Nutrition and Obesity Management in the Context of Anti-Obesity Medications: A Blueprint for Action

Obesity Medicine Association

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ATLAS CLARITY

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FOREWORD

We stand at a pivotal moment in obesity care. The prevalence of obesity is at an all-time high,[1] and its profound impact on health and well-being has created an urgent imperative for action. Fortunately, anti-obesity medications (AOMs), such as glucagon-like peptide-1 receptor agonists (GLP-1s), are a powerful new tool that can help in the treatment obesity. However, AOMs alone will not treat obesity most effectively. Obesity advocacy organizations, including the Obesity Medicine Association (OMA), the Academy of Nutrition and Dietetics (the Academy), and many others, have long advocated for the adoption of comprehensive obesity care management, which starts with nutrition interventions, and includes physical activity interventions, behavioral therapy, and medical interventions such as bariatric surgery, and, more recently, AOMs. Providing comprehensive obesity care requires policy changes, increased access to interdisciplinary care teams, and fighting against weight bias and stigma.

The current presidential administration is also taking steps to address obesity, as part of its "Make America Healthy Again" agenda, through a pronounced focus on nutrition, food policies, and physical activity.[2] The administration's interest in these topics is important and timely, and achieving these goals will require adequate funding for research and robust policies that strengthen nutrition-related programs.

Encouragingly, multiple stakeholders are working to continue to improve nutrition care and obesity management. For example, the Centers for Disease Control and Prevention (CDC) has recently launched the High Obesity Program, which aims to reduce obesity rates in mostly rural counties in part by providing residents with new fruit and vegetable voucher incentives and produce prescription programs.[3] In addition, the Academy[4] and the Obesity Association (a division of the American Diabetes Association)[5] have published new standards of care documents to guide healthcare providers. While this and similar actions are important, there is often a lack of effective coordination across stakeholder groups. This *Blueprint for Action* aims to help address that gap by laying out what each stakeholder group can do in the short-, mid-, and long-term to contribute to a coordinated effort that results in comprehensive, patient-centered nutrition and obesity care management for all individuals living with obesity.

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ABOUT THIS BLUEPRINT FOR ACTION

Modern AOMs,[a] especially GLP-1s, have significantly advanced obesity treatment, providing prescribers with powerful, nonsurgical tools for managing the disease. However, despite being seen by many as a "magic bullet," AOMs are not a standalone solution. Instead, they are a new component within a comprehensive obesity care framework that indispensably includes nutrition therapy, physical activity, and behavior modification. Unfortunately, even though it is widely recognized that these support services are necessary and not optional, AOMs are frequently prescribed without them. This often results in worse health outcomes for patients.

This presents a key opportunity for obesity care. Maximizing the potential of the AOMs requires embedding them within a framework of comprehensive care, thereby providing the opportunity to achieve superior weight loss outcomes and enhance patients' quality of life. To develop an action-oriented framework for this integration, the Obesity Medicine Association, the Academy of Nutrition and Dietetics, and ATLAS CLARITY LLC convened a National Stakeholder Dialogue. This Stakeholder Dialogue brought together individuals living with obesity, experts in nutrition and obesity management, and experts in health policy to identify actionable solutions for integrating nutrition and essential supports into comprehensive obesity care for individuals taking AOMs.

The outcomes of the Stakeholder Dialogue are presented in this *Blueprint for Action*, which provides actionable steps for each stakeholder group. The *Blueprint for Action* is organized into three sections:

1. **Understanding the Issue**: This section provides a concise overview of the obesity epidemic's significant health and economic consequences. It underscores that obesity is a chronic disease and should be treated as such with a treatment plan that includes nutrition interventions, and medical or surgical management informed by the patient's medical history and shared decision making. The persistent lack of such comprehensive care, despite these established facts, necessitated the Stakeholder Dialogue.

