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Research

Impact of the 5As Team study on clinical practice in primary care obesity management: a qualitative study

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Abstract

Background: The 5As [Ask, Assess, Advise, Agree, Assist] of Obesity Management Team study was a randomized controlled trial of an intervention that was implemented and evaluated to help primary care providers improve clinical practice for obesity management. This paper presents health care provider perspectives of the impacts of the intervention on individual provider and team practices.

Methods: This study reports a thematic network analysis of qualitative data collected during the 5As Team study, which involved 24 chronic disease teams affiliated with family practices in a Primary Care Network in Alberta. Qualitative data from 28 primary care providers (registered nurses/nurse practitioners [*n* = 14], dietitians [*n* = 7] and mental health workers [*n* = 7]) in the intervention arm were collected through semistructured interviews, field notes, practice facilitator diaries and 2 evaluation workshop questionnaires.

Results: Providers internalized 5As Team intervention concepts, deepening self-evaluation and changing clinical reasoning around obesity. Providers perceived that this internalization changed the provider–patient relationship positively. The intervention changed relations between providers, increasing interdisciplinary understanding, collaboration and discovery of areas for improvement. This personal and interpersonal evolution effected change to the entire Primary Care Network.

Interpretation: The 5As Team intervention had multiple impacts on providers and teams to improve obesity management in primary care. Improved provider confidence and capability is a precondition of developing effective patient interventions. **Trial registration:** ClinicalTrials.gov, no.: NCT01967797.

Many primary care providers do not feel equipped to address obesity prevention and management with their patients.[1–3] Interventions aimed at changing health care professionals' behaviour to support patients with obesity are lacking,[4,5] and misinformation about the complexity and chronicity of obesity leads to unrealistic expectations on the part of health care providers and patients that hamper care.[5]

The 5As [Ask, Assess, Advise, Agree, Assist] of Obesity Management are a suite of resources for use in primary care.[6–8] This approach stresses that the root causes of obesity are far more than diet and exercise; they include mental health, social situation and comorbid diseases. The 5As approach has been shown to improve practitioners' willingness and efficacy in providing obesity management and counselling and to support patient weight loss.[9–12]

The 5As Team study was a randomized controlled trial with mixed-methods evaluation, developed collaboratively with primary care practitioners.[13] The aim was to increase the frequency and quality of obesity management in primary care through changing the behaviour of interdisciplinary health care providers, by identifying and addressing provider-identified needs and barriers to effective care. The objective of

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the qualitative component, presented here, was to understand interdisciplinary health care providers' perspectives of the intervention's impact on their clinical practices.

Methods

Study design

The 5As Team trial protocol, intervention structure, content, theoretical foundation and provider content evaluation have been described elsewhere.[13,14]

Setting and participants

The trial was carried out in a large Primary Care Network in Edmonton serving ethnically and socially diverse patients, reflecting an urban/suburban Canadian setting. The embedded interdisciplinary teams, who are paid by the Primary Care Network, focus on improving the management of chronic diseases (e.g., diabetes, obesity, depression), prenatal care and care of elderly people. Eligible clinics had a primary care team (registered nurse/nurse practitioner, mental health worker and dietitian) embedded by April 2013. Twenty-four eligible clinics serving 157 470 patients were randomly assigned to either the intervention arm (n = 12) or the control arm (n = 12).[13] All practitioners in the intervention arm (n = 29) were the subjects for this qualitative study and included registered nurses/nurse practitioners (n = 15), dietitians (n = 7) and mental health workers (n = 7); the last 2 groups were shared between intervention clinics. One registered nurse/nurse practitioner withdrew, and the data for this person were excluded.

Intervention

The intervention has been described in detail elsewhere.[14] It was created with front-line providers who self-assessed the skills and resources needed to improve their ability to support obesity management. The goal of the intervention was to educate health care providers on obesity management in primary care using the 5As framework and to facilitate change and innovation in the intervention clinics. The format of the intervention was 12 two-hour sessions held biweekly from November 2013 to April 2014, with a kick-off and wrap-up session. This was followed by a postintervention evaluation session in May 2014; and review session October 2014. The focus was on diverse aspects of obesity management, with a presentation by content expert(s) followed by facilitated discussion with clinic team groups. The intervention was supported by practice facilitation.

