Published in final edited form as:

Clin Obes. 2018 February ; 8(1): 11–20. doi:10.1111/cob.12225.

Views of Diverse Primary Care Patients on the Roles of Healthcare Providers and Staff and the Influence of Other Variables in Their Weight Management

Carolyn M. Tucker¹, Jaime L. Williams¹, Guillermo M. Wippold¹, Lori A. Bilello², Tara A. Morrisette¹, Allison J. Good³, Nipa R. Shah⁴, and Neil E. Rowland¹

¹Department of Psychology, University of Florida

²Department of Medicine, University of Florida College of Medicine – Jacksonville

³University of Florida College of Medicine

⁴Department of Community Health and Family Medicine, University of Florida College of Medicine – Jacksonville

Abstract

BACKGROUND—The prevalence of overweight/obesity is disproportionately higher among racial/ethnic minority and low-income patients.

PURPOSE—The purpose of this study was to survey racially diverse, low-income patients regarding their experiences with and desires regarding their providers' involvement in weight management.

METHOD—Adult patients ($N=529$), including mostly African American (42.7%), White (44.6%), and low-income (55.5% with incomes $\leq \$30,000$) patients from 7 Patient-Centered Medical Homes voluntarily completed a brief anonymous survey while waiting to see their providers.

RESULTS—Only 19.8% of the patients said that their primary care provider frequently or very frequently talked with them about their weight. Older patients as compared to younger patients, as well as males compared to females, were more likely to have their primary care provider talk to them about their diet and physical activity during the last year. It was also found that 56.9% of the patients were interested in getting help from their doctor to connect with resources for weight management in their community. African American patients, as compared to White patients, were more interested in getting such help.

Address correspondence to: Jaime L. Williams, Department of Psychology, University of Florida, P.O. Box 112250, Gainesville, FL 32611-2250. jlwilliams@ufl.edu.

Conflict of Interest

The authors declare that they have no conflict of interest in relation to this study.

Author Contributions

CMT, LAB, and JLW conceived the study. CMT, GMW, JLW, LAB, and NRS carried out various aspects of the survey. GMW and JLW analyzed the data. All authors were involved in writing the manuscript and had final approval of the submitted and published versions.

IMPLICATIONS—These results suggest that there is a need to establish healthcare policies and training in primary care settings that are designed to ensure that primary care providers routinely talk with all of their patients, including their female and older patients, about their weight and weight management services. Additionally, primary care administrators need to play an increased role in identifying, developing, and advocating for affordable weight management services, particularly in African American and low-income communities.

Keywords

healthcare providers and staff; patient-centered; primary care; weight management

Introduction

Obesity is a major public health concern in the United States [1]. The prevalence of overweight and obesity has increased significantly in the past several decades. Currently, more than two-thirds of adults are overweight or obese [2], with even higher rates present in some racial/ethnic minority groups and among individuals from low-income backgrounds [3]. High body weight and high levels of body fat are associated with an increased risk for the development of various adverse health consequences, including type 2 diabetes, coronary artery disease, and certain types of cancer [4]. Thus, it is imperative to find evidence-based interventions that prevent and/or reduce overweight and obesity among all individuals, and especially among those minority and low-income groups who are disproportionately affected by these health problems.

Previous research has highlighted the immediate need to address the obesity disparities that affect racial/ethnic minority groups and individuals from low-income households. Racial/ethnic minority patients have been shown to have less adherence to recommended treatment regimens, a trend that results in part from providers' limited knowledge about, awareness of, experience with, and perceived respect for various cultural values and healthcare practices [5]. Moreover, it has been suggested the health-promotion interventions for racial/ethnic minorities and individuals from low-income household are less effective when they fail to attend to these important cultural variables [5].

Tucker's Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Model [5] provides a conceptual framework for developing overweight/obesity interventions for minority and low-income patients. The central tenet of this model is that providers' cultural sensitivity positively influences patients' levels of satisfaction with provider care and perceived interpersonal control (i.e., their sense of empowerment and active participation in their own healthcare) in patient-provider interactions, both of which positively impact patients' health behaviors and health outcomes [5]. Cultural sensitivity is defined as engagement in behaviors and attitudes that enable patients to feel comfortable, trusting, and respected. Examples of culturally sensitive behaviors exhibited by providers include providing medical information using lay language and/or a patient's native language, inviting patients to ask questions about their treatment regimens, and demonstrating respect for patients' cultural healing traditions. In short, this model explains the established link between patients' perceptions of the cultural sensitivity of providers and their eventual health outcomes,

including engagement in behaviors known to support weight management (e.g., healthy eating, physical activity) [5]. It is also noteworthy that PC-CSHC involves care in which patients and providers are considered partners, with patients providing input on the care they need and receive [6].

