight themselves. It's harder than telling an adult that their weight is a problem. If you tell them that their child's weight is a problem that's a very pejorative thing to say to a parent and I think it's a very difficult conversation to have." Practice ID 29, GP

"Nobody likes to be criticised, no one likes to be critical... any suggestion you're a bad parent, you just don't want to go there. Even though it isn't necessarily about parenting, clearly you know, the major intervention is altering the parental approach, to the child's typical levels of feeding. That's not to say that they're bad parents but it always comes over as such and it's a real minefield." Practice ID 22, GP

Box 8. Sensitivity of the issue.

"It's a slightly awkward one to have in front of the child, because you don't know whether the child perceives themselves as being overweight. Or they have already experienced some kind of bullying, or issues at school around peer groups, around their weight, and then to be told by the doctor, well, you know, that your child's looking a bit overweight." Practice ID 26, GP

Conversely, a small number of interviewees raised concerns that the general focus upon obesity meant less attention was given to the issues associated with eating disorders (Box 9).

Theme 3: the potential impact of general practice

Interviewees did not frame childhood obesity as a medical issue in itself, although its health consequences were recognised. The root cause of obesity was identified in complex societal change related to access to food and increasingly sedentary lifestyles. The problem was framed as one which primarily required social change supported by public health interventions. The majority of interviewees did not feel that they could successfully intervene and questioned the evidence-base for them to do so. As a result, there was resistance to addressing childhood obesity in general practice and a sense of frustration that it could become their responsibility (Box 10).

Concern was also expressed about the opportunity cost of a greater focus upon childhood obesity in the practice setting. Interviewees noted that they currently worked at full capacity and felt their efforts

Box 9. Sensitivity of the issue.

“I’d be concerned about a one size fits all approach to it, where every child or teenager had to have their weight done, because you’ve got to think of the people with the other way round, which is as much of an issue for some teenagers, and lots of them I try to avoid . . . Well, just because of the anorexia thing, getting obsessed with weight, oh, the doctor’s weighing me. You’ve got to look at everyone individually, I think” Practice ID 20, GP

Box 10. The potential impact of general practice.

“As a health care professional, what you think is that if somebody has got a problem, you have to deal with it and you need to see a very good outcome, so for me, as a GP what makes me happy is – he had a problem, diabetes, diagnose it, start treatment, got better! that’s the outcome. You have got obese child, you’ve got nothing to do with it, it’s parents’ jobs – you can’t prescribe anything, you can’t tell them anything and for me, the outcome is frustration – nothing else.” Practice ID 16, GP

“My concern about obesity in general practice is it seems to imply that the solution in obesity is in general practice. And it is absolutely clear that the solution is nowhere near general practice. The solution to obesity is in public health; nothing to do with general practice.” Practice ID 25, GP

should be directed towards health problems they identified as medical issues where evidence suggests they can make a difference. As a result many interviewees felt their role in childhood obesity management should be limited to opportunistic identification and onward referral to specialist services. However, there was limited awareness of the availability of services (Box 11).

Discussion

Summary

This study suggests that interviewees viewed childhood obesity as an important issue with the potential to impact on health outcomes. However, it was regarded as a public health rather than a medical issue. General practice lacked influence over the environmental, economic and lifestyle factors underpinning obesity and therefore would have little impact on changing health behaviour. There was a perception of a lack of evidence demonstrating the benefits of general practice involvement coupled with anxiety over raising the topic of a child’s weight with both parents and children.

Interviewees were concerned that their limited contact with children meant that they were unsuitable to undertake population surveillance of childhood

Box 11. The potential impact of general practice.