[a] For this *Blueprint for Action*, the term "anti-obesity medications" (AOMs) is used as a starting point to discuss all modern anti-obesity medications. These include but are not limited to glucagon-like peptide 1 receptor agonists (GLP-1s), GLP-1 analogs, glucose-dependent insulinotropic polypeptides (GIPs), dual GIP/GLP-1 receptor agonists, incretin mimetics, and other such medications that are currently being developed.
It is also important to note that while "anti-obesity medications" (AOMs) is a widely used term in scientific and clinical literature, some find the "anti" prefix to be oppositional and potentially stigmatizing for individuals with obesity. Alternative terms like "medications for obesity" or "obesity medications" have been proposed. The authors of this *Blueprint for Action* chose to use the widely used term AOMs only because it is widely used, and simultaneously recognize that the term can be used interchangeably with synonyms that do not have the "anti" prefix. If alternative terminology is developed and widely used, that terminology can replace AOM throughout.

2. **Dialoguing the Solutions**: This section details the Stakeholder Dialogue, including the patients and experts involved, and the solutions they identified. The process led to the distillation of 12 key recommendations for improving nutrition and comprehensive care for individuals on AOMs. Participants then ranked these solutions based on their potential impact and feasibility.

3. **Planning for Action**: This *Blueprint for Action* presents the Stakeholder Dialogue's findings, aligned with each stakeholder group (patients, clinicians, advocates, researchers, and policymakers) with concrete actions they can take within specific timeframes (short-term, mid-term, and long-term). This ensures each group has actionable steps to help individuals living with obesity receive high-quality, comprehensive care.

Some of the actions discussed at the Stakeholder Dialogue are already being initiated by relevant stakeholders, which is an indication that the *Blueprint for Action* presents practical, important next steps for relevant stakeholders. Part of what the *Blueprint for Action* adds to that effort is an overarching view of how stakeholders can coordinate over time to optimize outcomes and leverage the power of nutrition.

The time for implementing this *Blueprint for Action* is now. Two compelling reasons underscore this urgency: first, early adoption of the proposed solutions can significantly amplify the impact of AOMs and provide immediate, necessary nutrition care and other supports to millions of people living with obesity. Second, the current governmental administration's emphasis on nutrition, health, and chronic disease provides a timely and critical window to address the improved integration of nutrition into AOM treatment. By proactively implementing these solutions, we can ensure that patients on AOMs receive comprehensive care including nutrition that profoundly enhances their overall quality of life.

1. UNDERSTANDING THE ISSUE

This section provides a brief overview of the many issues surrounding obesity and obesity care management in the era of modern anti-obesity medications.

The Obesity Epidemic and its Consequences

In the United States, obesity is a prevalent, serious, and costly chronic disease. As of 2020, more than 100 million adults live with obesity, and more than 22 million live with severe obesity (see Appendix A: Adult Obesity Prevalence Map – Overall Obesity).[1] The current high prevalence of obesity follows a decades-long upward trend. From 1999 to 2020, U.S. adult obesity rates climbed dramatically from 30.5% to 41.9%, with severe obesity rates nearly doubling from 4.7% to 9.2%.[1] Healthy People 2030 set a target to reduce obesity prevalence to 36.0%, down from the baseline of 38.6%.[6] Unfortunately, the U.S. is not currently on track to hit that target, with the latest data showing instead an increase in the prevalence of obesity to 41.8%.[6,7] Moreover, obesity does not affect everyone equally. It disproportionately impacts people who may have limited access to healthy, nutrient dense food, nutrition care, and access to nutritious food.[8] This puts the greatest burden on our most vulnerable individuals.[8]

Obesity can lead to a multitude of health consequences, negatively impacting an individual's quality of life and longevity. It significantly increases the risk of developing other chronic diseases such as type 2 diabetes, cardiovascular disease, and many types of cancer.[9] Joint problems, sleep apnea, and gallstones are also common complications.[9] Furthermore, obesity can lead to poorer mental health, including depression, anxiety, low self-esteem, and lower self-reported quality of life.[9]

The economic consequences of obesity are substantial, as well. Obesity-related medical care costs the United States nearly $173 billion every year.[10] Furthermore, lost productivity due to obesity-related absenteeism ranges from $3.38 billion to $6.38 billion annually.[10] These figures encompass both direct medical expenses, such as preventive care and treatment, and indirect costs associated with reduced productivity, premature death, and disability. Notably, the Centers for Disease Control and Prevention (CDC) reported that annual medical costs for adults with obesity were $1,861 higher than for those without.[1]

Considering the widespread prevalence of obesity, significant effects on individual well-being, and the substantial financial strain it places on healthcare systems and economies, obesity represents a major health problem that urgently requires a comprehensive and multifaceted approach to address effectively.

