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12 **Childhood Obesity Prevention Interventions in Primary Care:**
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14 **Perspectives of Primary Care Clinicians and Parents of 2-5 year old children**
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30 Nicole Bourgeois, RD^{1,2}

31 Paula Brauer, PhD, RD¹

32 Janis Randall Simpson, PhD, RD¹

33 Susie Kim, MD, CCFP, MScCH^{2,3}

34 Jess Haines, PhD, RD¹

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43 ¹Family Relations and Applied Nutrition, University of Guelph, Guelph, ON

44 ²Family Practice Health Centre, Women's College Hospital, Toronto, ON

45 ³Department of Family and Community Medicine, University of Toronto, Toronto, ON

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Introduction

Prevention of childhood obesity is an important public health priority, given the high prevalence of obesity in Canadian children as young as 2-5 years of age [1-3], and the associated health risks when obesity persists in adulthood [4-7]. Leaders in the field have expressed a need for systems-wide prevention strategies [8, 9] and have identified primary care as an important setting, given the wide population reach and frequent contact with primary care in the early years [10]. In their recently-published recommendations on the prevention and management of obesity in children in primary care, the Canadian Task Force on Preventive Health Care recommended against offering structured prevention interventions in the primary care setting due to a dearth of effective interventions [11]. The Task Force identified that a key barrier to the development of effective obesity prevention interventions is the lack of knowledge regarding parents' and children's preferences regarding interventions. Formative research within the primary care setting is needed to understand the current context and resources available to support interventions [12] and to identify preferences of the end users of the intervention; this information can serve to inform the development and refinement of obesity prevention interventions [13].

Our study aimed to explore the perspectives of primary care clinicians and the parents of their 2-5 year old patients on an obesity prevention intervention within primary care, through the lens of an existing universal prevention intervention developed by the senior investigator (JH). The 9-week structured group intervention targets parents of 2-5 year old children as the primary agents of behaviour change, and embeds weight-related behaviours within a general parenting skills program [14]. The intervention includes a concurrent children's program, as a catalyst for

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3 parent participation. The intervention has been tested in community-based settings in both the
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5 United States and Canada [14], but has not yet been delivered within the primary care setting.
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8 9 **Methods**

10 11 *Study Design and Setting*

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14 We used a qualitative approach involving focus groups with clinicians and individual
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16 interviews with parents to explore preferences with respect to prevention interventions in the
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18 primary care setting.
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22 This study was conducted in three primary care Family Health Teams (FHTs) in Ontario.
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24 In FHTs, physicians work in groups under a blended capitation model and are supported by
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26 interprofessional healthcare providers [15]. Our sites included: one urban academic practice
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28 (18,000 patients, 30 family physicians, 30 residents), one urban community-based practice
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30 (280,000 patients, 150 family physicians), and one rural practice (14,000 patients, 6 family
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32 physicians).
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38 39 *Recruitment of participants*

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41 Interprofessional clinician participants with higher proportions of patients in the target
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43 age were purposively approached to participate via email. Clinicians were consented at the focus
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45 groups where lunch was provided.
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49 At each site, parent participants were recruited through several mechanisms including
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51 flyers (posted in waiting rooms and distributed by staff), and a letter sent to parents through a
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53 primary school (rural site only). Parents were sent consent forms in advance by mail or email and
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3 were provided with a \$35 grocery gift card for participation. Ethics approval was obtained from
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5 Research Ethics Boards at both Women's College Hospital, and the University of Guelph.
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8 9 *Data Collection & Analytic Approach*

