ORIGINAL RESEARCH

Models for Delivering Weight Management in Primary Care: Qualitative Results from the MOST Obesity Study

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Background: **Obesity is a leading cause of morbidity and mortality in the United States (US). Primary care medical practices can educate patients about the health effects of obesity and help patients with obesity lose and manage their weight. However, implementation of weight management in primary care is challenging. We sought to examine how practices that implement weight management services do so feasibly.**

Methods: **Multiple methods including site visits, observations, interviews, and document reviews were utilized to identify and learn from primary care practices located across the US. A qualitative multidimensional classification of empirical cases was performed to identify unique delivery features that were feasible to implement in primary care.**

Results: **Across 21 practices, 4 delivery models were identified: group, integrated into standard primary care, hiring an "other" professional, and using a specific program. Model characteristics included who delivered the weight management services, whether delivered to an individual or group, the types of approaches used, and how the care was reimbursed or paid. Most practices integrated weight management services and primary care delivery, although some created specific carve-out programs.**

Conclusion: **This study identified 4 models that may serve to overcome challenges in delivering weight management services in primary care. Based on practice characteristics, preferences, and resources, primary care practices can identify a model for successfully implementing weight management services that best fits their context and needs. It is time for primary care to truly address obesity care as the health issue it is and make it a standard of care for all patients with obesity. (J Am Board Fam Med 2023;36:603–615.)**

Keywords: **Body Composition, Obesity, Organizational Innovation, Qualitative Research, Weight Loss**

Introduction

Obesity rates continue to rise in the United States; the current national prevalence of obesity is more than 42%.[1] In addition, class III obesity (Body Mass Index [BMI] greater than or equal to 40) has dramatically increased over the past several decades, currently being close to 10%.[1,2] Obesity is associated with multiple comorbidities and chronic health conditions,[3,4] which amount to high human[5,6] and economic costs.[7]

Research demonstrates that when people with obesity are provided with intensive behavioral therapy, medications, bariatric surgery, or other such evidence-based treatments, they are able to lose weight and, in

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some cases, sustain that weight loss.[8–12] In light of this evidence, the United States Preventive Services Task Force (USPSTF) recommends that obesity screening and intensive behavioral counseling for weight loss be provided in primary care settings.[13–15] In addition, primary care clinicians uniformly endorse that obesity is a health issue that should be addressed in primary care.[16] However, most patients do not receive weight management assistance from their primary care physician or care team.[17,18] There are many reasons for this: lack of training in treating obesity, lack of payment for providing weight management services,[19–21] concern about success of available treatments such as weight-loss medication and bariatric surgery,[22–25] belief that patients should simply be able to adhere to the lifestyle changes needed for maintaining an appropriate weight,[26,27] and the ever-present tyranny of the urgent and the competing demands of other more acute health conditions.[28] Moreover, many behavioral treatment approaches are time- and resource-intensive, making them difficult to implement and sustain.[25] Therefore, determination of how to effectively and feasibly implement these services in primary care practices such that patients can receive these benefits may lead to improved individual and population health.

What can be done to overcome these barriers to implementing weight management services in primary care practices? A review of US practices that were billing for the Medicare Intensive Behavioral Therapy for Obesity benefit from the Medicare Provider Utilization and Payment Data: Physician and Other Supplier[29] finds that a small number of primary care practices are regularly providing weight management services. The *Making Obesity Services and Treatments Work (MOST) Study* sought to identify and learn from these practices. How were they able to continue providing weight management services in their practice? How do they organize the care to implement in practice? In this article, we will share the different ways that weight management services can be organized and sustainably implemented in primary care practices. Illuminating how some primary care practices organize weight management services may help increase efforts to treat obesity in the US.

Methods

Making Obesity Services and Treatments Work (MOST) Study

The goal of the overall study (AHRQ #1R01HS024943-01) was to investigate why so few primary care practices were using the Medicare procedure codes for Intensive Behavioral Therapy for Obesity (IBT), whereas the purpose of this article is to provide results related to practices we identified that were delivering weight management services in their practices.