Obesity Is a Chronic Disease

Major medical organizations, including the American Medical Association and the World Health Organization, recognize that obesity is a chronic, progressive, relapsing, and treatable neuroendocrine disease.[11,12] It arises from a complex interplay of genetics, biology, psychology, and environmental factors that often lie outside an individual's complete control.[13,14] It frequently leads to a persistent, low-grade inflammatory state throughout the body, contributing to many other health problems such as insulin resistance, dyslipidemia, and impaired glucose metabolism, significantly increasing the risk of developing numerous comorbidities including type 2 diabetes, cardiovascular disease, and certain cancers.[15,16]

Attributing obesity to individuals' choices or "lack of willpower" ignores the potent biological and environmental drivers that lead to obesity, and fuels harmful weight stigma, which has documented detrimental effects on mental and physical health, potentially hindering rather than helping weight management efforts.[14] Compounding matters, many healthcare providers hold strong negative attitudes and stereotypes about people with obesity, which can lead to poor communication and decision making.[17] Patients who experience obesity stigma from a provider are more likely to experience stress, avoid care, and have lower rates of medication adherence.[17] Thus, correctly classifying obesity as a chronic disease underscores its biological basis, recognizes that care requires a multifaceted approach, emphasizes the need for comprehensive medical prevention and treatment strategies similar to other chronic conditions, and helps avoid stigmatizing and counterproductive moral judgment.

Because obesity is a complex, chronic disease, treatment for obesity must be multifactorial, individualized, and patient-centered.[4,18–21] This comprehensive approach is often broken down into what are known as the "Four Pillars of Obesity Management":

- **Nutrition Therapy:** Focusing on healthy eating patterns and dietary choices, delivered by a registered dietitian nutritionist or similar expert.
- **Physical Activity:** Emphasizing regular movement and exercise.
- **Behavioral Modification:** Addressing habits, psychological factors, and lifestyle changes.
- **Medical Interventions:** Utilizing pharmacological interventions such as AOMs or surgical options such as bariatric surgery when appropriate.

The Four Pillars of Obesity Management[18]

Figure 1: The Four Pillars of Obesity Management[18]

The first of the four pillars is **nutrition therapy**, which focuses on establishing nutritional adequacy while simultaneously creating a sustainable negative caloric balance through personalized dietary plans considering individual needs and preferences. Individuals who initiate AOMs may benefit from modifying their diets to optimize healthy weight loss, prevent muscle mass loss, and prevent nutrient deficiencies.[18] The second pillar, **physical activity**, is crucial for increasing metabolism and maintaining muscle mass, thereby improving cardiometabolic health and addressing one of the common side-effects of AOMs (see "Loss of Muscle Mass and Treatment of Obesity with AOMs," below).[18] The third pillar, **behavioral modification**, provides support for individuals' mental health and interpersonal dyanmics.[18] The fourth pillar, **medical interventions**, includes AOMs as one potential piece of an individual's treatment, in addition to a complete medication review and health assessment to manage other chronic diseases, support overarching health, and prevent weight regain.[18]

These pillars work together to help individuals achieve their health and weight goals by addressing the multifaceted nature of obesity. While all four pillars are important, the emphasis will vary for each patient and their healthcare team, and this emphasis may change during the weight loss and maintenance treatment journey. Regardless of individual variations in emphasis, it is only through properly addressing all four pillars that sustainable, healthy weight loss and optimal obesity treatment can be achieved.

While all four pillars are vital, the subsequent sections of this document will delve into the first pillar: nutrition therapy. The focus will be on its significance for individuals using AOMs and its contribution to combating muscle mass loss. (Other pillars may be highlighted in future documents, but this one will, for brevity's sake, focus most heavily on nutrition.)