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11 We conducted semi-structured phone interviews with parents and focus groups with
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13 interprofessional primary care clinicians at their respective clinics. All but one focus group was
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15 held in person; one focus group was held over the phone. All participants completed a brief
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17 demographics form. One of the authors (NB) conducted all interviews and focus groups between
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19 August 2013 and July 2014.
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25 To focus the discussions, we began clinician focus groups with a description of the
26
27 proposed intervention, and outlined topics covered (i.e., physical activity, sleep duration,
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29 TV/Screen time, limiting sugar-sweetened beverages, children's hunger/satiety cues, and
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31 alternatives to food as rewards). We then asked about current practices in addressing these
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33 weight-related behaviours, and facilitators and barriers to implementing the described program in
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35 participants' primary care setting (Figure 1). We conducted parent interviews similarly, except
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37 that the program was positioned as a program to support happy, healthy children (i.e., did not
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39 discuss obesity or weight).
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46 Contact summary sheets were created after each interview and focus group [16]; a
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48 debriefing was held between NB and a research assistant (RA) after focus groups to combine
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50 detailed notes. All focus group and interview data were audio-recorded and transcribed verbatim
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52 by a RA. Theoretical saturation was assessed by consensus (NB, JH, RA), at which point data
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54 collection ended. Qualitative analysis software (NVivo) was used for all coding procedures;
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56 directed content analytic methods were used [17]. We employed an a priori coding scheme based
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3 on the interview guides, the key foci of which included: current practices in addressing weight-
4 related behaviours, facilitators and barriers to implementation of the proposed intervention in
5 primary care settings, and general recommendations for implementation in primary care. A
6 single analyst (NB) read and coded each transcript line-by-line. To assess reliability, a second
7 coder (RA) independently coded 25% of the transcripts. Average percent agreement between the
8 two coders was calculated by the software; there was a high level of agreement for both parent
9 interviews (99.5%) and clinician focus groups (99.3%). All discrepancies were discussed and
10 resolved between the coders prior to analysis. To check the validity of interpretation, the second
11 coder was also provided with a selection of individual codes for independent interpretation,
12 which was compared to those of the primary analyst (NB). Interpretations were found to be
13 consistent between coders. To member check our results, clinician participants (1 physician, 1
14 nurse, 1 nurse practitioner) reviewed the results, and confirmed that interpretations reflected their
15 experiences.

35 **Results**

37 **Participant Characteristics**

39 *Clinicians*

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42 Seven clinician focus groups were held across the three sites (n = 40); attendance ranged
43 from 2-13 participants. The highest participation was from registered nurses; however, a wide
44 variety of disciplines participated (Table 1). Clinician participants represented a wide number of
45 years in practice (< 1 to 48 years), and half reported that this age group represented at least 10%
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Parents

Twenty-six parent interviews were held across the three sites. Theoretical saturation was reached after the sixth rural interview. All but one interview was conducted over the phone (one conducted in person). All of the parent participants were female; the majority identified as white (Table 2).

Themes

Results are presented in four main themes derived from the coding scheme: 1) current practices of primary care clinicians in addressing weight-related behaviours; 2) facilitators to implementation of the proposed intervention in primary care settings; 3) barriers to implementation; and, 4) recommendations for implementation in primary care.

1. *Current practices of primary care clinicians in addressing weight-related behaviours*

Clinicians were asked about their current practices with respect to weight-related behaviours in children aged 2-5 years, specifically: TV/screen time, physical activity, sugar-sweetened beverages, sleep duration, and children's hunger/satiety cues. The extent to which clinicians reported addressing these topics with families in an anticipatory way was highly variable. Many clinicians described addressing some, but not all, of the weight-related topics routinely. Across, and within sites, there was a lack of consistency in what clinicians are routinely addressing. As one participant said, "I think [Clinician] is starting to talk more about sugar-sweetened beverages...but probably not everyone."