To begin, despite the overwhelming prevalence of obesity in the US Medicare population, as of December 31, 2019, less than 2% of eligible Primary Care Providers (PCPs) in the US were providing this service to enough patients to be counted in this data set (ie, provided the service to 11 or more unique patients and billing Medicare).[30] In phase 1 of our study, we surveyed 282 primary care practices. We found that many faced the barriers discussed above. In particular, respondents noted the extremely low reimbursement rates from Medicare for the IBT services and the numerous hassles of using the IBT codes for reimbursement.[31] We conducted follow-up interviews with key informants of 75 of these practices, which revealed other barriers such as lack of knowledge about how to go about providing weight management services and the lack of workflows to accommodate care delivery. Respondents facing these barriers frequently reported feeling overwhelmed when confronting the obesogenic culture of the US.[16] Nevertheless, there were also practices that had integrated weight management services into their care delivery. To learn more about the implementation and sustainability of their weight management services, we completed additional data collection. In phase 2, we selectively identified practices appropriate for further exploration. This article describes the results of phase 2 of this study, where we made onsite visits to learn in depth from these practices how they were delivering weight management services and what made the difference in their ability to sustain this care. The Colorado Multiple Institutional Review Board (IRB) as well as the IRBs at Michigan State University and Duke University approved this protocol.

Setting and Participants

From the total 75 available practices, we selectively identified 29 practices to learn more about based on our assessment of the quality of their program. The criteria we used were as follows: primary care practice, description of successful implementation of weight management services provided within their own practice, program ongoing for at least a year,

Table 1. Characteristics of Participating Practices

Practice Characteristic	N (%)
Discipline	
Family Medicine	10 (48)
General Internal Medicine	11 (52)
Practice Size	
Small (less than 4 providers)	17 (81)
Medium (4 to 6 providers)	1 (5)
Large (more than 6 providers)	3 (14)
Ownership	
Private	17 (81)
Health system	4 (19)
Location	
Urban	11 (52)
Rural	2 (10)
Suburban	8 (38)
Geography	
Northeast	3 (14)
South	9 (43)
Midwest	8 (38)
West	1 (5)

and willingness to host a 2-day site visit. We approached all 29 practices and 21 agreed to and participated in an onsite visit by a research team member. Table 1 provides the practice descriptions. Practices were split between family and general internal medicine, and ended up being mostly small and privately owned, and in urban/suburban locations with underrepresentation of the west.

Data Collection

Table 2 describes our data sources. This article focuses on the qualitative results from the practice summary, which included data from the practice tour, patient visit observations, practice member interviews, and the narrative portion of the costs and resources survey. Data collection occurred in person at the practice by a female PhD qualitative analyst and study investigator or 1 of 2 female master's prepared professional research assistants over the course of 1 to 2 days. Visits occurred between March and September 2019. Each practice was compensated a total of $2000 for completion of the data collection, including additional data not described here (eg, patient outcomes data).

As part of these practice visits, we conducted 61 practice member interviews with individuals in the following roles: physician, nurse practitioner, practice manager, health coach, registered nurse, registered dietitian nutritionist (RDN), personal trainer, business manager, pharmacist, psychologist, and medical assistant. The selection of interviewee was to represent the 3 to 5 key roles of weight management services delivery and provide information-rich accounts of how and why the weight management services were delivered. Each interview lasted 45 to 75 minutes. Written informed consent was obtained before the interview.

Practice member interviews were conducted using a semistructured interview guide developed by the study team, reviewed by experts, and pilot tested with nonstudy sites. The guide was designed to gain an understanding of how weight management services were delivered, which included describing practice member roles and involvement, resources available, workflows, and payment or reimbursement. Factors influencing the ability to continue delivery of these services were explored as well. In addition, interviewees were asked about clinician and practice philosophy of care for obesity

Table 2. MOST Study Phase 2 Data Sources for This Analysis

Data Source	Product	Unit
Practice tour	Field notes using template	One per practice
Patient visit observations	Visit summary using template	One per patient (n = 2 to 10 per practice)
Practice member interviews	Recordings made into transcriptions	One per interviewee (n = 1 to 6 per practice)
Cost and resources oral survey	Accounting of resources needed and their associated monetary costs using template	One per practice
	Interpretation	
All	Practice summary	One per practice

and as a primary care service, knowledge and special training in weight management, reimbursement and payment mechanisms, and challenges and recommendations for managing patients with weight concerns. Templates included questions for specific categories of information as well as open-ended areas for taking field notes to capture descriptions and observer impressions related to each desired area of inquiry.