Data collection

The core qualitative data were obtained from semistructured interviews (conducted by J.A.) with all participants, field notes taken during the 12 sessions, exit questionnaires and diaries of the practice facilitator, recorded throughout the study. Activity sheets from evaluation workshops at the end of the intervention and sustainability phases augmented this data set. The interviews and questionnaires are detailed in Appendix 1 (available at www.cmajopen.ca/content/5/2/E322/suppl/DC1). The methods and role of practice facilitators have been described elsewhere.[13,14]

Interviews were audiorecorded, transcribed and entered into NVivo 10 qualitative data software (QSR International). Field notes followed the method of Shaw and colleagues.[15] Immediately after each session, team members synthesized field notes into summaries that were coded and organized with the use of NVivo 10. Questionnaire data were collected after the 6-month intervention and at 12 months. We used the coding method of Attride-Sterling[16] to assess long-answer responses. Participant feedback was solicited in the evaluation sessions.

Analysis

Our thematic analysis approach[16] had 3 stages: familiarization, reduction and exploration. In familiarization, we reviewed materials multiple times to gain a broad understanding of the data. In reduction, we applied qualitative coding to organize the data by broad subject, assigning descriptors to units of text.[16] A coding manual was derived from the data during early analysis and was vetted by 4 team members. A subset of interviews was then cross-coded by 5 team researchers, and an external qualitative researcher independently reviewed coding for consistency. Coding led to topic-specific text clusters. Finally, in exploration, we developed thematic maps that organized text from codes into themes. A theme was defined as integrations of disparate pieces of data that were consistently present, linked numerous codes and were latent or manifest.[17] Three team members assessed all themes for agreement. The results were member-checked by participants at the evaluation sessions, with strong agreement.

Ethics approval

This study was approved by the University of Alberta Research Ethics Board (Pro00036740).

Results

Participant internalization of 5As approach

The intervention affected how participants thought about, spoke about and managed obesity in their clinical practice (Table 1). Participants reported that the intervention revealed their intrinsic biases, with increased self-awareness leading many to reframe obesity as a chronic disease rather than a lifestyle choice. This resulted in self-reported improved sensitivity, moving scales for privacy and ordering bariatric equipment.

Although changes to perceptions and moments of sudden insight appeared frequently in the data, the most widely reported personal perceived effect of the intervention was on participant confidence. Participants reported increased willingness to initiate conversations about obesity management with patients and specifically cited intervention content as the source of their confidence.

Related to all aspects of internalization is the concept of participant buy-in. Participants reported that they believed in and accepted core program messaging. Participants frequently reported that they loved the approach or thought it was valid and applicable to their practice.

Provider–patient impacts

Increased participant willingness to ask their patients about obesity management was a dominant theme. Participants noted that asking permission to discuss obesity was among the easiest changes they made following the intervention. Providers perceived that their relations with patients improved through their increased willingness to initiate discussion of obesity management, increased patient focus and improved goal-setting (Table 2).

Another theme was that providers adopted a more patient-centred approach. Participants cited previous tendencies to focus on what they thought was best for patients and detailed how the intervention pushed them to fashion care plans around patient preferences. They noted greater attentiveness to patients' thoughts, feelings and motivations. This increased sensitivity to patients' needs manifested as simple concern and efforts to foster rapport. The intervention spurred participants to think about cultural sensitivity as a dimension of patient-centred care and to attempt to adapt obesity management to different cultural contexts.

Provider–provider impacts

Increased interdisciplinary work among nurses, dietitians and mental health workers as a result of the 5As Team intervention was noted (Table 3). Participants adapted principles of interdisciplinary teamwork emphasized in sessions to their specific clinical environments. Examples ranged from quick debriefings and face-to-face patient referrals to complete interdisciplinary clinical interviews. Participants noted increased empowerment from partaking in the intervention together, which armed them with effective obesity management knowledge and supported them as change agents in their clinics. Many described increased willingness to challenge views of team members on obesity management and to actively educate and change colleagues' perceptions.

Interdisciplinary team care for obesity management can be challenging.[18] Sensitive topics discussed during intervention sessions indicated that this was a safe space for participants to speak candidly about interprofessional teamwork. The data were roughly evenly split between positive and negative work environments. Some participants cited effec-