Research has supported the PC-CSHC Model. For example, in an evaluation of this model involving predominantly low-income African American patients and non-Hispanic White patients seen in community-based primary care clinics, it was found that patient-perceived cultural sensitivity of their provider, patient satisfaction with provider care, and patient-perceived interpersonal control were positively linked to the patient's dietary adherence, medication adherence, and engagement in health promoting behaviors, such as healthy eating [5]. In another study, it was found that the higher degree of cultural sensitivity patients perceive experiencing from their provider, the more likely they are to adhere to treatment plans, including those focused on healthy behaviors [7–13]. The findings that patients who receive culturally sensitive healthcare from their providers engage in healthier behaviors are particularly noteworthy given that several of these behaviors (i.e., eating a healthy diet, engaging in exercise, and practicing stress management) are empirically supported methods for preventing and modifying overweight/obesity [14–16] and that promoting such healthy lifestyle behaviors can be effectively accomplished in healthcare settings [17].

Despite the promise of these findings, the majority of patients with overweight/obesity who believe they should lose weight endorse wanting more assistance with weight management than they are currently receiving from their primary care physicians [18]. There is also a paucity of information on the type of weight management assistance patients perceive that they are currently receiving from their providers and the type of assistance that they desire. Asking patients to provide this information is consistent with a patient-centered approach in general and the PC-CSHC Model specifically. Indeed, McWhinney described the patient-centered approach as one where the “physician tries to enter the patient's world, to see the illness through the patient's eyes” [19]. Seeing a problem through a patient's eyes includes the formative step of asking patients what they currently receive, as well as what they want and need from physicians to address their weight-related concerns.

The purpose of the present study was to survey racially diverse, primarily low-income patients about (a) the degree to which their providers talk with them about weight and healthy lifestyle behaviors, (b) the level of respect they perceive their providers show in patient-provider interactions focused on weight, (c) the roles they believe their providers should assume in assisting patients with weight management, and (d) the factors that influence whether or not they utilize weight management programs. Differences in relation to patients' race/ethnicity, gender, household income, and age were also examined. The survey data obtained in this study will ultimately form the basis for overweight/obesity interventions in primary care settings that will help promote health and reduce overweight/obesity and associated diseases.

Method

Participants

A total of 529 adult patients from 7 Patient-Centered Medical Homes (PCMHs) affiliated with an academic medical center participated in the study. The mean participant age was 52.17 years ($SD = 15.39$; range 18 to 97 years). The participant sample included large numbers of both African American/Black patients (42.7%) and White American patients (44.6%), with substantially fewer patients from other racial/ethnic groups (9.1%). The majority of patients in the sample reported earning an income below \$30,000 per year (55.5%). See Table 1 for additional participant information.

Patient Survey

The Patient Survey is an 18-item survey that was modified by the present authors from the Patient Waiting Room Survey developed by the Oregon Rural Practice-based Research Network and the Oregon Health & Science University in collaboration with the Agency for Healthcare Research and Quality [20]. Modifications included the addition of several demographic questions, including assessment of patients' race/ethnicity identification and annual income, that the researchers determined were important variables of interest in the present study. Modifications also included the addition of a question assessing patient-perceived provider respectfulness when discussing weight management, as provider respectfulness is a central component of the PC-CSHC Model [6]. Modifications also included the removal of several items that assess more specific information about physical activity and healthy eating (e.g., "How many of the past 7 days did you follow a healthful eating plan" and "Which statement best describes your usual exercise routine"). These questions were removed in order to limit the length of the survey to be appropriate for use in the medical home waiting room and because it was determined that this information was adequately captured by the questions asking if the patient is "currently making efforts to [lose weight/make healthy food choices/be physically active on a regular basis]."

The survey was designed to obtain patients' opinions about the role of their healthcare provider in managing their weight and their likelihood of participating in a medical office-based health promotion program. Specifically, the survey assessed information about the following variable domains: (a) health and health behavior, (b) primary care and health behavior change, (c) community weight management resources, and (d) demographics.

An example of a health question is "When you consider your current body weight, do you consider yourself to be..." Response options were on a 5-point scale ranging from 1 = very underweight to 5 = very overweight. An example of a health and health behavior question is "Are you currently making efforts to be physically active on a regular basis?" Response options include two "yes" options (i.e., "Yes, I have been for more than 6 months;" "Yes, I have been for less than 6 months.") and three "no" options (i.e., "No, but I intend to in the next 30 days;" "No, but I intend to in the next 6 months;" "No, and I do not intend to in the next 6 months.").