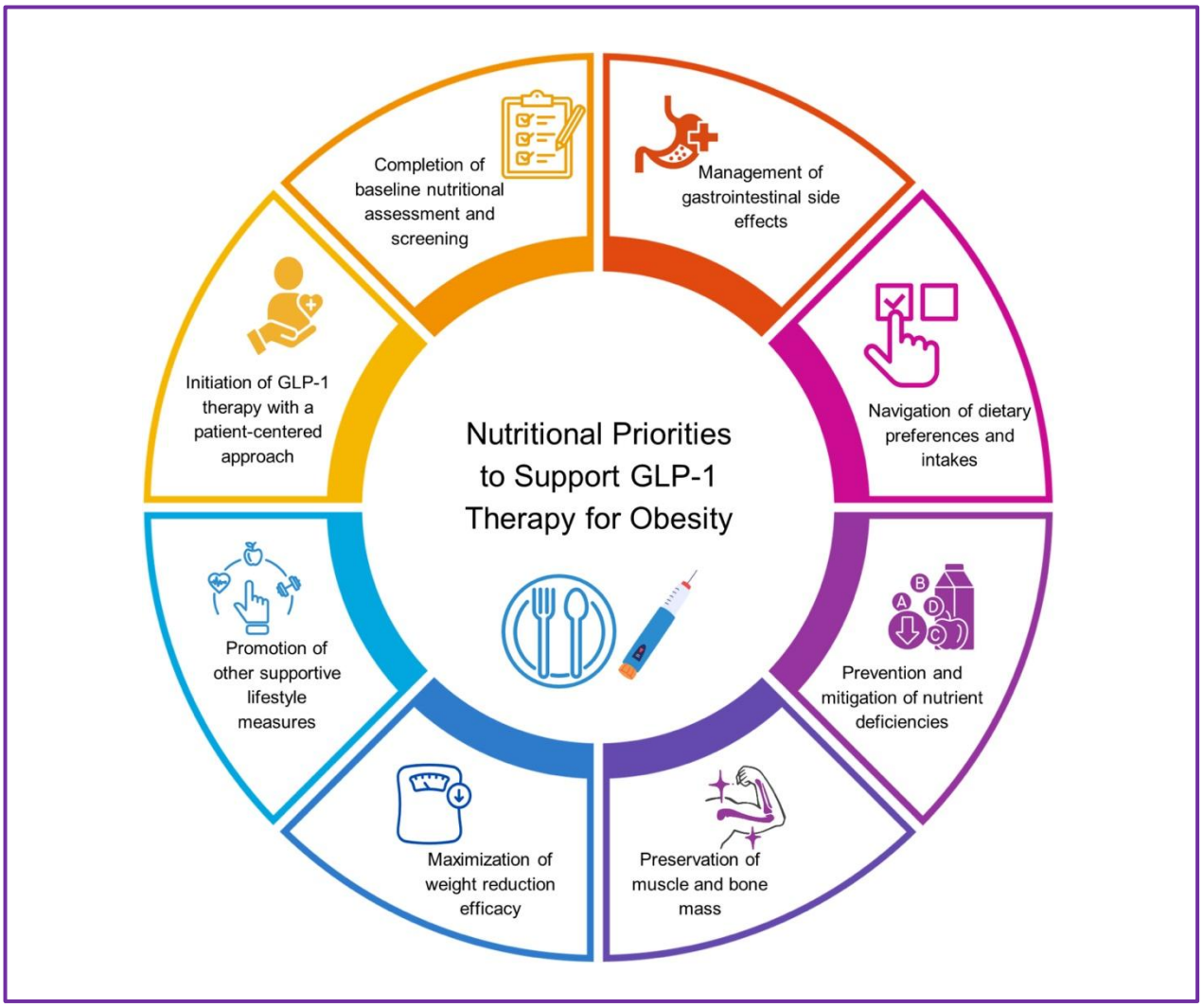
Nutrition Therapy Is Critical for Individuals Using AOMs

Comprehensive nutrition therapy often begins through a triage or triggering event which can include a medical referral or identification of risk through a screening mechanism. Medical Nutrition Therapy (MNT) is the term used by the Centers for Medicare & Medicaid Services (CMS) and other payors to indicate evidence-based care by a Registered Dietitian Nutritionist (RDN) or other qualified nutrition provider. MNT is defined by four steps: Assessment, diagnosis, intervention, and monitoring & evaluation.[22] When an RDN conducts an assessment on an individual at nutrition risk it includes an evaluation of the individual's food and nutrition security, dietary intake, food allergies or intolerances, medical history, current clinical condition, anthropometrics such as waist circumference, body mass index, change in weight overtime and percent lean body mass when available, biochemical indices, and any cultural values or beliefs that may impact care.