Table 1: Provider-level impacts of the 5As Team intervention

Impact	Representative quote*
Increased self-awareness	"I think it gives me a different perspective … because sometimes we're so used to doing what we do, we do it every day that we don't self evaluate, we don't self reflect so this, it allows me to do that. It kind of forces me to do that." (dietitian 4) "I think it's definitely given me a more rounded perspective in particular towards, like, weight, weight bias, that sort of thing … but is it something that am I going to remember everything that we talked about? Not a hundred percent right but I think it's definitely useful information." (dietitian 1) "[Provider X] mentioned she was very surprised about her score (on an weight-bias test) — was surprised she has so much bias. She has the training so was wondering if it wasn't something more personal coming from someplace else." [All nod] (field notes, session 1)
Reframing obesity as chronic disease	"You know doing the sessions here, I have come to realize that no I have not … I'm beginning to realize or at least see it more of a chronic disease." (dietitian 4) "I'll start off by telling them obesity is a chronic disease so setting some expectations right away versus saying 'Well, how much weight would you like to lose?'" (nurse 3) "Well I think there's definitely pieces that stand out. … I'm talking to people it triggers, like, 'Oh I heard this,' you know maybe I should do that. So definitely that asking part of it, and that it's a chronic disease, and that stopping the weight gain, that's a big one." (dietitian 2)
Change to vocabulary	"I've learned enough to ask 'Is that something that we can discuss, is that something you want to look at?' and stuff like that which, which was something that I wouldn't have done before the asking. You know … I would definitely lead in softly type of thing, but that, that's not the vocabulary that I would have used, so certainly more awareness there." (mental health worker 5)
Increased confidence	"I think, I feel more confident with some of the learning that I've done, even with just the presentations of actually taking on these clients and referring them on to [an external program], whereas I can do probably better follow-up since I've done this." (nurse 27) "I'm getting comfortable in, in asking and going over them [the 5As]." (nurse 3) "I'm not afraid to discuss weight and I think that, you know, that I've learned enough to ask is, you know, is that something that we can discuss … which was something that I wouldn't have done before." (mental health worker 5)
Buy-in to 5As Team concepts	"I really, I love the concept of the 5As. I think it's packaged well. I think that the Canadian Obesity Network has done a, a brilliant job in creating a template which we can use." (dietitian 3) "You know, education is always empowerment right and it always gives us the opportunity to improve our practice so I think in that way it will. Absolutely, you know when you learn something new and you have that kind of ah-ha moment, then it changes, you know it changes things forever so in that way I think it's helpful." (mental health worker 5) "I do. I, you know, I bring it back [to] what I've learned and I say … this is an approach we can try." (nurse 28)

*Quotes were edited to improve readability.

tive communication and strong rapport as assets, whereas others spoke pointedly about difficult working environments. For instance, many participants cited colleagues' different values and lack of willingness to change as major barriers to implementing the 5As approach. Dietitians and mental health workers who moved between intervention clinics added another dimension, with some citing variability in receptiveness. Participants also noted that a longer working relationship could improve the level of teamwork and interdisciplinary work.

The intervention had an uneven impact on the professions in this study. Although participants in all 3 professions reported changes to their practice as a result of the intervention, mental health workers consistently reported having less use for the 5As material. They felt that, although weight was interconnected with the psychological and emotional issues seen frequently in their clinics, obesity management was secondary to their goals and was infrequently the focus of clinical practice. Conversely, dietitians became more aware of mental health issues and the need to support patients with these as part of obesity management.

Clinic-level impacts

Impacts on participants' clinics involved changes to the physical environment, including efforts to make the clinic space more inclusive (Table 4). Participants reported actions such as moving weight scales to more private areas and assuring availability of bariatric scales and furniture. Motiva-