An example of a primary care and health behavior change question is "In the last year, how often has your primary care clinician talked with you about your weight?" Response options

were on a 6-point scale ranging from 1 = never to 6 = very frequently. Another example of a question from this domain is “Would you be interested in getting help from your doctor/provider to connect with resources for weight management in your community?” Responses options were on a 4-point scale ranging from 1 = not very interested to 4 = very interested.

The community weight management resources question asked participants, “Are there places in your community or nearby to assist adults with weight loss (e.g., diet programs, physical activity centers)?” Response options included “no,” “I don’t know/unsure,” and “Yes” with a request to specify the type and location of the known community resource. The survey also asked participants “What factors would affect your willingness to access resources for weight management?” and “What role should your doctor/provider play in supporting weight loss efforts?” Response options are available in Table 7 and Table 8. Participants were instructed to select all response options that apply to them and were also provided an option to write in a response not listed on the survey. Demographic information included the participants’ age, gender, race/ethnicity, and annual household income.

Procedure

The primary researchers of the present study sought study participation from the medical directors of 37 Patient Centered Medical Homes (PCMHs) that constitute a large primary care Practiced Based Research Network affiliated with an urban academic medical center. These PCMHs are located in a 3 county area. The researchers presented the study to the medical directors of the PCMHs at their quarterly meeting. The medical directors of 10 PCMHs were interested in having their practice participate in the study. The researchers then held individual meetings with these medical directors and the staff at their respective practices to discuss the research protocol.

Patients were invited to participate in the study by office staff members as they were checking in for their medical appointments at the participating PCMHs. Specifically, patients checking in were given a flyer that included the study participation criteria and the statements that participation in the study was voluntary and anonymous and that no compensation would be provided for participating in the study. The stated participation criteria were: (a) being patients who received services from PCMHs affiliated with the academic medical center, (b) being 18 years of age or older, (c) providing consent to participate in the study, and (d) being able to read and understand English. Those patients who met these criteria and agreed to participate were given an informed consent form and a blank survey to complete while they were waiting to be seen by their provider. The front desk staff instructed the patients to place their completed surveys in a secure drop box located in the clinic waiting area. Surveys were collected over a two-month period. Completed surveys were obtained from the medical practices by courier and then mailed to the primary investigator for analysis.

Data Analysis

Data were analyzed using IBM SPSS Statistics Version 20. Analyses included descriptive analyses (i.e., frequencies) and binary logistic regressions. Outcome variables were dichotomized given the highly skewed (i.e., skewness divided by the standard error skewness

for most of the variables was greater than |1.96|) and multimodal nature of the data and because dichotomized responses could easily represent discrete, natural differences in responses (e.g., interested versus not interested). In a critical review of variable dichotomization by MacCullum et al. [21], these authors suggested that such dichotomization is justified when variables are skewed. A binary logistic regression was used to address the questions that included a focus on differences in responses in association with patients' race/ethnicity, gender, household income, and age.

Results

Over half of the participant sample reported that they considered themselves to be either "somewhat overweight" or "very overweight" (61.4%). Non-Hispanic White, Hispanic, and African American patients were significantly more likely than patients who identified as "other" to have their primary care clinician talk to them about their weight in the last year ($p < .01$). Additionally, men were significantly more likely than women to have their primary care provider talk to them about their weight in the last year ($p < .05$). There was a significant positive relationship found between patients' age and whether their primary care provider talked to them about their diet in the last year ($p < .05$). It was found that men were significantly more likely than women to have their primary care provider talk to them about their physical activity in the last year ($p < .05$). Additionally, a significant positive relationship was found between patients' age and whether their primary care provider talked to them about their physical activity in the last year ($p < .05$). See Table 2a, Table 3, and Table 4 for more information.

Patients' race/ethnicity, gender, household income, and age were not significantly associated with whether their doctor/provider was respectful in discussing their weight. See Table 2b, Table 3, and Table 5 for more information.

African American patients were significantly more likely than non-Hispanic White patients to be interested in getting help from their doctor/provider and their doctor's office to connect with resources for weight management in their community ($p < .01$). Additionally, there was a significant negative relationship between income and whether the patients were interested in getting help from their doctor's office to connect with resources for weight management in the community ($p < .05$). See Table 2c, Table 3, and Table 6 for more information.

Finally, results indicate that "cost" and "time" were the factors that patients identified as having the greatest impact on their willingness to access resources for weight management. See Table 7 for more information. Furthermore, patients identified "advise patients about the risks of overweight and obesity" as an important role their doctor/provider should play in supporting weight loss efforts. Patients identified "ask patients about their interest in weight loss during office visits" as an important role their doctor's office should play in supporting weight loss efforts. See Table 8 for more information.

