

Dietitians' Perspectives on the Impact of Multidisciplinary Teams and Electronic Medical Records on Dietetic Practice for Weight Management

STEPHANIE ABOUEID, MSc, RD^a; CATHERINE POULIOT, RD^b; BILLIE JANE HERMOSURA, MAEd, MAN, RD^c; IVY BOURGEAULT, PhD^d; ISABELLE GIROUX, PhD, RD^e

^aPublic Health and Health Systems, University of Waterloo, Waterloo, ON; ^bHuman Kinetics, University of Ottawa, Ottawa, ON; ^cEducation, University of Ottawa, Ottawa, ON; ^dHealth Systems Management, University of Ottawa, Ottawa, ON; ^eNutrition Sciences, University of Ottawa, Ottawa, ON

ABSTRACT

Purpose: To understand the perception of dietitians regarding the effects of multidisciplinary settings and Electronic Health Records (EHRs) on their dietetic practice for weight management.

Methods: Individual semi-structured interviews were conducted with 14 dietitians working in multidisciplinary settings in Ontario. All interviews were audio recorded and transcribed verbatim. Two researchers coded the data independently using a thematic analysis approach. All themes emerged inductively and were refined iteratively.

Results: Most dietitians believed that working in a multidisciplinary setting allowed for interprofessional collaboration and time-effective referrals. Multidisciplinary clinics were perceived to improve patient care due to convenient scheduling, consistent messaging, and ongoing support. However, some dietitians reported instances of conflicting approaches and beliefs regarding weight management across health professionals. Dietitians suggested ways to address these conflicting approaches through clinical meetings and education. EHRs were perceived to allow for collaboration through facilitated communication and knowledge exchange; however, lack of interoperability between EHR platforms across different types of health care settings was perceived to be a barrier for optimal care.

Conclusions: Overall, multidisciplinary settings were perceived to positively impact dietitians' practices for weight management as they allow for interprofessional collaboration. Consistency in health messaging across health professionals should be emphasized through knowledge exchange.

(Can J Diet Pract Res. 2020;81:2-7)

(DOI: [10.3148/cjdr-2019-015](https://doi.org/10.3148/cjdr-2019-015))

Published at dcjournal.ca on 8 May 2019

RÉSUMÉ

Objectif. Comprendre la perception des diététistes quant aux effets des environnements multidisciplinaires et des dossiers de santé électroniques (DSE) sur leur pratique de la diététique pour la gestion du poids.

Méthodes. Des entrevues individuelles semi-structurées ont été menées auprès de 14 diététistes travaillant dans des environnements multidisciplinaires en Ontario. Toutes les entrevues ont été enregistrées sur bande audio et transcrites textuellement. Deux chercheurs ont chiffré les données indépendamment en adoptant une approche d'analyse thématique. Tous les thèmes ont émergé inductivement et ont été épurés de manière itérative.

Résultats. La plupart des diététistes étaient d'avis que le fait de travailler dans un environnement multidisciplinaire permettait une collaboration interprofessionnelle, et des aiguillages rapides et efficaces. Les cliniques multidisciplinaires étaient perçues comme améliorant les soins aux patients grâce à une planification pratique, des messages cohérents et un soutien continu. Cependant, des diététistes ont signalé des cas de croyances et d'approches contradictoires concernant la gestion du poids chez les professionnels de la santé. Les diététistes ont suggéré des façons d'aborder ces approches contradictoires au moyen de réunions cliniques et de formation. Les DSE étaient perçus comme favorisant la collaboration grâce à la facilitation de la communication et de l'échange de connaissances; toutefois, le manque d'interopérabilité entre les plateformes de DSE dans différents types de milieux de soins de santé était perçu comme un obstacle à des soins optimaux.

Conclusions. Dans l'ensemble, les environnements multidisciplinaires étaient perçus comme ayant un impact positif sur les pratiques des diététistes pour la gestion du poids, car ils favorisent la collaboration interprofessionnelle. La cohérence des messages sur la santé entre les professionnels de la santé devrait être promue par l'échange de connaissances.