The practice tour template covered information on the responsibilities, functions, and interactions of team members, knowledge and use of the 5 A's approach,[32] the relationship between staff members and with the providers (ie, team dynamics observed), details about the office and physical space (eg, community access, amount and type of office space, size of practice), resources available and used (eg, handouts/brochures, food models or other props, meal replacement foods, supplements, etc.), community resources and referrals, and billing for weight management services.

Before the onsite visit, the provider identified and asked patients about their willingness to have a researcher present in the room during their weight management appointment. On agreement to be approached by the researcher, patient written informed consent was obtained either in the examination room or a secluded area within the practice before observation. Ninety-five weight management visits were observed and documented.

The patient visit template encompassed notes about payment, referrals, content, type of program (eg, healthy lifestyle, weight loss medications), assessments (eg, diet, physical activity, smoking status, alcohol use), referrals based on assessments or previous discussion, the extent of goal setting, elements of the 5 As and who did them, and addressing patient emotion that arose during the visit. Qualitative notes of the provider's approach were noted. For example, notes assessing provider response to patient emotion may include their use of motivational interviewing techniques, responding to patient self-report or obvious emotional distress, exploring emotional eating, fostering an honest and open relationship, observing patient body language, etc.

The cost and resources survey collected typical weekly responsibilities and financial information on staff, supervision, and administrative support for delivering IBT for obesity services and the costs of resources required to start up and conduct activities associated with weight management services.

Immediately after completing the practice visit, the researcher completed the practice summary, which included answering questions and providing quantitative or qualitative evidence for answers across all data collection sources. An individual and abbreviated process of immersion/crystallization was utilized by depth review of the experience and discussing with the team the aspects of the data collected to assure summarization.[33] This practice visit summary described a synopsis of how the practice provided weight management services for patients identified as being appropriate. It included a detailed description of their weight management approach, documentation and billing procedures, staff and provider relationships, interactions with patients, and practice culture. Facilitators and barriers to providing weight management services were also described.

Analysis

A core analysis team with qualitative training and experience, including a practicing primary care physician (AN), PhD qualitative health services researcher (JH), and a professional research assistant (LC) completed the qualitative analysis. The team utilized a case study[34] approach to analyze the data with several steps. First, we reviewed the data for thematic elements with the interview data. The audio recordings were transcribed into text documents and then loaded into ATLAS.ti (version 8, Scientific Software Development GmbH). The team identified codes using a collaborative exercise of placing, comparing, and refining the codes using an emergent coding process. Several rounds of review across coders with the transcripts were conducted until coding[34] was calibrated. Calibration was achieved when the analysis team reached consensus on their understanding and use of the codes. Key areas of inquiry were then reviewed and added to the practice summaries.

Then we organized the themes into a table to illustrate the cases represented using a matrix approach.[35] In this method, the summaries for each practice were reviewed for key features by each core team member and then discussed. Through multiple discussions, the study team identified the features of weight management services delivery, which included both practical (ie, who, what, when) and philosophical/conceptual (ie, approach to counseling) considerations. Table 3 describes these features. Then a qualitative multidimensional classification of empirical cases was conducted to construct a typology of models. The core analysis team then

Table 3. Weight Management Services Delivery Model Features

Feature	Description	Categories
Visit type	How the visit with the patient was conducted	Individual, Group, Both
Role of provider	Key personnel involved in delivering weight management	Physician, Advanced Practice Provider, Registered Dietitian, Other
Multidisciplinary team	Use of different specialist training in the delivery of weight management	Yes, No
Program development	How the program was developed	External program, Self-developed Program, No Program
Weight loss approach	The diet and/or physical activity and/or other way of obtaining weight loss results	Healthy lifestyle, High protein/keto, Calorie reduction, Other
Methods to facilitate weight loss	The use of other methods or services to facilitate use of the approach	Medications, Meal replacement, supplements, Apps or online tools, Educational materials, Other
Counseling approaches	Approaches for behavioral management of weight loss	Stress, Mindfulness, Therapy, None, Other
Focus of practice	If weight loss services are a focus of the practice	Weight loss only, Blended into primary care, Combination
Method of payment	How the practice financially sustains the weight loss services	IBT for obesity, E&M codes, Patient self-pay, Subsidized

Abbreviation: IBT, Intensive Behavioral Therapy for Obesity.

made slight adjustments based on their knowledge/understanding of the program implementation within each practice. This included consideration of not only the clustering of the features but what was considered the defining results in a typology of model types.