Discussion

The purpose of the present study was to obtain information from racially diverse, primarily low-income patients about their current and desired weight management strategies and

assistance. Furthermore, the present study obtained information about patients' experiences with and desires for physician and medical office staff involvement in their weight management.

Results showed that for this sample of patients, providers talked to them most frequently/regularly about physical activity, less about weight, and the least about diet and eating habits. Furthermore, 31.2% of the participating patients reported that their provider had never spoken to them about weight within the last year, compared to only 4.5% of the participating patients who reported that their provider had spoken with them very frequently about weight within the last year. Yet, over half of the participating patients described themselves as somewhat overweight or very overweight. Therefore it appears that providers were sometimes not discussing weight when doing so could be particularly relevant to the patient's health.

The above finding that providers were not adequately counseling patients about weight and weight management is consistent with previous research [22, 23]. Furthermore, the finding that providers were not discussing weight management frequently enough runs contrary to the recommendations of the United States Preventive Services Task Force, which states that overweight/obesity screening and treatment are very often the responsibility of primary care providers [24].

The findings of the present study indicated that providers were more likely to discuss weight with men patients and patients who identified as "other" race/ethnicity (i.e., Asian, American Indian/Alaska Native, or Native Hawaiian/Other Pacific Islander) compared to their women, Black, Hispanic, and non-Hispanic White counterparts. The findings also indicated that providers were more likely to discuss healthy eating with older patients compared to younger patients. Finally, the results showed that providers were more likely to discuss physical activity with older, men patients, compared to the younger, women counterparts. It is likely that providers discuss these health outcomes with older patients due to the age-associated increase in chronic illness, including obesity, and sedentary behavior.

The present study also examined the degree to which the patients in this study perceived their provider to be respectful when discussing weight. Results showed that there were no such differences in perceived provider respect when talking about weight of patients in association with age, gender, income, or race/ethnicity. It has been suggested that one possible reason why providers may avoid discussing weight management with their patients is that providers do not want to disrespect or insult their patients or weaken the patient-provider rapport [25]. The majority of patients in the present study (70%) indicated that their providers were "respectful" or "very respectful" in discussing weight. Therefore, it may be possible that the patients' providers actually are respectful when discussing weight with most of their patients.

Results of the present study also revealed important information about what the patients in this study would like to receive from their providers and doctors' offices (i.e., staff other than a doctor or other provider) regarding weight management. For example, it was found that approximately 60% of the patients reported that they were interested in receiving help

from their provider or doctor's office in connecting with community resources for weight management. This is consistent with the approximately 60% of patients who self-reported they were overweight or very overweight. Results also indicated that Black/African American patients reported wanting more help from their providers and doctors' offices in connecting with weight management services in the community than their non-Hispanic White counterparts. Furthermore, patients from low-income households report wanting more help from their doctors' offices in connecting with weight management resources.

It is also noteworthy that the patient participants in this study identified factors that would impact their willingness to access weight management resources in their community. The most highly endorsed factor, and thus presumably the most impactful factor, was cost of such resources. The second and third factors that patients indicated would most impact their willingness to access weight management services were time and transportation, respectively. These findings are consistent with the known barriers faced by individuals with low-incomes in accessing health services [26]. It is therefore necessary that providers and doctors' offices take these barriers into account when recommending community weight management resources for their patients. Providers and doctors' offices should ideally work with local community organizations to identify weight management resources that are low cost or free, time efficient, and easily accessible (e.g., in the patient's neighborhood, easily accessible by good public transportation).

It is noteworthy that African American/Black individuals have the highest incidence of overweight/obesity [27] and yet they have been historically underserved in healthcare. Thus, it makes sense that the African American/Black patients in the present study would report a stronger desire to connect with services for weight management than their non-Hispanic White counterparts. Given that African Americans/Blacks are more likely than their non-Hispanic White counterparts to have low incomes or live in poverty [28], they likely have a greater need for low-cost or free weight management resources in their community. Providers and doctors' offices should consider these race- and income-related healthcare disparities when considering how best to assist low-income, African American/Black patients in managing their weight.

Finally, results of the present study revealed ways in which the participating patients would like their providers to be involved in their weight management. The patients most strongly desired that their providers engage in patient-provider discussions about the risks of overweight/obesity. The second and third most strongly endorsed ways in which patients would like their providers to be involved in their weight management included asking patients about their interest in weight loss during office visits and screening patients for weight status during office visits.

In terms of the doctors' office staff and personnel other than the primary providers, patients in this study most strongly desired their involvement in weight management to include asking patients about their interest in weight loss during office visits. The second and third most strongly endorsed ways in which the patients would like their doctors' office staff to be involved in their weight management were screening patients for weight status during office visits and assisting patients in developing weight loss plans. Notably, only 19% of the

patients reported that they thought their provider and doctors' office staff should have no role in their weight management.