These assessment data are used to determine if one or more nutrition problems (diagnosis) are present or if the individual is at risk for a problem as well as the cause of the problem. Once a problem is identified a comprehensive treatment plan including other providers can be developed. In the case of obesity, the nutrition provider will work with the patient to determine the types of interventions that will help them achieve their personal goals. Interventions may include designing a personalized dietary plan or nutrition support, education, counseling, and care coordination with other services such as meal delivery or food security support.

MNT is a key part of helping people with obesity develop healthy, sustainable dietary patterns. The American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and The Obesity Society reviewed available scientific evidence and incorporated expert opinions to identify the key elements of nutritional priorities to support GLP-1 therapy for obesity (Figure 2).[23] They propose that incorporating these priorities into care for individuals using AOMs will help maximize benefits, minimize potential risks, and increase efficiency of AOM therapy for weight reduction.[23]

Figure 2: Nutritional Priorities to Support GLP-1 Therapy for Obesity



Many of the priorities listed in Figure 2 have long been part of nutrition therapy for obesity care, but they have not necessarily been widely available, often because of access issues. For example, developing individualized food plans with the help of a RDN is critical for preventing, stopping, and reversing the progression of obesity, and for ensuring adequate nutrient intake.[18,24–26] Strong evidence demonstrates that individuals with overweight or obesity who receive nutrition interventions from RDNs achieve significantly greater weight loss, reductions in waist circumference and blood pressure, improved fasting blood glucose levels, and enhanced quality of life compared to those receiving no such guidance.[27,28] However, for individuals with obesity, Medicare does not cover MNT from an RDN.

For individuals using AOMs, nutrition therapy can help these individuals achieve the benefits identified, while addressing short- and long-term side effects specific to AOMs. These side effects can include reduced nutrient intake, gastrointestinal issues, and loss of muscle mass. Recent research suggests that nearly 20% of AOM users develop a nutrition deficiency or deficiency complication within 1 year of initiating AOM therapy.[29] Such side effects have been shown to contribute to a 68% AOM discontinuation rate after 1 year.[30] It is no surprise than that experts recommend RDNs should have follow-up contacts with individuals on AOMs at least every 3 months for the duration of AOM therapy.[28] RDNs have the skills and knowledge to help individuals using AOMs develop healthier eating habits that promote healthy weight loss and minimize detrimental side effects. Yet recent research documents less than 9% of patients on AOMs visit a dietitian before starting AOMs.[25]

The importance of pairing AOM medications with nutrition therapy is widely supported by expert opinion, but the data are lacking or with gaps. Early studies indicate that energy intake for individuals on AOM is reduced by 16-39%, which helps lead to weight loss, but little is known about dietary quality.[31] Moreover, in the pioneering study of Semaglutide, a glucagon-like peptide-1 (GLP-1) receptor agonist that is approved by the FDA for weight loss, participants received individual counseling sessions to support adherence to a reduced-calorie diet.[32] It was the combination of the medication and nutrition therapy that led to the impressive weight loss results. Thus, for individuals using AOMs, tailored nutrition interventions are vital for promoting AOM adherence, improving eating behaviors, and optimizing overall health outcomes.

Loss of Muscle Mass and Treatment of Obesity with AOMs[b]

One particular concern associated with inadequate nutrition intake among individuals taking AOMs is the loss of muscle mass.[33] While AOMs are highly effective at inducing weight loss, this often includes a reduction in muscle mass alongside reduction in fat mass.[32,34,35] The loss of muscle mass can negatively impact strength, power, and mobility, and potentially increases the risk of frailty, falls, fractures, and reduced physical function.[36] This is of particular concern in older adults or those with pre-existing low muscle mass.[36,37] People with obesity may already have lower levels of muscle mass, due to mobility challenges, even before they start to lose weight. Moreover, lean muscle is