“We may bring in fit and well kids in here, they’re going to school, they’ve got school nurses why not let them do it and let us deal with the self harmers and the kids with behavioural problems and the parents who want their child assessed if they’ve got autism or ADHD, never mind the kids who are being abused and identifying them.” Practice ID 28, GP

“I don’t think we’ve got the infrastructure, in terms of the services at all. I don’t think the services are really geared up to deal with it.” Practice ID 3, GP

“We can refer, there are childhood services. I know there’s something in the community that does overweight or obese children. I can’t remember, I’ve never had to refer anyone to it . . . But certainly a clear pathway needs to be drawn up . . . we should have involvement in it and we should know what our pathway is. It should be fairly simple, and we need to make sure that the people that we are meant to be referring to or the plan of the referral is very clear, explicit and we have it in place before we put out something like this and say ‘now start picking up your childhood obese patients’.” Practice ID 9, GP

obesity. Limited opportunities were identified for opportunistic identification and referral to specialist services. Schools were viewed as being better placed to address the issue on a population basis due to their regular contact with children.

Strengths and weaknesses of the study

There are several strengths and weaknesses of the present study. A main strength compared to other qualitative studies in this area is our sample characteristics. Compared to other studies,⁷⁻¹¹ we interviewed staff from a large number of practices in different geographical areas across England where access to child obesity services may vary. Other studies are limited to specific states in Australia,¹⁰ America,¹¹ and smaller geographical areas in England such as Bristol primary care and community settings,⁹ Rotherham Primary Care Trust,⁸ and an inner London primary care trust.⁷ During sampling, we ensured practices were broadly representative of general practices in England in terms of practice list size, clinical Quality and Outcomes Framework score and deprivation (Index of Multiple Deprivation score). Furthermore, we obtained views from a range of practitioners and administrative staff of both genders. These practices volunteered to take part in a wider study testing potential indicators for the Quality and Outcomes Framework pay for performance scheme. The first part of the interview focused on the feasibility of implementing seven potential indicators which practices piloted in the preceding six months. Interviewees may therefore have been concerned that the research team were eliciting their opinions with a view to childhood obesity indicators either being piloted in future or formally included in the Quality and Outcomes Framework. These anxieties may have resulted in a negative reaction from practices aiming to guard against childhood obesity becoming a pay for performance area.

Comparison with existing literature

The study findings show that in this sample of practices across England, general practice is viewed as having only a minor potential role in managing childhood obesity. This role would primarily be centred on the opportunistic identification of overweight children and signposting to obesity services. This is in line with previous research on this issue which also suggested a minor role for practices.⁸⁻¹⁰ One study suggested a small role could involve raising the issue of the child's weight and providing basic diet and exercise advice.⁸ Across all studies, childhood obesity was viewed as a social, family and public health issue

rather than a medical issue to be addressed in primary care. Other concerns consistent with our study were workload, limited contact with children and ensuring a sensitive approach with families.⁸⁻¹¹

A key challenge across studies was engaging with families to manage weight. In our study, interviewees highlighted that parents rarely initiated this discussion so a practitioner would need to raise this. Other research suggests parents are apprehensive about working with their general practitioner to address their child's weight. One study reported a low uptake when families of obese children were invited to discuss possible referral to a secondary care clinic with their general practitioner.¹⁶ Interviews with parents show that they are hesitant due to fear of being blamed, concern for the child's mental well-being and feeling general practitioners are ill equipped with knowledge and resources to treat the problem.^{17,18} Legitimate concerns in light of our findings. Other research shows many primary care clinicians lack specific knowledge about childhood obesity such as prevalence, and guidelines for diet and exercise and confidence in their ability to treat it.^{12,19} In the context of adult obesity management, clinicians feel more empowered to manage the issue if they have had appropriate training so they can support patients through education and non-judgemental care.²⁰ This sense of being supported has been shown to increase patient empowerment and engagement with general practice. These studies suggest general practitioners may need further training to manage child obesity, or alternatively they could utilise services or health professionals with specialist knowledge. Further research should also explore suitable strategies for health professionals to raise the issue sensitively with parents.