These findings suggest that healthcare providers and staff are not attending to weight management as much as patients would like, which may significantly hamper patients' knowledge about and access to weight management treatment and related services. These findings help to clarify exactly how the patients would like their healthcare providers and staff to be involved in their weight management efforts.

Despite these important findings, the present study had several noteworthy limitations. First, the identified weight management behaviors of providers and office staff are based completely on the patient's perception of these behaviors. In other words, patients were asked to self-report how often their providers spoke to them about weight management, diet, and physical activity. Such self-report data are known to be subject to bias and other sources of inaccuracy [29, 30]. Despite this limitation, self-report data are frequently used in health research and are generally considered acceptable [29, 30]. Future studies would benefit from audio or video recording providers' and office staffs' clinical encounters with patients to assess the occurrence and content of weight management, diet, and physical activity discussions between patients and providers.

Secondly, the fact that only approximately 60% of the patients in the present study identified as overweight or very overweight could impact the findings of this study. For example, it is possible that healthy-weight patients would not report needing assistance from their providers in accessing weight management resources, and it is possible that their providers would discuss weight less frequently with them compared to patients with overweight/obesity. However, it is notable that the United States Preventive Services Task Force recommends that providers discuss weight and healthy lifestyle behaviors (e.g., healthy eating, physical activity) as part of routine screening and prevention of obesity and other chronic illnesses for all patients [26]. It is also notable that only about 18% of patients in the present study reported that they believed their provider and doctors' office should have no role in their weight management.

Future similar research to this study is warranted. Such research should include studies that include a sample of exclusively overweight/obese patients as identified by objective measures of obesity (e.g., BMI, waist-hip ratio). Such studies should include examining the influence of number of primary care visits on patients' views regarding provider involvement in weight management. A limitation of the present study is that patients' current BMI and number of primary care visits per year were not collected. It is known that the average number of visits per year for all patients seen at these clinics was 1.2 visits and those patients with diabetes had an average of 2.7 visits per year.

Another limitation of the present study relates to the generalizability of the findings. Although the patient sample in the present study was relatively large, all participants were members of the same group of PCMHs. Furthermore, the sample largely identified as either African American/Black or non-Hispanic White. These sample characteristics could limit the generalizability of the findings in this study to other more diverse samples of patients

and healthcare settings. Future studies could benefit from gathering information related to primary care weight management practices from a nationally representative sample of patients.

It is noteworthy that 42.7% of the patients in the present study identified as African American/Black, 55.5% identify as low-income, and 66.2% identify as female. Even though the goal of the study was to achieve a racially/ethnically diverse low-income sample, the actual resulting sample consisted mostly of groups that are particularly at risk for obesity (i.e., women, African American/Black individuals, and individuals from low income households) and thus would likely benefit from weight management conversations with their healthcare providers. Furthermore, the over-representation of African Americans/Blacks in the present study is one of its strengths, particularly given that African American/Black individuals continue to be underrepresented in health research and continue to be a major health disparity group in the U.S. The racial differences found in the present study may not have been found if it were not for the fact that large groups of mostly low-income African American/Black, low-income, and female patients decided to be study participants.

According to the PC-CSHC Model, when patients are included as active participants in their healthcare—for example by being asked about their weight management healthcare experiences and desires as done in the present study—they are more likely to trust, feel comfortable with, and feel respected by their providers, and ultimately experience better health outcomes. The present study has served to inform researchers about what is needed and wanted by the patients in the participating PCMHs. If the results of the present study are validated in similar future studies with large, representative patient samples from a large number of culturally diverse PCMHs, strong support will be provided for patients and providers working collaboratively to develop patient-desired weight management interventions within or affiliated with PCMHs. Training providers in how to talk with culturally diverse patients, including African American/Black and low-income patients, likely should be among these interventions.

The present study is particularly important in that it provides support for patient-centered culturally sensitive healthcare, which includes considering patients as valuable experts on what will and will not work for them in terms of weight management and lifestyle modifications (e.g., improved healthy eating, increased physical activity). Such care is critical in reducing obesity and obesity disparities that are major contributors to the extraordinarily high cost of healthcare in the U.S., and more importantly, that contribute to the preventable morbidity and mortality that plague this nation.

Acknowledgments

This study was supported by the National Institutes of Health and National Center for Research Resources CTSA grant UL1 TR000064 and by funding from the Office of Research at the University of Florida.

References

1. US Department of Health and Human Services, Public Health Service. The Surgeon General's call to action to prevent and decrease overweight and obesity. Office of the Surgeon General; Rockville, MD: 2001.