Table 2: Provider–patient impacts of the 5As Team intervention

Impact	Representative quote*
Increased "Ask"	"I think I talk about weight more initiated by me I would say now." (nurse 7) "I tried it [asking about weight] twice now because of the sessions because if they come in for something other than that like diabetes for example but they have a weight issue, then yes I do try and ask them." (dietitian 4) "I think that that's something [asking permission to talk about weight] that maybe I'm doing much more diligently than I have in the past because of being involved in, in this group." (mental health worker 3)
Agenda shift	"I really promote kind of getting away from the numbers and focusing on health and I never weigh them initially so I'll ask them if that's something they want, like, 'Do you want to focus on numbers?' because some people do, they just want to know the numbers and it's going down but it's not anything, like, I never promote it or I never just automatically do it anymore, whereas before I would, as we're walking to the room at the back, we would stop and do height and weight so that's something I never do anymore and it's completely up to the patient if [he or she] wants that or not." (dietitian 6) "I think it's really good, it's helped me kind of sit back and have a little bit more structure to my appointments and come in with more of an open mind to see what the patient wants from me more as you know me coming in and telling them what they need to change or what they should do." (nurse 4) "I think the biggest thing to remember is to just be patient focused because I think we all have our own motives and our own desires for what we want our patients to do but it needs to be what they want to do." (nurse 11)
Increased attentiveness to patients' feelings	"I'm more aware of asking them if they want to change, what are, how are they feeling which I probably never would have before." (nurse 19) "You know how it's going to impact my practice, I guess just increased awareness and sensitivity for people." (mental health worker 5)
Fostering rapport	"I think it's just going to have to depend on the patient because some patients are, I don't know, they like a gentler approach than others and you just have to know your patient. ... If they're nervous and uncomfortable, you know I think sometimes they just want to be heard and so just giving them the time and I think nurses have that time." (nurse 11) "Well I think it's just that consistency and, and just always be open and honest and, and allowing for the conversation to keep happening." (nurse 20)
Cultural sensitivity	"The cultural one, I think I'll try to figure out what a good way to ask about the food because it's important and I know lots of the ones that I talk to some of them are traditional, some are very Western, like they've adapted and some are kind of in-between but I think I always assume that they're still quite traditional so finding more about what, what role food plays in their household now." (dietitian 6)
Changes in goal-setting	"I'm remembering the session when she said, you know, trying to … nurture your body versus nourish [your emotions] so those people that get cravings at night, try to find activity that's not necessarily food focused so like go for a walk or take a bubble bath or whatever. … I find those are what's more helpful that I take out because I apply those to practice definitely." (dietitian 7) "The concept of weight maintenance is new to me because honestly I would have focused on getting down to maybe not an ideal body mass index but at least approaching that and so I think it's a different focus for me since, since the program started." (nurse 9)
Patient empowerment	"Yeah, you have to meet them where they're at so it, it's not something that we can do for them. They have to do that exercise piece. They have to, you know, monitor their diet and they have to, if it's the surgery they want they have to take those steps to get into that program and we can just guide them." (nurse 26)

*Quotes were edited to improve readability.

tions for such changes were voiced as stemming from increased awareness of clinic practices that compromised patient dignity and comfort.

Participants further reported improvement to clinical visits with integration of the 5As approach. Not only did they feel better equipped to initiate discussions of obesity management,

Table 3: Provider–provider impacts of the 5As Team intervention

Impact	Representative quote*
Development of the 5As Team team	"[Dietitian X] said she started seeing more patients jointly and that it helps her learn more, and the patient." (field notes, session 4) "One other thing that came up was that afterwards [nurse Y] came up to X and pointed out that her and another dietitian are doing a new prenatal class in French around weight management. A goal they set." (field notes, session 5) "[Nurse X] shared how her and [dietitian X] piggyback on each other's appointments and do the pass-off in front of the patient." (field notes, session 12) "I actually like the interaction between all team members because I found we all have slightly different perspectives which is super, it's great." (nurse 7)
Provider empowerment	"Since I've done it, I can talk more comfortably and not be so afraid to kind of challenge some of the physician's statements and opinions so that's been helpful to feel a little bit more, more assertive I guess in that and have something to back it up with." (mental health worker 6) "I was really excited. … The first morning back I went around to all the doctors and gave them a copy of each of the tear-offs saying, you know … this is finally actually on one piece of paper, the approach we've been using with weight." (nurse 20) "[X] gave an example of a doctor who is telling patients that walking is not physical activity and they should aim for something different if they want to be active. She disagrees strongly and asked for the group's advice. She is going to speak to the doctor and bring a source that [X] mentioned in her talk about the benefits of walking." (field notes, session 8)
Interprofessional relations	
Areas for improvement	"The hardest thing I find obviously is the coordination with the physicians because they sort of have a different mindset and it's not that we have sort of sit-down meetings about our patients and that sort of thing." (nurse 7) "[X] said she sees in clinic all the time — that when they weigh people the MOA [medical office assistant] will yell the weight out loud — she doesn't know what to say to make it stop." (nurse 3) "What do you do when you have a problem with one of the doctors? What do you do when it is the person on the top of the chain doing these things? [Referring to the slide (X) gave about physicians:] She was nodding on every point as she has a provider and this is everything he believes. She has tried to challenge it especially in the area of mental health. But the doctor is set in his ways and his comments make her feel sad and helpless." (mental health worker 6)
Strengths	"Very good. Yeah, my doctors are very supportive, receptive, you know they're, they're really great to work with and very appreciative so yeah it couldn't be better." (nurse 8) "We have a really good relationship, Dr. [X] and I. We're on the same page with managing patients, great communication." (nurse 21) "Oh yeah. It's great working here. Oh yeah, we get along. It's wonderful. I can talk to Dr. [Y] across the hall. If I come up with something from a patient that I don't understand, he'll explain it to me, like, I don't feel that he would criticize me for not knowing anything or not knowing that." (nurse 19)
Importance of context	"Oh boy, complicated. It depends on what clinic you go to. Some, some are very dysfunctional. They see me more as someone to talk about diabetes but not weight management. They wouldn't, you know, they would probably tell their patient to go to Weight Watchers before they would refer to me and then my home clinic, the environment is excellent and they're very open, and I think if I said 'Why don't you start telling people to come see me for weight management,' I think they would do that." (nurse 26) "They have never had nurses before and we're really just working through it and trying to figure out, like, they've been together for over 30 years so they can't just have me coming in and saying 'This is how we're going to do it now,' so it's something that I will probably bring up." (nurse 26)
Impacts within different disciplines	[In response to the question "Is weight management important in your practice?"] "No. No it's not. … Often sometimes they'll bring it up to me, you know, because they've, you know, when they go into the … downward spiral of depression, they often get quite sedentary, sometimes they put on a lot of weight, sometimes it's exact opposite, they're not eating and they're losing a lot of weight so, I mean, there is that aspect of it and I think that maybe it has brought me to a place where I'll tick it off in, in terms of addressing it which maybe I didn't necessarily do before, I would only look at the symptoms of depression or anxiety or, or whatever so I think that, that has been helpful but again it's not their primary concern ever when they're coming to see me." (mental health worker 3)