Clinicians identified several barriers to addressing these behaviours with young children. Across all sites, clinicians described a perceived gap in well-child primary care between 2-5 years of age, which corresponds with the Ontario immunization schedule. Additional barriers to

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3 addressing these topics included: a lack of time, perceived lack of parental engagement,
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5 sensitivity of these topics, and a perceived gap in topics outlined in primary care screening tools
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8 (Figure 2).
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10 11 2. *Facilitators to implementation of the proposed intervention in primary care settings*

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14 Both clinicians and parents identified that trust, and the longitudinal relationships offered
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16 in primary care settings are key facilitators to intervention implementation. Several parents
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18 across sites also identified their primary care providers as experts and credible sources of
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20 information (Figure 3). However, there were a few parents who associated their primary care
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22 teams with routine care, and not preventative group programs; one parent shared “I only go there
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24 for check-ups.”
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31 Clinicians and parents also felt that the proposed topics were highly relevant; the peer
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33 support and learning offered in a group intervention was also perceived to be advantageous
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35 (Figure 4). Having separate parent and children’s programs, and addressing both general
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37 parenting topics and weight-related behaviours were identified by parents as desirable aspects of
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39 a primary care prevention intervention (Figure 5).
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43 3. *Barriers to implementation of the proposed intervention in primary care settings*

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46 The primary barriers identified by both clinicians and parents included that a 9-week
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48 intervention may be too long for families and that availability of transportation and travel time to
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50 the clinic may impact attendance. However, parents had variable opinions on the length of the
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52 program, with some parents preferring the full 9-week intervention. Clinicians across all sites
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54 had concerns that clinics may not have sufficient human resources to implement the intervention.
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4. *Recommendations for implementation in primary care*

Across all sites, clinicians identified that some of the weight-related behaviours may already be established by 2-5 years; clinicians at two of the sites suggested that the target age range be expanded to include children in the 0-2 year age range.

Both clinicians and parents identified that a recommendation from a primary care clinician would be an effective recruitment strategy. The well-attended 18-month visit was also felt to be a good opportunity to recruit. Across sites, there was some clinician interest in a communication mechanism from the intervention back to the primary care team, so that follow-up could be arranged as-needed.

In an early focus group, a clinician recommended to consider an online delivery mode to reduce barriers to participation. Interest in online formats was assessed in subsequent focus groups and interviews; however, most clinicians and parents expressed negative views and preferred in-person interventions. Several parents expressed interest in complementary online materials, but not online formats as a primary delivery mode.

Interpretation

The purpose of this study was to explore perspectives of primary care clinicians and parents of 2-5 year old children on primary care obesity prevention interventions through the lens of an existing intervention. We found that both clinicians and parents are interested in such interventions to promote healthful weight-related behaviours.

Barriers to addressing weight-related behaviours such as a lack of time [18, 19], competing priorities during well-child visits [19], and sensitivity of these issues [20] have been

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3 similarly reported in primary care settings outside of Canada. Insufficient human resources are a
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5 key challenge to implementing interventions in this setting. For physicians and nurses who
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7 traditionally provide the majority of well-child primary care, it may not be feasible to address
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9 multiple weight-related behaviours in the context of a well-child visit. In fact, research has
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11 shown that parent retention of anticipatory guidance declines with increasing number of topics
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13 addressed [21]; adding topics to an already full well-child visit may not be effective. In a review
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15 of models of well-child care, Coker and colleagues [22] found that group visits were at least as
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17 effective as individual visits. Our findings suggest that parents and primary care clinicians may
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19 be interested in group-based formats for obesity prevention interventions due to peer learning
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21 and support. Expanding the role of nurses in well-child care to include group programs, utilizing
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23 other members of the interprofessional primary care team (such as social workers, childhood
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25 development specialists [22], registered dietitians), and/or partnering with public health [8] could
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27 help to overcome human resource-related barriers.
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35 We found that clinicians perceive that tools used to guide well-child care in this age do
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37 not include guidance on many weight-related behaviours. Recently-revised versions of these
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39 tools, such as the Rourke Baby Record, have included screening items on some topics (i.e.,
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41 physical activity/sedentary behaviour, sleep habits, and sweetened beverages [23]). However, it
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43 is possible that the newest versions have not yet been adopted in some practices. Future research
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45 could explore how these revised tools, and others such as NutriSTEP [24], impact clinical care
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47 regarding obesity-related behaviours among children.
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53 We also found that clinicians perceive a gap in care between 2-5 years which presents a
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55 barrier to addressing weight-related behaviours; some of these behaviours could be addressed
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3 before 2 years. Future studies should explore optimal timing and frequency of addressing these
4 behaviours.
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9 Our findings offer guidance for structured interventions for families with young children
10 in primary care. Desirable aspects of an intervention included having separate parent and
11 children's programs, and addressing both general parenting topics and weight-related behaviours.
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13 Positioning interventions within a general parenting program has been described by others as a
14 strategy to increase parent participation [25] and could be tested in future studies.
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20 21 22 *Strengths and Limitations* 23