2. Ogden CL, Carroll MD, Curtin LR, et al. Prevalence of overweight and obesity in the United States, 1999–2004. *JAMA*. 2006; 295:1549–55. [PubMed: 16595758]
3. Wang Y, Beydoun MA. The obesity epidemic in the United States – gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta-regression analysis. *Epidemiol Rev*. 2007; 29:6–28. [PubMed: 17510091]
4. National Task Force on the Prevention and Treatment of Obesity. Overweight, obesity, and health risk. *Arch Intern Med*. 2000; 160:898–904.
5. Tucker CM, Marsiske M, Rice KG, Nielson JJ, Herman K. Patient-centered culturally sensitive health care: model testing and refinement. *Health Psychol*. 2011; 30(3):342–350. [PubMed: 21553978]
6. Tucker CM, Arthur TM, Roncoroni J, Wall W, Sanchez J. Patient-centered, culturally sensitive health care. *Am J Lifestyle Med*. 2015; 9(1):63–77.
7. Lukoschek P. African Americans' beliefs and attitudes regarding hypertension and its treatment: A qualitative study. *J Health Care Poor Underserved*. 2003; 14(4):566–587. [PubMed: 14619556]
8. Rose LE, Kim MT, Dennison CR, Hill MN. The context of adherence for African Americans with high blood pressure. *J Adv Nurs*. 2000; 32:587–594. [PubMed: 11012800]
9. Davis K, Schoenbaum SC, Audet AJ. A 2020 vision of patient-centered primary care. *J Gen Intern Med*. 2005; 20:953–957. [PubMed: 16191145]
10. DiPalo MT. Rating satisfaction research: Is it poor, fair, good, very good, or excellent? *Arthritis Care Res*. 1997; 10:422–430. [PubMed: 9481234]
11. Greenfield TK, Attkisson CC. Steps toward a multifactorial satisfaction scale for primary care and mental health services. *Eval Program Plann*. 1989; 12:271–278.
12. Hall JA, Milburn MA, Epstein AM. A causal model of health status and satisfaction with medical care. *Med Care*. 1993; 31:84–94. [PubMed: 8417273]
13. Strogatz DS. Use of medical care for chest pain: Differences between Blacks and Whites. *Am J Public Health*. 1990; 80:290–294.
14. US Department of Health and Human Services. Dietary Guidelines for Americans. [WWW Document]. 2013. URL <http://www.health.gov/dietaryguidelines/dga2005/document>
15. Ford ES, Kohl HW III, Mokdad AH, Ajani UA. Sedentary behavior physical activity the metabolic syndrome among U.S adults. *Obes Res*. 2005; 13:608–614. [PubMed: 15833947]
16. Rod NH, Gronbaek M, Schnohr P, Prescott E, Kristensen TS. Perceived stress as a risk factor for changes in health behavior and cardiac risk profile: A longitudinal study. *J Intern Med*. 2009; 266:467–475.
17. LeBlanc ES, O'Connor, Whitlock EP, et al. Effectiveness of primary care-relevant treatments for obesity in adults: a systematic evidence review for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2011; 155:434–447. [PubMed: 21969342]
18. Potter MB, Vu JD, Croughan-Minihane M. Weight Management: what patients want from their primary care physician. *J Fam Pract*. 2001; 50(6):513–518. [PubMed: 11401737]
19. McWhinney, I. The need for a transformed clinical method. In: Stewart, M., Roter, D., editors. *Communicating with Medical Patients*. Sage; London: 1989.
20. McGinnis, P., Davis, MM., Howk, S., DeSordi, M., Thomas, M. *Integrating Primary Care Practices and Community-based Resources to Manage Obesity: A Bridge-building Toolkit for Rural Primary Care Practice Transformation*. Agency for Healthcare Research and Quality; Rockville, MD: 2014.
21. MacCallum RC, Zhang S, Preacher KJ, Rucker DD. On the practice of dichotomization of quantitative variables. *Psychol Methods*. 2002; 7(1):19. [PubMed: 11928888]
22. Jay M, Chintapalli S, Squires A, Mateo KF, Sherman SE, Kalet AL. Barriers and facilitators to providing primary care-based weight management services in a patient centered medical home for Veterans: a qualitative study. *BMC Fam Pract*. 2015; 16(1):167. [PubMed: 26572125]
23. Ruelaz AR, Diefenbach P, Simon B, Lanto A, Arterburn D, Shekelle PG. Perceived barriers to weight management in primary care—perspectives of patients and providers. *J Gen Intern Med*. 2007; 22(4):518–22. [PubMed: 17372803]
24. Moyer VA. Screening for and Management of Obesity in Adults: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med*. 2012; 157:373–378. [PubMed: 22733087]