(Rev can prat rech diétét. 2020;81:2-7)

(DOI: [10.3148/cjdr-2019-015](https://doi.org/10.3148/cjdr-2019-015))

Publié au dcjournal.ca le 8 mai 2019

INTRODUCTION

Obesity is a highly complex condition and has various etiologies [1]. Current guidelines to manage and prevent obesity recommend behavioural, pharmacological, and surgical options. Diet and physical activity are the first line of treatment and should be addressed regardless of the weight management method used [2]. There is recognition that multidisciplinary teams are needed to effectively prevent and

manage chronic diseases, including obesity [3]. As such, the Health Reform Fund included a shift towards establishing multidisciplinary primary health care settings [3]. Based on a 2015 report, the integration of dietitians within primary care organizations in Ontario has increased since 2012 [4] and seems to mitigate barriers for dietetic referrals by primary care providers [5, 6]. Dietetic consultations in primary care have been shown to be effective in improving diet quality, diabetes

outcomes, and weight loss outcomes [7, 8]. Dietitians often adopt an intuitive eating approach [9], which promotes behaviour change and health improvements rather than weight loss alone [10].

Another priority highlighted in the Health Reform Fund was the integration of Electronic Health Records (EHR) in health care practices across Canada [11]. While the adoption and use of EHRs varies across Canada, their use has been steadily increasing [11] and is thought to facilitate communication between health professionals in primary care and allow for delivery of patient-centred care [12]. Although EHRs are reported to be a useful communication tool [13], they may not be fully utilized. The Commonwealth Fund survey found that only 14% of Canadian family physicians used 9 or more of 14 electronic information functions [14]. Nonetheless, EHRs are perceived by family physicians and nurse practitioners to facilitate referrals and communication between health professionals as well as message reinforcement with patients [15].

Multidisciplinary settings and EHRs may improve the prevention and management of chronic disease as well as enhance patient care. Studies examining dietitians' perspectives on the impact of multidisciplinary teams and EHRs on dietetic practice for weight management are lacking. Therefore, the overarching objective of this study was to gain dietitians' perspectives on the impact of multidisciplinary settings and EHRs on their dietetic practice for weight management.

METHODS

With a constructivist approach to inquiry [16], we used a qualitative research design to provide an in-depth understanding of dietitians' perspectives on the impact of multidisciplinary settings and EHRs on their dietetic practice for weight management. The COREQ checklist was used for reporting qualitative findings [17]. Semi-structured interviews were conducted with 14 dietitians working in different types of multidisciplinary settings which included family health teams, community health centres (CHCs), a nurse practitioner (NP) led clinic, and a bariatric weight management clinic. Most of these clinical models are relatively new compared with the historical lone-physician office model. Important commonalities between these clinical settings are the various health professionals (e.g., social worker, pharmacist, dietitian) who comprise them and that dietitian services are free of charge at the point of care.

The interview protocol was pilot tested with 3 dietitians and refined. Prior to the interview, participants were asked about their self-perceived gender, years of experience as a dietitian, years of experience in the clinical setting in which they currently work, and the country in which they completed their professional training. The interview protocol addressed the following areas: (i) how dietitians felt about working in a multidisciplinary setting, (ii) how the multidisciplinary setting influenced their dietetic practice for weight management, and (iii) how the use of EHRs impacted their practice for weight management. In fall 2017 and winter 2018, 2 researchers

(SA and CP) conducted the individual semi-structured interviews. SA and CP self-identify as female dietitians and are trained in conducting interviews. Ethics approval was obtained from the University of Ottawa's Research Ethics Board (file number: 06-16-07).

To inform dietitians of this study, an email was sent through a dietitians' network distribution list. Dietitians who met the following eligibility criteria were included in the study: (i) working in a multidisciplinary health care setting, (ii) having ≥ 6 months of experience as a dietitian, and (iii) seeing adult patients for weight management. An incentive was not provided and informed consent was obtained from all participants. Interviews were audio recorded and were 30–61 minutes in length. The interview protocol was not provided to participants prior to the interview and no one withdrew from the study. Interviews were conducted in person or by phone based on the participant's geographic location or preference. To allow for reflexivity, field notes were taken during the interviews. Participant recruitment ceased after 14 participants because data saturation was reached.