Results

Table 4 presents the results of the qualitative multidimensional classification. Four main models were identified. Table 5 presents the defining characteristics of each model and offers recommendations regarding the situations in which that model may be helpful based on particular primary care practice circumstances.

Group Program Model

The distinguishing characteristic of the group program is how patients receive care for weight management. This is distinct from other models in that patients gather with other patients to receive education and support from a practice member. The emphasis is less on who is providing the program, although it was usually provided by an advanced practice provider (APP) or other individual such as a health coach. In our data set, physicians or RDNs did not usually provide this program, although they could. Getting paid for providing the group program overlapped with other methods of getting reimbursed, and most of the time insurance was billed, and the IBT for obesity codes were utilized.

Integrated into Standard Primary Care Model

The distinguishing characteristic of this model is that weight management services are being provided by a medical provider (physician or APP) and in individual visits much like any other chronic disease care. Ongoing visits are scheduled at various intervals, and weight management counseling is provided, much like IBT for obesity. A specific program protocol across all patients is not utilized. The emphasis is typically on healthy diet, physical activity, and healthy lifestyle, although some providers blended in mental health and stress reduction. Some emphasized specific dietary approaches such as a high protein diet. This model was most likely to also use medications to treat weight loss.

"Other" Professional Model

The distinguishing characteristic of this model is the use of someone with nutrition, behavioral health, or weight management expertise to provide the weight management service to patients in the practice. This is most often an RDN but could be other professionals. For example, we visited 1 practice that utilized a person with training as a food scientist. Another provider type is a behavioral health provider. The key here is that someone

Table 4. Qualitative Categorical Analysis of Model Features by Participating Practice

Practice ID	Visit Type (Individual, Group, Both)	Type/Training of Key Role in Program Delivery (Physician, Nurse Practitioner or PA, Registered Dietitian, Others)	Additional Role Types in Delivery Using an Interdisciplinary Team Approach (yes/no)	Set Program Approach (Purchased Program, Self-Developed or no)	Weight Loss Focus of the Clinic (Blended with other primary care, Partial weight loss clinic, Weight loss only clinic)	Weight Loss Approach	Methods to Facilitate Weight Loss	Method of payment (IBT plus others insurance billing, other insurance billing, self-pay plus ins billing, self-pay only)
Integrated into Standard Primary Care Model								
1	IND	PHYS	NO	SELF	BLENDED	HL	EDUC, CSLG	IBT OTHER
2	IND	PHYS	NO	NO	BLENDED	HL	MEDS, CSLG	IBT OTHER
3	IND	NP/PA	NO	NO	BLENDED	HL, PA	EDUC, MEDS	OTHER SELF-PAY
4	IND	PA	NO	NO	BLENDED	HL, PA	EDUC, MEDS	OTHER SELF-PAY
5	IND	PHYS	NO	SELF	BLENDED	HL, CAL RED	EDUC, MEDS, BF, CSLG	IBT OTHER
6	IND	PHYS	YES	SELF	PARTIAL WEIGHT LOSS	HL, PA	EDUC, SUP EX, BF, CSLG	IBT OTHER SELF-PAY
Other Professional Model								
7	IND	PHYS, RDN	YES	SELF	WEIGHT LOSS ONLY	HL, CAL RED	EDUC, MEDS, BF, CSLG	OTHER SELF-PAY
8	IND	RDN/FOOD SCIENTIST	NO	SELF	BLENDED	HL, CAL RED	EDUC, CSLG, SUP EX	IBT
9	IND	RDN	NO	NO	BLENDED	HL	EDUC	OTHER
10	IND	RDN	NO	SELF	BLENDED	HL, CAL RED	EDUC, CSLG	IBT OTHER
11	IND	RDN	NO	SELF	BLENDED	HL	EDUC	OTHER
12	IND	RDN	NO	PURCHASED	BLENDED	HL	EDUC, CSLG, SUP EX	IBT OTHER
Purchased (or Developed) Program Model								
13	IND	PHYS	NO	SELF	BLENDED	HP, PA, IF	MEDS, MEALS	IBT OTHER
14	IND	HEALTH COACH	NO	PURCHASED	PARTIAL WEIGHT LOSS	HP	APPS, EDUC, MEALS	IBT OTHER SELF-PAY