24 To our knowledge, our study is the first to describe perspectives of Canadian primary
25 care clinicians and parents of 2-5 year old children on obesity prevention interventions within
26 primary care. While we engaged a variety of primary care clinicians from three different settings
27 (urban academic, urban, and rural), we only recruited from the FHT model, which does not
28 reflect the diversity of practices in Canada. Our parents were not diverse despite an extended
29 recruitment phase. Future studies should recruit a wider variety of primary care practices and
30 parents to better reflect a diverse Canadian population.
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41 42 *Conclusion* 43

44 Effective, engaging obesity prevention interventions are needed for young children;
45 primary care settings have a wide population reach, at a time when they are already engaged in
46 routine care. While no existing interventions have demonstrated effectiveness, our study
47 provides insight into the preferences of both primary care clinicians and parents, which can
48 inform strategies for obesity prevention within primary care.
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Figure 1: Relevant Questions from the clinician interview guide

1. **Current practices in addressing weight-related behaviours:** Do you routinely offer anticipatory guidance on healthy behaviours? Which health behaviours do you typically address with parents? Are there any barriers you find in counseling parents on healthy behaviours in the clinical/office setting?
2. **Opinions on the proposed intervention:** Are the topics covered in the program challenges that you think will fit with the patients in your practice? As a clinician, are these topics you would like your patients to learn more about? Is there anything missing in the topics that you think we should include?
3. **Intervention implementation:** Are there any differences between offering a program in primary care, compared to another setting (i.e. Public Health)? Are there any features of the primary care setting that would increase the chance that parents would attend the program? What are some ways we can encourage parents to attend the program? What do you think would be the most important factors that determine whether a parent would attend the program?

Table 1: Clinician Demographics

	All Sites (n= 40)	Academic Site (n=13)	Rural Site (n=13)	Urban Site (n=14)
Mean Age (SD)	41 (13)	43 (12)	39 (15)	42 (11)
Role* (%)				
MD	15	31	8	7
RN	35	54	15	36
NP	15	15	15	14
RD	8	0	8	14
SW	5	0	0	14
RPN	13	0	31	7
Other	10	0	23	7
Mean years in practice (SD)	15 (13)	17 (12)	17 (16)	13 (12)
Practice population of 2-5 year olds (%)				
0-10%	33	31	46	21
11-20%	30	46	23	21
21-30%	10	8	0	21
31-40%	5	8	8	0
>40%	5	0	0	14
Don't know	18	8	23	21

*MD = physician, RN = registered nurse, NP = nurse practitioner, RD = registered dietitian, SW = social worker, RPN = registered practical nurse, other includes lab technicians, pharmacists, students.

Table 2: Parent Demographics

	All Sites (<i>n</i> =24*)	Academic Site (<i>n</i> = 9)	Rural Site (<i>n</i> =6)	Urban Site (<i>n</i> =9)
<i>Mean Age (SD)</i>	33 (5)	33 (6)	33 (3)	33 (5)
<i>Gender (% F)</i>	100	100	100	100
<i>#Children (mean)</i>	2	2	3	2
<i>Ethnicity (%)</i>				
White	83	78	100	78
Asian	4	11	0	0
South Asian	8	11	0	11
First Nations	4	0	0	11

*Two parents did not complete a demographics form.