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but they also improved visit organization, comprehensiveness and follow-up. In addition, participants mentioned changing their line of clinical questioning, asking about and considering patient history they would not have included before. Improved clinical practices were often linked to the 5As Team tools,[19] which participants used as sources of information and organizational aids.

Last, participants reported adaptation of the 5As Team approach to their clinical environment and style, describing changes or improvements made as an extension of their usual routine.

Impacts on Primary Care Network

The 5As Team intervention gave participants a forum to discuss strengths and weaknesses of the Primary Care Network in obesity management (Table 5): gaps in and access to existing programming, issues with scheduling, resource allocation and areas of identified need. Front-line staff often critically evaluated the network's existing plans to address obesity as a possible catalyst for change. De-identified feedback was shared with the Primary Care Network, which resulted in changes in patient programs and training of new staff.

Table 4: Clinic-level impacts of the 5As Team intervention

Impact	Representative quote*
Changes to clinical environment	"One provider mentioned that she wanted to move the scale in the her clinic and ended up moving it herself." (field notes, session 2) "One provider said that she spoke with a nurse at their clinic and how they have ordered special chairs and portable scales so weighing can be more private." (field notes, session 2)
Improved clinical visits	"Structure things more and how I'm going to address patients and using the tools to kind of help me a bit more with patients as well." (nurse 21) "I think, I feel more confident with some of the learning that I've done, even with just the presentations of actually taking on these clients and referring them on to Weight Wise [a tertiary bariatric program], whereas I can do probably better follow-up since I've done this [5As Team intervention]." (nurse 27) "Absolutely. I find some of the questions that I ask are different than what they were before, I'm looking for slightly different things now than I was, so it, again, it gives me kind of a different perspective." (dietitian 1)
Use of 5As Team tools	"I'm actually using the 5As sheet where you can just jot down notes and actually putting that into the patient's electronic medical record so it's helping me chart as well just keeping my interactions with patients more organized as well." (nurse 3) "I'm frequently given patients beause they, so many come with odd ideas from, that they gathered from the Web when they've got so many sites and none of them credible so to be able give them a handout that has good websites on them." (nurse 20)

*Quotes were edited to improve readability.