All interviews were transcribed verbatim and analyzed independently by 2 researchers (SA and BJ). The conventional content analysis approach was used for coding [18]. This allowed codes and themes to flow from the data [18]. SA and BJ read the transcripts in their entirety to get a sense of the whole [19]. The transcripts were then read to elucidate descriptive codes [20]. As codes were generated, the 2 researchers took notes of their initial analysis. As the process continued, codes were grouped together into meaningful clusters, which were then labelled as themes [21]. Discussions regarding emergent themes, interpretations, and discrepancies in data analysis and coding were discussed by the research team, which also allowed for reflexivity and consensus to be reached [22].

Lincoln and Guba's criteria for establishing trustworthiness were used [23]. Involving many researchers in the study allowed for the data to be examined from various angles and investigator triangulation [24]. Participants who were interested in a member check ($n = 5$) were contacted but no changes were made. Further, supporting quotes from the interviews allowed for participants' voices to be heard and demonstrated authenticity [23].

RESULTS

All participating dietitians self-identified as females and completed their professional education in Canada. Six participants had < 5 years of experience in the dietetic profession while the others had 6–15 years of experience, and 1 dietitian had > 25 years of experience. The majority of those interviewed had been working in a multidisciplinary setting for 2–5 years. Three main themes emerged from data pertaining to dietitians' perspectives on the effects of working in a multidisciplinary health care setting on their weight management practices. As for the effects of EHRs on dietitians' weight

management practices, most factors elucidated from data positively influenced dietitians' practices.

Effects of working in a multidisciplinary health care setting

Theme 1: Interprofessional collaboration: Working in proximity to allied health professionals was seen as an important facilitator for interprofessional collaboration. Communication was enabled through informal encounters or case management team meetings. Referrals to and from allied health professionals were also considered feasible because of the team-based nature of clinical settings and familiarity with other health professionals' roles and scopes of practice. One participant (P) noted, "Being in the same building is important because we can just walk over, and we talk to the doctor or counsellor if we have a concern" (P11) and another commented, "Doing rounds and case management for patients can really help" (P8).

Some participants acknowledged the important role that primary care providers play in dietetic referrals. Since family physicians and nurse practitioners are the patient's first point of contact with the health care system, they are perceived to play an integral role in referring patients to a dietitian when needed. Depending on the clinical setting, patients may be able to self-refer; however, it was mentioned that some patients might not know about this option.

I think it's really important because the doctors are the first point of access and everything snowballs from there. Without that teamwork, they would not get that referral to me. Having me at the CHC with the primary care team helps expedite the process so the client will see me sooner. The referral process becomes easier. (P1)

Multidisciplinary settings were perceived as an opportunity to draw on the expertise of team members and learn from each other. Collaborating with other health professionals was considered an asset for continuity in care delivery. Several dietitians reported they work together with doctors, nurses, and other allied health professionals by discussing client care and conducting joint meetings with patients. Communication within the multidisciplinary team supported continuity of patient care as stated by this participant, "The fact that I have the support to talk to one of the NPs or kinesiologists or psychologists, we are all on the same page. We train each other and learn from each other." (P5)

Theme 2: Conflicting approaches and beliefs: In general, respondents suggested that a multidisciplinary health care setting was beneficial when all health professionals were willing to collaborate since working in the same location does not guarantee interprofessional collaboration or knowledge exchange. Some participants perceived that conflicting perspectives created challenges among team members as commented by this participant, "I do my part and then they do theirs but there isn't much collaboration, we don't talk as much. For other conditions, there are more interactions but

when it is for weight management, there is less collaboration." (P3)

To promote collaboration, a common outlook on the root causes of obesity and its management were perceived to be important. As a dietitian noted, "In the past, when we had different staff, it did create a bit of conflict when two professionals did not see eye-to-eye on how to approach weight management, but in our current setup we are all in the same mindset, so it helps." (P7)

Participants shared ways to resolve conflicting weight management approaches, such as access to chart notes and team meetings. Also, the ability to exchange professional knowledge and educate others was identified as an opportunity of being part of a team-based clinic.