Figure 2: Clinician-reported barriers to addressing weight and related behaviours with parents of 2-5 year old children

- **Gap in care:** "...traditionally we see kids up to the two-year-old because that's their last inoculation or ... eighteen months. So we don't actually see them.... until they go to school... there's that gap in their care ...traditionally [in] family practice."
- **Parent disinterest:** "I find like half the parents don't listen to the advice we give to them during those well-baby visits anyway".
- **Sensitivity of topics:** "... parents don't like to hear that maybe they're doing something ...wrong I guess. You have to really tread delicately and...you don't want to get their backs up."
- **Gaps in screening tools:** "...the weight-related topics are all stuff that people...would be interested in and we try to promote...The TV stuff comes up for me a lot.... especially because it's on the Grieg and part of your screening with older kids. But I don't think we talk about it as much on the Rourke with the two to five year olds."

Figure 3: Trust, relationships, and credibility in the primary care setting**Clinician Perspectives:**

- "...there's power in having our own staff running it because we know the patients... The longitudinal relationship will come in there".
- "[Patients] prefer coming to their own clinic... their home base, where they know somebody that may be running it."
- "... [Patients] trust the staff, they trust the nurses, they trust the people here so... that familiarity...that would be ... an advantage."
- "...We see them for short periods of time and that is effective. However, this [intervention] ... sort of spreads out... I see it fanning out to [increase] our ability to

reach them in those short visits. ..We're only seeing them for fifteen minutes. How much can we really get accomplished? And there's a lot do to prevent obesity."

Parent Perspectives:

- "I feel that when you're with the family health team... you have a connection to that team. You know they're there to take care of you so maybe there's a little bit more feeling of immediate trust. There's no necessary need to develop rapport."
- "Perhaps the reputability...the information is probably going to be better ... health professions may be able to provide real in-depth information as opposed to just presenting you with a general broad overview."
- "...Definitely has a prestige factor to it, so I think it would entice people more ... They might be feel it's more scientifically-driven...and more serious."
- "I would be a lot more likely to go to my doctor's office for it."

Figure 4: Benefits of peer support and group learning

Clinician Perspectives

- "So is there value, though, to having that information being repeated in a group setting because ... I think listen to their peers... Not necessarily more so than us, but I think they get... different messages from [their peers], and maybe more meaningful."

Parent Perspectives

- "...it's always nice to go with a group though and be able to run situations by other people and kind of get input from other parents and a professional on how you could have handled it or what you should do in the future if it keeps coming up... That's what I find group things are the best for is...the brainstorming part of it. To share it with people."
- "A lot of people don't necessarily have the community right around them... [parents can] feel like they're the only ones going through...hard times with a toddler that's just not listening."

Figure 5: Desirable features of the intervention: Parents

On the integration of general parenting and healthy lifestyle topics (weight-related behaviours):

- "I like that there's ...the sleep stuff, the eating stuff...and physical activity. But I also like that there's the psychological stuff as well in terms of disciplining."
- "It would be nice to sort of have a dedicated... parenting group or class that ... focuses on health issues but also... general issues."

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On the benefits of engaging children in separate, parallel programming:

- "...if I've got [my son] running around and [my other son] on my lap and squirming, I can't pay attention to anything that's going on."
- "Most programs... it's the children and mothers usually interact...But... [in the proposed intervention] it's really great too because you're... guaranteed at least a little bit of time just for yourself, right?"
- "...I may get something out of it but then also, he's playing for an hour and a bit which is more fun for him...than like at home ... So I think that, that to me is a major pull."