25. National Institute of Diabetes and Digestive and Kidney Diseases. Talking with patients about weight loss: Tips for primary care providers. [WWW document]. 2012. URL <https://www.niddk.nih.gov/health-information/health-topics/weight-control/talking-with-patients-about-weight-loss-tips-for-primary-care/Pages/talking.aspx>
26. Braveman PA, Cubbin C, Egerter S, Williams DR, Pamuk E. Socioeconomic disparities in health in the United States: what the patterns tell us. *Am J Public Health*. 2010; 100(S1):S186–96. [PubMed: 20147693]
27. An R. Prevalence and trends of adult obesity in the US, 1999–2012. *ISRN Obes*. 2014; 2014
28. DeNavas-Walt, C., Proctor, BD., Smith, JC. Income and poverty in the United States: 2014. United States Census Bureau; Washington, DC: 2015.
29. Bhandari A, Wagner T. Self-reported utilization of health care services: Improving measurement and accuracy. *Med Care Res Rev*. 2006; 63:217–35. [PubMed: 16595412]
30. DiMatteo MR. Variations in patients' adherence to medical recommendations: A quantitative review of 50 years of research. *Med Care*. 2004; 4:200–9.

What is already known about this subject

- The U.S. Preventive Task Force recommends that all adults with obesity participate in an evidence-based, intensive, multicomponent, behavioral obesity treatment program.
- One conclusion in a 2015 clinical review article on the role of primary care providers in treating obesity is that obesity treatment programs can and should occur in primary care settings and that research is needed to determine the roles of primary care providers, particularly physicians, in the delivery of such programs.
- The Agency for Healthcare Research and Quality continues to call for patient-centered, culturally sensitive healthcare to help reduce obesity, obesity disparities, and other health disparities—care that is patient empowerment oriented and has been linked to patient engagement in a health promoting lifestyle (e.g., healthy eating and physical activity).

What this study adds

- This study adds that the diverse patients in this study perceive that physicians talk with their patients to different degrees based on the patients' gender and age.
- This study adds that the African American patients, as compared to White patients, in this study were more interested in getting help from their doctor in connecting with resources for weight management in their community.
- This study adds that patients' perceptions of whether their doctor/provider was respectful when discussing weight did not differ in association with the patients' race/ethnicity, gender, household income, and age.
- This study adds that it is the view of the diverse patients in this study that during office visits, an important role of physicians is to ask patients about their interest in weight loss.

Table 1

Participant Demographic Variables

	<i>n</i>	%
Gender		
Male	179	33.8
Female	350	66.2
Income		
< \$10,000	133	25.1
\$10,000 – \$19,000	99	18.7
\$20,000 – \$29,000	62	11.7
\$30,000 – \$39,000	38	7.2
\$40,000 – \$49,000	28	5.3
\$50,000 – \$59,000	27	5.1
\$60,000 – \$69,000	17	3.2
\$70,000 – \$79,000	12	2.3
\$80,000 – \$89,000	14	2.6
\$90,000 – \$99,999	16	3.0
> \$100,000	29	5.5
Race		
Hispanic	28	5.3
Black	226	42.7
White	236	44.6
Other	20	3.8
Weight		
Very Underweight	17	3.2
Somewhat Underweight	38	7.2
Healthy Weight	148	28.0
Somewhat Overweight	206	38.9
Very Overweight	119	22.5

Provider Involvement in Weight Management

Author Manuscript

Author Manuscript

Author Manuscript

Table 2b

Provider Respectfulness

	Dichotomized				
	Not Very Respectful	Somewhat Respectful	Respectful	Very Respectful	Not Applicable
How respectful is your doctor/provider in discussing your weight with you?	15 (2.8%)	29 (5.5%)	135 (25.5%)	230 (43.5%)	97 (18.3%)
					15 (2.8%)
					394 (74.3%)

^aThis answer choice is composed of the Not Very Respectful answer choice.

^bThis answer choice is composed of the Somewhat Respectful, Somewhat Respectful, Respectful, and Very Respectful answer choices.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 3