Continued

Table 4. Continued

Practice ID	Visit Type (Individual, Group, Both)	Type/Training of Key Role in Program Delivery (Physician, Nurse Practitioner or PA, Registered Dietitian, Others)	Additional Role Types in Delivery Using an Interdisciplinary Team Approach (yes/no)	Set Program Approach (Purchased Program, Self-Developed or no)	Weight Loss Focus of the Clinic (Blended with other primary care, Partial weight loss clinic, Weight loss only clinic)	Weight Loss Approach	Methods to Facilitate Weight Loss	Method of payment (IBT plus others insurance billing, other insurance billing, self-pay plus ins billing, self-pay only)
15	IND	PHYS/NP	NO	SELF	WEIGHT LOSS ONLY	HL, CAL RED	APPS, MEALS, SUPP, EDUC, MEDS, CSLG, BF	IBT OTHER SELF-PAY
Group Model								
16	GROUP	HEALTH COACH	YES	SELF	BLENDED	HL, CAL RED, IF, HP	EDUC	IBT OTHER SELF-PAY
17	GROUP	NP	NO	SELF	BLENDED	HL	EDUC, CSLG	IBT
Multiple Models								
18	IND	PHYS	NO	SELF	PARTIAL WEIGHT LOSS	HL, CAL RED	EDUC, MEALS, MEDS, SUPP, BF, CSLG	IBT OTHER
19	BOTH	PHY/RDN/BEH HEALTH PROVIDER/ FITNESS	YES	SELF	WEIGHT LOSS ONLY	HL, PA, HP	APPS, EDUC, MEALS, SUP EX, MEDS, CSLG	SELF-PAY OTHER
20	BOTH	RDN	YES	PURCHASED	BLENDED	HL	EDUC, CSLG	IBT OTHER SELF-PAY
21	BOTH	PHYS	YES	SELF	PARTIAL WEIGHT LOSS	HL, CAL RED, HP	APPS, EDUC, MEALS, REP, SUPP, BF, CSLG, SG	IBT OTHER SELF-PAY

Abbreviations: IBT, Intensive Behavioral Therapy for Obesity; EDUC, Education; APPS, Web Apps; MEALS, Meal Replacements; MEDS, Prescribed Meds; HL, Healthy Lifestyle; SUPP, Supplements or vitamins; HP, Keto or other high protein; SUP EX, Supervised Exercise; PA, Physical Activity; BF, Biofeedback; CAL RED, Calorie Reduction; CSLG, Counseling; IF, Intermittent Fasting; SG, Support Group.

Table 5. Predominant Weight Management Delivery Models in Participating Practices

Distinguishing Feature	Description	Classification of Features	General Description of Model in Practice
		Integrated into Standard Primary Care Model	
Medical provider delivers weight management interspersed with other patient care	Medical provider provides individualized weight management counseling within the daily care of other patients	Visit type = individual Role of provider = Physician or APP Multidisciplinary team = Not usually Program development = Self or other Weight loss approach = Variable Methods to facilitate weight loss = Meds, apps, ed materials Counseling approaches = Variable Focus of practice = Blended Method of payment = Variable, usually E&M	• Usually a physician, although can be an APP • External program not needed due to professional expertise • Focus on healthy lifestyle approach usually although some focus on high protein diet • Other methods often included apps and use of medications • Paid for by insurance billing and some patient co-pay
		Other Professional Model	
Another provider that is not the medical provider delivers the care	Medical provider identifies and refers internally to another professional to provide individual weight management counseling	Visit type = usually individual Role of provider = RDN, BHP, other Multidisciplinary team = Sometimes Program development = Self Weight loss approach = Lifestyle Methods to facilitate weight loss = Ed materials, Medications Counseling approaches = Variable Focus of practice = Variable Method of payment = Variable	• Usually an RDN, although can be another knowledgeable provider • External program not needed due to professional expertise • Focus on healthy lifestyle approach • Other methods usually not needed, but sometimes apps and educational materials utilized • Paid for by insurance billing and some patient co-pay