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Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups

Submission to CMAJ

Title: Childhood Obesity Prevention Interventions in Primary Care: Perspectives of Primary Care Clinicians and Parents of 2-5 year old children

Authors: Nicole Bourgeois, Paula Brauer, Janis Randall Simpson, Susie Kim, and Jess Haines

No.	Item	Guide questions/description	Authors notes
Domain 1: Research Team and Reflexivity			
<i>Personal Characteristics</i>			
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?	Nicole Bourgeois
2.	Credentials	What were the researcher’s credentials? E.g. PhD, MD	Nicole Bourgeois, RD, MSc (candidate); Dietitian and Health Promoter in the Women’s College Hospital Academic FHT
3.	Occupation	What was their occupation at the time of the study?	Dr. Jess Haines, PhD, MHSc, RD; Assistant Professor at the University of Guelph in the Department of Family Relations and Applied Nutrition. Dr. Paula Brauer, PhD, RD, FDC; Associate Professor at the University of Guelph in the Department of Family Relations and Applied Nutrition. Dr. Janis Randall Simpson, PhD, RD; Associate Professor at the University of Guelph in the Department of Family Relations and Applied Nutrition Dr. Susie Kim, MD, CCFP, MScCH; Family Physician at Women’s College Hospital
4.	Gender	Was the researcher male or female?	All researchers are female
5.	Experience and training	What experience or training did the researcher have?	Dr. Jess Haines has received training in qualitative data collection and analyses; she has led 4 qualitative research studies, and supervised Nicole Bourgeois in this project as partial requirements for her MSc. Nicole Bourgeois has experience as a dietitian working with families of young children in a primary care setting; she had completed a graduate level course in qualitative data collection and analyses prior to study initiation. Dr. Paula Brauer has conducted 5 qualitative and consensus health services research studies and was a member of the Canadian Task Force on Preventive Health Care working group developing recommendations on childhood obesity prevention and treatment released March 2015.

<i>Relationship with participants</i>			
6.	Relationship established	Was a relationship established prior to study commencement?	As a dietitian working at one of the study sites, Nicole had working relationships with those clinicians. Additionally, one parent participant was a former patient. Nicole had no prior relationships with participants at other sites. Dr. Jess Haines, Dr. Paula Brauer, Dr. Janis Randall Simpson, and Dr. Susie Kim had no prior relationships with any participants.
7.	Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	In all focus groups and interviews, participants were informed that the research team was considering implementing a program for parents of children 2-5 years in Family Health Teams, and that their input would help inform the tailoring and implementation of the program.
8.	Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	For clinician focus groups, the researcher (Nicole) was introduced by a contact person at each site, as a dietitian working in a Family Health Team, and as such may have been seen as an insider to clinicians. With the exception of 1 participant, parents did not know the researcher's role/background.
Domain 2: Study Design			
<i>Theoretical Framework</i>			
9.	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	We used a directed content analysis approach as described by Berg [1]; and utilized methods described by Miles and Huberman [2].
<i>Participant Selection</i>			
10.	Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	In addition to the researcher's primary care practice, two additional practices approached the researchers to participate. Through a contact person at each site, clinicians with higher proportions of children aged 2-5 were purposively approached (via departmental email) and invited to participate in focus groups. Parent participants were recruited through a variety of methods including: waiting room flyers, distribution of flyers by administrative and clinical staff, as well as a letter sent to parents through a primary school (rural site only).
11.	Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	
12.	Sample size	How many participants were in the study?	A total of 40 clinicians (through 7 focus groups), and 26 parents participated.
13.	Non-participation	How many people refused to	It is unknown how many clinicians refused to participate; clinicians