Income, Age, and Gender Differences in Primary Study Variables

	Income		Age		Gender	
	β	OR [95% CI]	β	OR [95% CI]	β	OR [95% CI]
In the last year, how often has your primary care clinician talked with you about your weight?	.01	1.00 [.94 1.07]	.01	1.01 [.99 1.02]	.45*	1.57 [1.05 2.36]
In the last year, how often has your primary care clinician talked with you about your diet?	.02	1.02 [.96 1.09]	.02*	1.02 [1.00 1.03]	.39	1.47 [.98 2.20]
In the last year, how often has your primary care clinician talked with you about your physical activity?	.01	1.01 [.95 1.09]	.02*	1.02 [1.01 1.03]	.67*	1.96 [1.25 3.07]
How respectful is your doctor/provider in discussing your weight with you?	.36	1.42 [.95 2.14]	-.02	.98 [.94 1.02]	-.81	.44 [.13 1.47]
Would you be interested in getting help from your doctor/provider to connect with resources for weight management in your community?	-.04	.96 [.89 1.03]	-.01	.99 [.98 1.01]	-.16	.85 [.53 1.35]
Would you be interested in getting help from your doctor's office (i.e., staff other than a doctor or other provider) to connect with resources for weight management in your community?	-.09*	.92 [.85 .97]	-.01	.99 [.98 1.01]	-.21	.81 [.51 1.30]

* $p < .05$

Table 4

Race/Ethnicity Differences in Primary Study Variables.

In the last year, how often has your primary care clinician talked with you about your _____?									
Comparison	Weight		Diet		Physical Activity				
	β	OR [95% CI]	β	OR [95% CI]	β	OR [95% CI]			
Hispanic & Other	-1.63 *	.20 [.05 .77]	-1.09	.34 [.10 1.20]	-.40	.67 [.17 2.61]			
Hispanic & African American	-.06	.94 [.40 2.17]	-.19	.83 [.36 1.93]	-.34	.71 [.28 1.83]			
Hispanic & White	.10	1.12 [.48 2.54]	-.16	.85 [.37 1.95]	-.28	.75 [.30 1.92]			
Other & African American	-1.57 *	.21 [.06 .67]	-.90	.41 [.14 1.15]	-.06	.94 [.32 2.78]			
Other & White	-1.53 *	.22 [.07 .69]	-.92	.40 [.14 1.11]	-.11	.89 [.31 2.58]			
African American & White	.038	1.01 [.99 1.02]	-.02	.98 [.65 1.46]	-.06	.95 [.62 1.45]			

*
 $p < .01$

Table 5

Race/Ethnicity Differences in Primary Study Variables.

<u>How respectful is your doctor/provider in discussing your weight with you?</u>		
	β	OR [95% CI]
Comparison		
Hispanic & Other	–	– [–]
Hispanic & African American	–	– [–]
Hispanic & White	–	– [–]
Other & African American	–.28	.76 [.08 7.70]
Other & White	–1.16	.32 [.03 3.88]
African American & White	–.88	.416 [.11 1.64]

*
 $p < .01$

Note: analyses of variance comparing the Hispanic group with the other groups could not be calculated due the lack of variance among the Hispanic responses to this question.

Table 6

Race/Ethnicity Differences in Primary Study Variables.

Would you be interested in getting help from your _____ to connect with resources for weight management in your community?				
	Doctor/provider		Doctor's office	
	β	OR [95% CI]	β	OR [95% CI]
Comparison				
Hispanic & Other	-.21	.81 [.20 3.34]	-.12	.89 [.19 4.06]
Hispanic & African American	.16	1.18 [.43 3.23]	-.29	.75 [.26 2.18]
Hispanic & White	-.62	.54 [.20 1.43]	-.87	.42 [.15 1.19]
Other & African American	-.37	.69 [.22 2.13]	.17	1.18 [.36 3.95]
Other & White	.42	1.52 [.50 4.56]	.75	2.12 [.65 6.91]
African American & White	.79 *	2.20 [1.37 3.54]	.58 *	1.80 [1.12 2.86]

*
 $p < .01$

Table 7

Factors Impacting Willingness to Access Weight Management Resources

What factors would affect your willingness to access resources for weight management in your community or nearby?		
	<i>n</i>	%
Cost	218	41.2
Time	176	33.3
Transportation	99	18.7
Family Support	36	6.8
Friend Support	19	3.6
Doctor Support	34	6.4
Quality of Resource	53	10.0
Confidentiality	28	5.3
Other	59	11.2

Table 8**Roles of Providers and Doctor's Office in Weight Management**

What role should your _____ play in supporting weight loss efforts?	Doctor		Doctor's office (i.e., staff other than a doctor or primary provider)	
	<i>n</i>	%	<i>n</i>	%
No Role.	100	18.9	97	18.3
Screen patients for weight status during office visits.	155	29.3	135	25.0
Ask patients about their interest in weight loss during office visits.	157	29.7	140	26.5
Advise patients about the risks of overweight and obesity.	164	31.0	124	23.4
Assess patients' willingness to make weight related health behavior changes.	121	22.9	97	18.3
Assist patients in developing weight loss plans.	154	29.1	129	24.4
Arrange referrals with community resources for weight management.	116	21.9	102	19.3
I don't know/unsure.	89	16.8	91	17.2
Other.	22	4.2	17	3.2