It could be great if the providers take the time and look through the things we discussed and the goals that we are working on ... to briefly reinforce the message. This can show the client that we are all providing the same messages so that they are not saying something else in terms of nutrition and weight loss. (P9)

I think there is also the opportunity to provide education to staff. ... We have clinical team meetings, so for example last clinical team meeting I did a small information session on Irritable Bowel Syndrome, so at least they have a little bit of knowledge around what some of these things are. (P12)

Theme 3: Perceived benefits to patients: Most dietitians felt the co-location of services was convenient for patients. Dietitians mentioned that patients appreciated the ease of booking appointments with different clinicians and developed a familiarity with the CHC and services available. Dietitians were able to meet with a client after an appointment with the physician or nurse practitioner as reported by this participant, "All the providers are in one place, so they can book appointments in one day, so they can see the doctor and me the same day for example. It makes everything so much more convenient and easier for them to access so that they don't have to go elsewhere." (P6)

Participants identified that it was important for health professionals on the team to contribute to the same goal, convey the same messages, and support the patients' personal goals. Most dietitians stressed the importance of focusing on modifiable risk factors rather than weight loss as the main outcome. Conveying the same messages in a multidisciplinary setting and its effect on patient motivation was seen as integral,

I think the most important thing is that we are all saying the same messages and that we are supporting patients and their goals. Moving away from weight loss as a goal because it is not actually an outcome. It is something that happens but should not be the goal. (P5)

If patients are hearing similar things from different angles it definitely helps with the motivation for a healthier lifestyle. It is much more likely that the client will succeed. (P11)

Effects of EHRs on weight management practices

Most participants believed that EHRs had a positive influence on their weight management practices. EHRs were perceived

to: (i) allow quick access and extraction of valuable information (e.g., anthropometric measures, biochemical markers, medical history), (ii) allow for consistency of messaging, (iii) improve the screening process through visual aids, (iv) facilitate referrals between health professionals, and (v) aid in continuity of care.

Having access to those records before the first nutrition assessment gives me a better idea on how to help the client. (P5)

I think in terms of pulling statistics and identify[ing] patients who have a BMI over 40 etc. We are just starting preventive health appointments. (P7)

I am not sure if all of them are reading my notes but within our team, it is very helpful when a patient goes ... for fitness counselling. I can see what the goals were, and I can reinforce the message. (P6)

While most dietitians perceived the use of EHRs to be beneficial for their weight management practices, 2 suboptimal factors emerged from the data. The first factor was hindrance of face-to-face interaction with patient. As a dietitian mentioned, "... it sometimes prevents the face-to-face interaction with the client. In counselling we need interaction with the client" (P11). The second factor was the lack of interoperability between different EHR platforms across health care settings. For example, dietitians working in primary care are not able to review chart notes written by health professionals working in tertiary care and vice versa.

The challenge here with EHRs at the hospital is that they do not connect with community EHR platforms. It is not easy to get a big picture of what's happening. It would be nice if they connected more so we can really help people at the best of our capacity. (P4)

DISCUSSION

An interdisciplinary approach is preferred for obesity management because of its complex nature—to be effective, strong communication and clinical relationships among health professionals is necessary [25, 26]. Multidisciplinary teams consist of health professionals who work in the same location [3], whereas interdisciplinary teams require communication and coordination of care among health professionals [27]. While most dietitians perceived proximity to be an important enabler for interprofessional collaboration, others noted a lack of collaboration despite co-location. This finding may be attributed to a dietitian's definition of collaboration—some may consider a referral from a physician as collaboration.

Nevertheless, multidisciplinary teams seem to mitigate many barriers highlighted in previous studies such as suboptimal dietetic referrals due to lack of access to dietitians and cost of dietetic services [28–31]. Primary care providers play an important role in referring to dietitians and raising awareness regarding the importance of changes in modifiable risk factors before providing a dietetic referral [32]. This has shown to be important for patient initiation and adherence to nutrition counselling with a dietitian [33]. In this study, dietitians

highlighted the important role that primary care providers play in the referral process. This finding is consistent with studies that evaluated patients' perspective on the role of primary care providers in obesity management [34, 35].