Continued

Table 5. Continued

Distinguishing Feature	Description	Classification of Features	General Description of Model in Practice
		Purchased (or Developed) Program Model	
Following a program developed externally or self-development of a program that follows similar protocols	Practice contracts (purchases license) with a provider of weight management services to deliver the specified program within their practice	Visit type = individual Role of provider = physician, APP Multidisciplinary team = Sometimes Program development = other Weight loss approach = Often keto/protein, other Methods to facilitate weight loss = Ed materials, meal replacement, supplements Counseling approaches = Variable Focus of practice = Often full weight loss or partial weight loss Method of payment = Variable, often self-pay	• Usually provided by a combination of visits with medical provider occasionally and health coach or medical assistant for regular check-ins • External program licensed • Focus on high protein/keto • Other methods usually include meal replacement and/or supplements, and educational materials utilized • Mostly paid for by patient self-pay, some insurance may cover physician visits
		Model: Group program	
Group delivery distinct from all other models	Patients gather together for a group educational and support program led by someone from the practice with group facilitation skills and knowledge and/or using a weight loss curriculum	Visit type = group Role of provider = APP, RDN, other Multidisciplinary team = Sometimes Program development = Self or other Weight loss approach = Lifestyle Methods to facilitate weight loss = Ed materials Counseling approaches = Variable Focus of practice = Blended Method of payment = Variable	• Facilitator was usually an APP or health coach, but could be any knowledgeable provider • Either developed program (not purchased) or self-developed if professional expertise • Focus on healthy lifestyle approach • Uses educational materials • Paid for by IBT group visit, patient self-pay

Abbreviations: IBT, Intensive behavioral therapy for obesity; RDN, Registered dietitian nutritionists; APP, Advanced practice provider.

other than a medical provider provides the weight management services.

Purchased (or Developed) Program Model

This model's distinguishing feature is the use of a specified program that was often, but not always, externally developed. This is often a meal replacement program such as Opti-fast or Ideal Protein, where the practice purchases the products for the program and then earns an income by selling these specialized foods and supplements to patients, typically for cash-pay and not through insurance. The physician visit portion of the program, however, may be paid for by insurance reimbursement. For example, IBT for obesity may be billed for the ongoing portion of the care that involves regular check-ins and counseling. Practices that use this model often are marketed as weight loss providers and receive referrals from other practices, as a portion of their practice is specializing in weight loss. This is often for care of patients with class III obesity (previously called morbid obesity), rather than overweight or class I or II obesity.[36] Sometimes in this model the practice has created their own program, often with other additions like meal replacement or supplements, and a specific diet to follow that is recommended for all qualifying patients as a general standard.

A model worth noting that we did not observe is the "Identify and Refer Model," in which a referral relationship exists between the practice and an external weight management program. This may occur between a hospital-sponsored program or, for example, Weight Watchers. The key to this model is that the referral is initiated and monitored by the treating providers to determine the patient's progress over time. This was not evident in our phase 2 data set as our focus was on weight management models occurring exclusively within a practice.

Discussion

Primary care practices decide whether or not to provide weight management services and how much and in what way. This varies with local circumstances, the patients served, and the ability of the practices to deliver these services. In this study, we found that there are different organizing structures, which we chose to call models, that can make provision of weight management services possible in the primary care setting. For example, practices may choose to use 1 approach to providing weight management care for a subset of existing patients but otherwise continue to provide full-spectrum primary care. Alternatively, practices can shift more of their time toward weight management by carving out part of their practice toward weight management services.