1		participate or dropped out? Reasons?	were instructed to respond to reply via email to the researcher if interested in participating. However many clinicians simply arrived to the session without notice.
2			We had a total of 36 parent participants contact us regarding the study;
3			10 parents did not complete the interview (1 parent had a baby during
4			the study period, 2 parents were too busy to complete the interview,
5			and we lost touch with 7 parents after follow-up emails prior to
6			scheduling the interview).
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10	<i>Setting</i>		
11	14.	Setting of data collection	Where was the data collected? e.g. home, clinic, workplace
12			Clinician focus groups were all held at their primary care practices; all
13			were held in person except one which was held over the phone.
14			All but one parent interview was held over the phone from parents' homes. One interview was held at the primary care practice.
15	15.	Presence of non-participants	Was anyone else present besides the participants and researchers?
16			A research assistant was present at the focus groups.
17			No one other than the researcher was present for the interviews.
18	16.	Description of sample	What are the important characteristics of the sample? e.g. demographic data, date
19			Demographics for clinicians are outlined in Table 1 of the manuscript
20			(role, age, gender, number of years in practice, proportion of patients in
21			their practice 2-5yrs old). Demographics for parents are outlined in
22			Table 2 (age, gender, ethnicity, number of children at home).
23	<i>Data Collection</i>		
24	17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?
25			Relevant interview questions are included in Box 1 of the manuscript.
26			The guides were based heavily on the original guide developed by Dr.
27			Haines used in the development of the proposed intervention.
28			The guides were not pilot-tested for this study.
29	18.	Repeat interviews	Were repeat interviews carried out? If yes, how many?
30			No
31	19.	Audio/visual recording	Did the research use audio or visual recording to collect the data?
32			Yes. All interviews and focus groups were audio-recorded, and
33			transcribed verbatim by an undergraduate research assistant prior to
34			analysis.
35	20.	Field notes	Were field notes made during and/or after the interview or focus group?
36			Yes – detailed field notes were taken by both the researcher and a
37			research assistant for the focus groups; during a debrief the field
38			notes were combined in the form of a contact summary sheet.
39			For the interviews, the researcher took detailed field notes in the form
40			of a contact summary sheet.
41	21.	Duration	What was the duration of the interviews or focus group?
42			Focus groups ranged from 25 minutes to 1 hour, depending on the
43			availability of the clinicians and how much they had to say.

			Parent interviews ranged from 20-40 minutes, depending on how much parents had to say.
22.	Data saturation	Was data saturation discussed?	Yes – data saturation was discussed and determined by consensus between the Nicole Bourgeois, Dr. Haines and the research assistant.
23.	Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No. Due to the extended recruitment phase, and delay in creating transcripts, it was deemed infeasible to check the transcripts with participants.
Domain 3: Analysis and Findings			
<i>Data Analysis</i>			
24.	Number of data coders	How many data coders coded the data?	Nicole Bourgeois coded all of the data, and created the coding scheme. A research assistant independently coded 25% of the data in order to determine reliability of the scheme (described in the methods section).
25.	Description of the coding tree	Did authors provide a description of the coding tree?	The main themes described in the manuscript were identified through the finalized coding tree/scheme. Due to space limitations, a more detailed description of the scheme was not outlined in the manuscript.
26.	Derivation of themes	Were themes identified in advance or derived from the data	An a priori conceptual framework was used to bound the analysis, however each transcript was read in-depth and coded line-by-line by Nicole Bourgeois which formed grounded codes. The coding scheme derived from the grounded codes was harmonized with the conceptual framework to develop themes. Some new sub-themes were identified through the grounded codes.
27.	Software	What software, if applicable, was used to manage the data?	NVivo was used for all coding procedures, and for the reliability testing.
28.	Participant checking	Did participants provide feedback on the findings?	Member-checking was completed after analysis with a sample of interprofessional clinicians from 1 site (physician, nurse practitioner and registered nurse). Due to the extended recruitment phase, and delay in creating transcripts, it was deemed infeasible to member-check with more participants.
<i>Reporting</i>			
29.	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. participant number	Yes – quotations are provided throughout the manuscript in Boxes (1-6).
30.	Data and findings consistent	Was there consistency between the data presented and the findings?	

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31.	Clarity of major themes	Were major themes clearly presented in the findings?	
32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Yes – cases in which there was a diversity of opinions, or deviant cases on the main themes have been identified in the manuscript.

1. Berg BL. Qualitative research methods for the social sciences. Boston: Boston : Allyn & Bacon; 2009.
2. Miles MB, Huberman AM. Qualitative Data Analysis: An Expanded Sourcebook. Holland R, editor. Thousand Oaks, California: Sage Publications; 1994.

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