Our participants identified schools as being critical to the prevention, identification and management of childhood obesity. In England, schools already record a child's body mass index at ages 5 and 11 for the National Child Measurement Programme with intention of the resulting data informing planning and commissioning of local services.²¹ A Cochrane²² review of child obesity prevention interventions found beneficial effects of implementing strategies in schools. Successful strategies are increased physical activity sessions, education focusing on healthy eating, body image and physical activity, improved nutritional quality of food in schools and support for teachers to implement health promotion activities. Research shows parents feel schools and school nurses have an important role,^{17,23} although participation of school nurses in obesity management is inconsistent.²⁴ From the perspective of head teachers, there may be barriers to increased school involvement

which need further attention before implementing a formal initiative.²⁵ These centre on time, academic pressures, the requirement for more expert support and better facilities and resources within schools. It was also recognised that for obesity prevention in schools to be successful, it needed to be an integral part of the education agenda rather than an additional initiative. A sensible solution could be to increase support towards schools and expand the National Child Measurement Programme to include either a direct referral to obesity services or a letter to the child's GP requesting this referral. This would also need to consider recent research showing that parents currently perceive there to be a lack of sensitivity surrounding the feedback of their child's measurements for the National Child Measurement Programme.²⁶ Training was recommended for both practice staff and school staff to improve their approach to discussing a child's measurements and obesity management with the family. Due to their regular contact with children, schools could also be provided with more information on public health resources and encouraged to signpost to them. Existing public health campaigns such as Change4Life and Mind, Exercise, Nutrition, Do it (MEND), a multicomponent community-based childhood obesity intervention, have shown success in encouraging healthy lifestyles.^{27,28}

Implications for research and practice

Our findings suggest that policies recommending a significant role for general practitioners in prevention, identification and management of childhood obesity at a population level are unlikely to be successful. Practices did not see well children regularly enough to identify everyone who was overweight, and parents rarely raised the issue. It was described as a sensitive topic, and further research could explore strategies for health professionals to engage with families as their involvement was crucial. Interviewees felt policy in this area should be directed towards services that regularly engage with children such as schools. They identified a minor role for themselves centred on opportunistic identification of overweight children and signposting to obesity services.

Declarations

Competing Interests: PG, RFT and JOD are funded by NICE to develop and pilot potential new indicators for the Quality and Outcomes Framework (QOF). All authors are fully independent of NICE and the Department of Health. NICE had no role in the study design, data collection, analysis, interpretation or writing up of the article or decision to submit for publication.

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Ethics Approval: This study was approved by the Dyfed Powys Research Ethics Committee 13/WA/0282. All interviewees gave informed consent.

Guarantor: PG.

Contributorship: PG and RFT secured the funding for the QOF Pilot Study. PG, RFT and JOD conceived the research idea. JOD and RFT collected and analysed the data. JOD wrote the initial draft of the paper. All authors revised the paper and approved the final version.

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References

1. World Health Organisation (WHO). Facts and figures on childhood obesity, <http://www.who.int/end-childhood-obesity/facts/en/> (2015, accessed 8 February 2017).
2. Health and Social Care Information Centre. *Statistics on obesity, physical activity and diet*. England: Health and Social Care Information Centre, 2015.
3. Department of Health. *Healthy lives, healthy people: a call to action on obesity in England*. England: Department of Health, 2011.
4. National Institute for Health and Care Excellence. *NICE clinical guideline 189. Obesity: identification, assessment and management of overweight and obesity in children, young people and adults*. London: National Institute for Health and Care Excellence, 2014.
5. National Institute for Health and Care Excellence. *NICE public health guidance 47. Managing overweight and obesity among children and young people: lifestyle weight management services*. London: National Institute for Health and Care Excellence, 2013.
6. Sargent GM, Pilotto LS and Baur LA. Components of primary care interventions to treat childhood overweight and obesity: a systematic review of effect. *Obes Rev* 2011; 12: 219–235.
7. Epstein L and Ogden J. A qualitative study of GPs' views of treating obesity. *Br J Gen Pract* 2005; 55: 750–754.
8. Walker O, Strong M, Atchinson R, Saunders J and Abbott J. A qualitative study of primary care clinicians' views of treating childhood obesity. *BMC Fam Pract* 2007; 8: 50.
9. Turner KM, Shield JPH and Salisbury C. Practitioners' views on managing childhood obesity in primary care: a qualitative study. *Br J Gen Pract* 2009; 59: 856–862.
10. King LA, Loss JHM, Wilkenfeld RL, Pagnini DL, Booth ML and Booth SL. Australian GPs' perceptions about child and adolescent overweight and obesity: the weight and opinion study. *Br J Gen Pract* 2007; 57: 124–129.
11. Findholt NE, Davis MM and Michael YL. Perceived barriers, resources, and training needs of rural primary