Participants were also able to make referrals to other health professionals. Access to mental health support and exercise specialists was possible in these multidisciplinary settings and allowed for continuity in the delivery of care—a term broadly defined as coherent patient care over time and linked to quality outcomes [36]. Conveying the same message and convenient scheduling were perceived to be beneficial to patients. Likewise, patients appreciated interdisciplinary team settings for consistent messaging and scheduling [34]. Some patients believed that consistent messaging played a role in improving their motivation during their weight management journey [34]. However, some dietitians felt there were conflicting beliefs and approaches pertaining to nutrition advice for weight management. Team meetings and education seemed to address these discrepancies. This further highlights the dietitian's role in educating health professionals on evidence-based nutrition-related interventions [37].

EHRs seemed to play an important role in the consistency of messaging because it allowed dietitians to be aware of what was previously discussed between other allied health professionals and patients. Dietitians were able to extract valuable information such as medical diagnosis, anthropometric measures, and biochemical markers to conduct nutrition assessments. Other studies found that health professionals have positive perceptions regarding the use of EHRs [38, 39]. Although most emerging themes were positive, interoperability between different EHR platforms and possible hindrance of face-to-face interaction with patients were perceived to be suboptimal. These factors were also identified as barriers in a review of studies evaluating the use of EHRs [40]. Improving interoperability of different EHR platforms and addressing barriers to face-to-face interaction may improve perceptions of EHR use and overall patient care.

This study has some limitations. All participating dietitians completed their professional education in Canada and worked in multidisciplinary health care settings in Ontario. While our findings cannot be generalized to all dietitians and health care settings, the findings may be applicable to those working in similar Canadian settings. Also, given the predominance of females in the dietetic profession, all participants were female. As such, these findings may not be applicable to male dietitians as clinical practice may differ based on gender.

The strengths of this study include our constructivist approach to inquiry and inductive approach to analysis allowing for a greater understanding of participants' work contexts and perspectives. This study identifies important perspectives that need to be considered in primary health care planning, especially for chronic disease prevention and health promotion. Future research may utilize findings from this qualitative study to inform the conceptualization of surveys that could be administered to larger samples.

RELEVANCE TO PRACTICE

Our findings highlight the benefits of multidisciplinary teams and EHRs on dietetic practice for weight management. They also highlight the barriers that may be encountered in multidisciplinary settings, including conflicting approaches and beliefs, and the importance of interprofessional communication within the team. Dietitians play an important role in providing educational support to allow for consistency in messaging across health professionals thereby promoting successful interventions in multidisciplinary health care settings. Furthermore, our results emphasize the importance of having interoperable EHR platforms across health care settings to allow continuity in care.

Financial support: This study was supported by Telfer School of Management Research Grant (#147080), University of Ottawa.

Conflict of interest: The authors do not have any conflict of interest to declare.