Table 5: Impacts of the 5As Team intervention on the Primary Care Network

Impact	Representative quote*
Gaps in programming	"So after listening to [the] talk about the 4 Ms [Mental, Mechanical, Metabolic and Monetary], we had staff members say 'Well, I want to know what are questions that I can ask to help me identify the 4 Ms and I sat there a little bit with my jaw open because as a Primary Care Network we've already created that framework and we've created the questions and we trained the staff on it, but we haven't followed up." (dietitian 3)
Scheduling	"Well, it's mostly time, right, so, like, even if it would be, I don't know, I find the schedule is a little bit too full but I think that's more like a clinic problem than anything." (nurse 29) "More time. That's the biggest thing honestly is just time because part of my role is to improve access to this clinic so we have four physicians with varying panel sizes from 1500–4000 patients so if you can't, they can't get in to see that doctor [for] 3 to 4 weeks. … So if I book hour-long appointments with everybody, I'm not improving. I am for a very, very small proportion of these people but then I'm going to be booked up for a month ahead." (nurse 9)
Access	"[X] and [Y] talked about waiting time for weight loss clinics and how they can wait for years and then find out they are not eligible and how some go out of the country to get it [procedure] done." (field notes, session 10)
Resource allocation	"She thinks the Primary Care Network is a lot better than the picture [X] painted. That the Primary Care Network has all this equipment but they have the staff but not their clinics." (nurse 7)
Identified need	"From this a discussion came up around the Primary Care Network offering more support to patients who are thinking of entering a bariatric program, or who have lost weight and might need emotional support." (field notes, session 10)

*Quotes were edited to improve readability.

Interpretation

Changing clinical practice is a complex endeavour involving diverse actors with established ways of thinking and working together that need to shift to co-create new norms. Our findings show that provider internalization and adaptation of an intervention are key to this process. Ultimately, internalization of new ways of practising is achieved through increased self-awareness and reflection, improved knowledge and effective resources to reinforce the continued use of learned concepts. In our team-based sessions, members shared experiences through stories and by reporting personal goals. These interactions worked to externalize tacit knowledge and helped participants work through the integration of new information into collective practice. The uptake of knowledge and sustained change in practice is supported through the co-creation of tools, which serve as anchors for new information and its integration into practice.[19] There was room for each participant to contextualize the new information to their own practice and adapt it to their patients, while revisiting their learning collaborative and benefiting from peer learning.

In situations in which sustained practice change requires a team approach, practitioners work together to integrate new information into their practice and to adjust the setting to support change. This concept is particularly important in obesity management, as it is not sufficient to change an individual provider's practice; rather, there is a need to co-create a new clinical paradigm for the entire team or, in the terminology of Gabbay and Le May,[20] to co-create a "collective mindline." As our results show, individual providers shifted their personal approach to obesity management consultations, and participants reported changes in teamwork to develop new collective approaches. This is particularly important given the finding that obesity management is embedded within other reasons for clinical encounters in primary care.[21]

Literature focusing on improving providers' clinical practice in obesity management is scant,[4,22] which makes comparison of our core findings difficult. The few studies that assessed provider-level interventions focused on patient outcomes, specifically the amount of weight loss achieved, rather than on the process of provider change.[4] In their review of existing literature, Flodgren and colleagues[4] found only 1 high-quality study that assessed change in providers' behaviour. Studies involved shorter interventions (several hours to several days), and randomized controlled trials rarely had qualitative accompaniment.[4,22,23]

The qualitative component of the 5As Team study is similarly unique compared to the existing qualitative literature on primary care providers and obesity management. Past studies focused on providers' self-reported barriers to obesity management,[3,24,25] assessment of providers' existing obesity management ability,[26,27] providers' views on the utility of obesity management interventions,[28] and providers' biases regarding weight and attitudes toward obesity management.[29] The current literature does not describe processes of provider change and development for supporting obesity management in response to an intervention.[12]

Limitations

The data on the impact of the intervention are from the providers' perspective only; there are no data on the effects on other clinic team members such as reception staff, clinical assistants, clinical managers or patients. Our ongoing parallel 5As Team patient study is exploring patients' values, preferences, expectations of primary care providers, and evaluation of the 5As approach and tools to support their obesity management and health. Primary Care Network physicians were very supportive in agreeing to have their salaried team members released for this intensive intervention; however, we were unable to include the physicians owing to inability to provide monetary compensation for their time. We have developed and pilot-tested a shorter intervention, which is more manageable in terms of time. Although future research must assess the transferability of the effect of the 5As approach in different populations and settings, the findings of this initial study show how a provider-level intervention can create practice change.

Conclusion

The 5As Team study shows that a multifaceted educational intervention for primary care providers can affect obesity management at multiple practice levels. This intervention changed participants' personal understanding of and clinical approach to obesity management and their interactions in collaborative practice. Participants reported internalization of the 5As Team concepts, which facilitated improved communication and teamwork in the clinic, as well as transfer of newly acquired skills to clinic colleagues. The intervention also brought participant-reported improvements in interactions with patients and insights into better organization of care in primary care clinics. The 5As Team intervention represents one model for training interventions that affect practice in a concrete manner.

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