- care providers relevant to the management of childhood obesity. *J Rural Health* 2013; 29: 17–24.
12. Van Gerwen M, Franc C, Rosman S, Le Vaillant M and Pelletier-Fleury N. Primary care physicians' knowledge, attitudes, beliefs and practices regarding childhood obesity: a systematic review. *Obes Rev* 2009; 10: 227–236.
 13. Gill P, Foskett-Tharby R and Hex N. Pay for performance and primary care physicians: lessons from the UK Quality and Outcomes Framework for local incentive schemes. *JRSM Open* 2015; 108: 80–82.
 14. Braun V and Clarke V. *Successful qualitative research: a practical guide for beginners*. California: Sage Publications, 2013.
 15. Denzin NK and Lincoln YS. *Handbook of qualitative research*, 4th ed. Thousand Oaks, CA: Sage Publications, 2011.
 16. Banks J, Shield JPH and Sharp D. Barriers engaging families and GPs in childhood weight management strategies. *Br J Gen Pract* 2011; 69: e492–e497.
 17. Turner KM, Salisbury C and Shield JPH. Parents' views and experiences of childhood obesity management in primary care: a qualitative study. *Fam Pract* 2011; 29: 476–481.
 18. Edmunds LD. Parents' perceptions of health professionals' responses when seeking help for their overweight children. *Fam Pract* 2005; 22: 287–292.
 19. Spivack JG, Swietlik M, Alessandrini E and Faith MS. Primary care providers' knowledge, practices, and perceived barriers to the treatment and prevention of childhood obesity. *Obes Open Access* 2010; 18: 1341–1347.
 20. Henderson E. Obesity in primary care: a qualitative synthesis of patient and practitioner perspectives on roles and responsibilities. *Br J Gen Pract* 2015; 65: e240–e247.
 21. The Information Centre for Health and Social Care. *National child measurement programme: England, 2013/14 school year*. England: The Information Centre for Health and Social Care, 2013/2014.
 22. Waters E, de Silva-Sanigorski A, Burford BJ, et al. Interventions for preventing obesity in children (Review). *Cochrane Database Syst Rev* 2011; 12: 1–212.
 23. Murphy M and Polivka B. Parental perceptions of the schools' role in addressing childhood obesity. *J Sch Nurs* 2007; 23: 40–46.
 24. Quelly SB. Childhood obesity prevention: a review of school nurse perceptions and practices. *J Spec Pediatr Nurs* 2014; 19: 198–209.
 25. Clarke JL, Pallan MJ, Lancashire ER and Adab P. Obesity prevention in English primary schools: head-teacher perspectives. *Health Promot Int* 2015; 1–10, DOI: 10-1093/heapro/dav113.
 26. Henderson EJ, Ells LJ, Rubin GP and Hunter DJ. Systematic review of the use of data from national childhood obesity surveillance programmes in primary care: a conceptual synthesis. *Obes Rev* 2015; 16: 962–971.
 27. Department of Health. *Change4Life: one year on. 2010*. England: Department of Health.
 28. Sacher PM, Kolotourou M, Chadwick PM, Cole TJ, Lawson MS, Lucas A, et al. Randomized controlled trial of the MEND program: a family-based community intervention for childhood obesity. *Obesity Open Access* 2010; 18: 62–68.