References

1. Bray GA, Kim KK, Wilding JPH. Obesity: a chronic relapsing progressive disease process. A position statement of the World Obesity Federation. *Obes Rev.* 2017;18(7):715–23. PMID: 28489290. doi: 10.1111/obr.12551.
2. Brauer P, Connor G, Shaw E, Sing H, Bel N, Shan AR, et al. Recommendations for prevention of weight gain and use of behavioural and pharmacologic interventions to manage overweight and obesity in adults in primary care. *CMAJ.* 2015;187(3):184–95. doi: 10.1503/cmaj.140887.
3. Government of Canada. Primary health care transition fund; 2007 [cited 2019 Feb 1]. Available from: <https://www.canada.ca/en/health-canada/services/primary-health-care/primary-health-care-transition-fund.html>.
4. Dietitians of Canada. The dietitian workforce in Ontario primary health care survey report; 2015 [cited 2019 Feb 1]. Available from: <http://www.dietitians.ca/Downloadable-Content/Public/PHC-survey-report-Sept2012.aspx>.
5. Aboueid S, Bourgeault I, Giroux I. Nutrition care practices of primary care providers for weight management in multidisciplinary primary care settings in Ontario, Canada—a qualitative study. *BMC Fam Pract.* 2018;19(1):69. PMID: 29788914. doi: 10.1186/s12875-018-0760-3.
6. Aboueid S, Pouliot C, Bourgeault I, Giroux I. A systematic review of inter-professional collaboration for obesity management in primary care, a focus on dietetic referrals. *J Res Interprof Pract Educ.* 2018;8(1):1–15. doi: 10.22230/jripe.2018v8n1a266.
7. Hartmann-Boyce J, Johns D, Jebb S, Aveyard P. Effect of behavioural techniques and delivery mode on effectiveness of weight management: Systematic review, meta-analysis and meta-regression. *Obes Rev.* 2014;15(7):598–609. PMID: 24636238. doi: 10.1111/obr.12165.
8. Mitchell LJ, Ball LE, Ross LJ, Barnes KA, Willians LT. Effectiveness of dietetic consultations in primary health care: a systematic review of randomized controlled trials. *J Acad Nutr Diet.* 2017;117(12):1941–62. PMID: 28826840. doi: 10.1016/j.jand.2017.06.364.
9. Schaefer JT, Zullo MD. US registered dietitian nutritionists' knowledge and attitudes of intuitive eating and use of various weight management practices. *J Acad Nutr Diet.* 2017;117(9):1419–28. PMID: 28619668. doi: 10.1016/j.jand.2017.04.017.
10. Schaefer JT, Magnuson AB. A review of interventions that promote eating by internal cues. *J Acad Nutr Diet.* 2014;114(5):734–60. PMID: 24631111. doi: 10.1016/j.jand.2013.12.024.
11. Hutchison B, Levesque J-F, Strumpf E, Coyle N. Primary health care in Canada: systems in motion. *Milbank Q.* 2011;89(2):256–88. PMID: 21676023. doi: 10.1111/j.1468-0009.2011.00628.x.
12. Health Canada, Office of Health and the Information Highway. Toward electronic health records; 2001 [cited 2019 Feb 1]. Available from: <http://publications.gc.ca/site/eng/102956/publication.html>.
13. Reitz R, Common K, Fifield P, Stiasny E. Collaboration in the presence of an electronic health record. *Fam Syst Health.* 2012;30(1):72–80. doi: 10.1037/a0027016.
14. Schoen C, Osborn R, Doty MM, Squires D, Peugh J, Applebaum S. A survey of primary care physicians in eleven countries, 2009: perspectives on care, costs, and experiences. *Health Aff.* 2009;28(6):w1171–83. PMID: 19884491. doi: 10.1377/hlthaff.28.6.w1171.
15. Aboueid S, Bourgeault I, Giroux I. Nutrition and obesity care in multidisciplinary primary care settings in Ontario, Canada: short duration of visits and complex health problems perceived as barriers. *Prev Med Rep.* 2018;10:242–7. PMID: 29868375. doi: 10.1016/j.pmedr.2018.04.003.
16. Denzin NK, Lincoln YS. Paradigms and perspectives in content analysis. In: Denzin NK, Lincoln YS, editors. *The Sage handbook of qualitative research.* 5th ed. Washington, DC: Sage Publications Inc.; 2018. p. 97–107.
17. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007;19(6):349–57. PMID: 17872937. doi: 10.1093/intqhc/mzm042.
18. Hsieh H, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res.* 2005;15(9):1277–88. PMID: 16204405. doi: 10.1177/1049732305276687.
19. Tesch R. *Qualitative research: analysis types and software tools.* Bristol, PA: Falmer; 1990.
20. Miles MB, Huberman AM. *Qualitative data analysis: an expanded sourcebook.* Thousand Oaks, CA: Sage; 1994.
21. Coffey A, Atkinson P. *Making sense of qualitative data: complementary research strategies.* Thousand Oaks, CA: Sage; 1996.
22. Johnson B. Examining the validity structure of qualitative research. *Education.* 1997;118(3):282–92.
23. Lincoln YS, Guba EG. *Naturalistic inquiry.* Beverly Hills, CA: Sage; 1985.
24. Patton, MQ. *Qualitative research and evaluation methods.* 2nd ed. Newbury Park, CA: Sage; 2002. p. 339–423.
25. Asselin J, Osunlana AM, Ogunleye AA, Sharma AM, Campbell-Scherer D. Challenges in interdisciplinary weight management in primary care: lessons learned from the 5As Team study. *Clin Obes.* 2016;6(2):124–32. PMID: 26815638. doi: 10.1111/cob.12133.
26. Royall D, Brauer P, Atta-Konadu E, Dwyer J, Edwards M, Hussey T, et al. Eliciting provider and patient perspectives on new obesity management services in a team-based primary care organization. *Can J Diet Pract Res.* 2017;78(3):109–16. PMID: 28333557. doi: 10.3148/cjdp-2017-005.
27. Nancarrow SA, Booth A, Ariss S, Smith T, Enderby P, Roots A. Ten principles of good interdisciplinary team work. *Hum Resour Health.* 2013;11(1):19. doi: 10.1186/1478-4491-11-19.
28. Wynn K, Trudeau JD, Taunton K, Gowans M, Scott I. Nutrition in primary care: current practices, attitudes, and barriers. *Can Fam Physician.* 2010;56(3):109–16.
29. Claridge R, Gray L, Stubbe M, Macdonald L, Tester R, Dowell AC. General practitioner opinion of weight management interventions in New Zealand. *J Prim Health Care.* 2014;6(3):212–20. PMID: 25194248. doi: 10.1071/HC14212.
30. Ferrante JM, Piasecki AK, Ohman-Strickland PA, Crabtree BF. Family physicians' practices and attitudes regarding care of extremely obese patients. *Obesity.* 2009;17(9):1710–6. PMID: 19282824. doi: 10.1038/oby.2009.62.
31. Phelan S, Nallari M, Darroch FE, Wing RR. What do physicians recommend to their overweight and obese patients? *J Am Board Fam Med.* 2009;22:115–22. PMID: 19264934. doi: 10.3122/jabfm.2009.02.080081.
32. Kirk SF, Tytus R, Tsuyuki RT, Sharma AM. Weight management experiences of overweight and obese Canadian adults: Findings from a national survey. *Chronic Dis Inj Can.* 2012;32(2):63–9. PMID: 22414302.
33. Endevelt R, Gesser-Edelsburg A. A qualitative study of adherence to nutritional treatment: perspectives of patients and dietitians. *Patient Prefer Adherence.* 2014;8:147–54. PMID: 24523580. doi: 10.2147/PPA.S54799.
34. Torti J, Luig T, Borowitz M, Johnson JA, Sharma AM, Campbell-Scherer DL. Erratum to: the 5As team patient study: patient perspectives on the