We identified 4 models of care that may be a useful starting point for other primary care practices considering implementing something similar. One distinction is that some expand the care team to include nonmedical staff members to act as the primary providers of aspects of weight management services. The weight management care is "integrated" in the sense that it occurs under the roof of the primary care practice, but is not primarily provided (other than what we call the integrated model) by the medical providers. In these models, connection with the PCP may be an important link differentiating these efforts from other referrals to outside programs. Another distinct feature is whether the care is delivered individually or in a group or both. Each has unique pragmatic considerations and possible effectiveness for patient outcomes.[37,38] Although we found these practices by seeking information about IBT for obesity reimbursed through Medicare, we found that all these practices utilized various payment methods for reimbursement of their services such as through commercial payors. This included coverage through commercial payors, Medicare follow-up appointments or Wellness Visits, or Medicaid. Others also accepted self-pay. Thus, our sample of practices did not represent practices that only used IBT for obesity for reimbursement.

A narrative review of the literature on obesity treatment in primary care[39] concluded that various treatment approaches lead to overall weight loss in intervention patients. Medications,[40] meal replacements,[41,42] and behavioral interventions[25] have all been shown to be more effective than usual care (ie, simply advise patients to "eat less and exercise more"). However, as we found in phase 1 of this research,[16] beginning and maintaining a way to deliver these possible treatments to patients for treating obesity is challenging. Because many behavioral interventions are not delivered by primary care clinicians but by other providers like behavioral health providers,[25] a strength of our study findings may be that practices can choose to use another professional for this role. A review of the

literature describes many approaches to the treatment of obesity which usually are a form of integrating obesity care into other primary care (our integrated model). However, although how the weight management services are delivered is described, consideration of the delivery model itself seems to be mostly missing. Use of online methods and telemedicine/health are approaches currently being explored[43–45] that were not available during the time of our study data collection, which was before the COVID-19 pandemic. Providing counseling via video conference may be a promising new avenue; however, it would still likely fall within 1 of our models of delivery such as integrated or group programs. Some approaches consider what we describe as the other professional model, but not explicitly. For example, Feldman and Burkowitz describe the role of the behavioral health provider in primary care to include care for behavioral issues such as obesity.[46] There are additionally several studies that have investigated an RDN model of care.[47–49] However, what our study brings together in 1 article is the consideration of explicitly identifying and selecting a care delivery model as a method of implementation.

The models identified here allow primary care practices to leverage existing resources such as available personnel, options for reimbursement, and community services to use those evidence-based treatments in their own practices. For example, the use of a 5 As framework, consisting of the 5 steps—assessing interest in weight loss, advising of options, agreeing to a treatment approach, assisting with access to that approach, and arranging for follow-up—is an evidence-based approach to behavior change and weight management in primary care.[32,50] The models we identified can use the 5 As approach by helping practices decide how to address each component of this framework in a sustainable and practical way.[32] A practice already employing a behavioral health provider may choose, for example, the other professional model starting with a few patients to test workflows and evaluate results.

Limitations of this study include the fact that only 21 practices were evaluated and, although these practices were geographically dispersed and purposefully selected, they likely underrepresent many practice types such as large health system practices or federally qualified health centers.[51] Although we cannot be certain, this may indicate that systems and federally qualified health centers are less able to provide targeted weight management services with their current staff and structures. The models presented may not cover all the methods and possible organizing structures for weight management services in primary care. In addition, although we sought to obtain outcome data on patient weight loss results and on reimbursement for services, this proved very difficult, and we were unable to do so because the practices did not have the data systems needed to provide this data within the study's resources. Therefore, we have no data to support whether these models were in fact successful in helping patients achieve short or long-term weight loss.

Conclusion

There is a real need for primary care practices to step up and start providing weight management services, given the pressing health issue of obesity and sequalae of associated health problems. This article is important because it can provide information for PCPs and their practices to take that first step. Successfully delivering weight management services in primary care is challenging; however, the practices we studied confirm that doing so is achievable. Identifying and choosing an established model for care delivery may be a useful path for primary care practices to get started with providing weight management services. Further research should investigate how the models result in different outcomes for patients as well as their implementation potential across a wide range of typical practices.

Authors' Resource

From this work and as a means of distributing how to organize care according to these models, our team developed a website for practices to determine which model might work best for their practice. This website describes the features of each model, information on why weight management is important in primary care, and resources for implementation. The title for this website is Practical Solutions for Weight Management in Primary Care and can be found at: https://medschool.cuanschutz.edu/weightmanagementinprimarycare.

To see this article online, please go to: http://jabfm.org/content/36/4/603.full.

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