- role of primary care in obesity management. *BMC Fam Pract.* 2017;18:19. PMID: 28178930. doi: 10.1186/s12875-017-0596-2.
35. Brown I, Thompson J, Tod A, Jones G. Primary care support for tackling obesity: A qualitative study of the perceptions of obese patients. *Br J Gen Pract.* 2006;56(530):666–72. PMID: 16953998.
36. Van Servellen G, Fongwa M, Mockus D'Errico E. Continuity of care and quality care outcomes for people experiencing chronic conditions: a literature review. *Nurs Health Sci.* 2006;8(3):185–95. PMID: 16911180. doi: 10.1111/j.1442-2018.2006.00278.x.
37. Hark LA, Deen D, Andj A. Position of the Academy of Nutrition and Dietetics: interprofessional education in nutrition as an essential component of medical education. *J Acad Nutr Diet.* 2017;117(7):1104–13. PMID: 28648264. doi: 10.1016/j.jand.2017.04.019.
38. Canadian Institute for Health Information. Chronic disease management in primary health care: a demonstration of EMR data for quality and health system monitoring; 2014 [cited 2019 Feb 1]. Available from: https://secure.cihi.ca/free_products/Burden-of-Chronic-Diseases_PHC_2014_AiB_EN-web.pdf.
39. Manca DP. Do electronic medical records improve quality of care?: yes. *Can Fam Physician.* 2015;61(10):846–47. PMID: 26472786.
40. Chang F, Gupta N. Progress in electronic medical record adoption in Canada. *Can Fam Physician.* 2015;61(12):1076–84.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.