[b] It is important to acknowledge that nutrition interventions for individuals living with obesity, particularly for those taking AOMs, address more than just enhancing muscle synthesis and preventing loss, but also myriad other physiological functions and areas of mental and physical health. For example, AOMs have also been associated with gastrointestinal issues and micronutrient deficiencies, both of which can lead to significant health problems. For the sake of space, this *Blueprint for Action* focuses on the loss of muscle mass, due to its potentially dire downstream consequences and because it serves as an example of the type of side effect that can only be addressed via comprehensive nutrition and obesity care management.

metabolically active tissue, contributing substantially to resting metabolic rate (RMR) which practically means the amount of calories burned.[38] For individuals on AOMs, a reduction in muscle mass can lead to a decrease in RMR, which may make long-term weight maintenance more challenging after the initial weight loss phase and potentially increase the risk of weight regain if the medication is stopped or becomes less effective.[39] Beyond its role in metabolism, maintaining muscle mass during AOM therapy is important for optimizing glucose control. Loss of muscle mass could potentially reduce some of the improvements in insulin sensitivity and glucose regulation often seen with AOM treatment, which is particularly important for individuals with type 2 diabetes.[40]

Adequate protein intake is critical for preventing loss of muscle. Dietary protein provides a host of benefits for individuals on AOMs, including:

- supporting muscle mass preservation,
- supporting the development of new muscle,
- promoting satiety, and
- helping to manage blood sugar levels.[36]

When paired with physical activity and balanced energy intake, protein becomes a cornerstone of safe and effective AOM therapy, ensuring that weight loss primarily targets fat while maintaining the strength, functionality, and metabolic benefits provided by muscle mass.[41] RDNs are uniquely positioned to assess the quantity, quality, and timing of protein intake, and to supplement with protein powders, shakes or bars if dietary intake is inadequate.[4] This is essential to mitigate muscle mass loss, thereby maintaining physical function, preservation of metabolic rate, and improving the overall quality of the weight loss.[33]

The Rise of New Classes of Anti-Obesity Medications Such as GLP-1s

The emergence of more effective AOMs represents a significant advancement in the pharmacological management of obesity (i.e., an important part of the fourth pillar),[42] and

while it may seem that these medications are recent innovations, GLP-1s have been used in type 2 diabetes treatment for nearly 2 decades. It is only in the last few years that their potent effects on weight regulation have led to clinical approvals and use specifically for obesity treatment.[42] Clinical trials consistently demonstrate substantial weight loss, achieving average reductions of between 15% and 25% of initial body weight in individuals with obesity, significantly surpassing the efficacy of lifestyle interventions alone or older anti-obesity medications.[43] While bariatric surgery generally yields greater weight loss, AOMs offer a highly effective, less invasive alternative.[42]

Yet, although less invasive than its surgical counterpart, medication therapy with AOMs does not negate the need for the other three pillars of obesity management. Major medical and advocacy organizations that address obesity (e.g., the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and The Obesity Society) call for lifestyle medicine to be the primary framework under which care is delivered, with AOMs serving as an adjunct.[23] These expert organizations know that AOMs are just a part of the overall approach to comprehensive obesity care management, and that AOMs are more effective when implemented alongside nutrition therapy, physical activity, and behavior modification interventions. Research has shown that individuals who receive both AOM therapy and structured nutrition guidance achieve greater weight loss, have better adherence, and are more likely to sustain weight loss after discontinuing medication compared to those receiving AOMs alone.[44] There are many reasons why people receiving comprehensive care achieve better results than those seen in people receiving AOMs alone. For example, the primary side effects of AOMs, including nausea, vomiting, and diarrhea, can often be effectively managed with the support of an RDN, potentially leading to higher rates of long-term medication adherence.[45,46] It is not surprising then that the rise in use of new AOMs has increased the need for RDNs, particularly RDNs who have been trained in the treatment of obesity, as nutrition therapy and lifestyle management are crucial to address gastrointestinal side effects, the loss of muscle mass, and other complications.[47]

AOMs are becoming increasingly used, filling a critical gap in the medical options for obesity management and reinforcing the understanding of obesity as a chronic, complex disease amenable to medical intervention alongside lifestyle modifications. Researchers are identifying other clinical benefits of AOMs to assist in the treatment of other chronic conditions like cardiovascular disease, chronic kidney disease, and neurocognitive disorders.[48] It is critical that nutrition care is integrated into these efforts.

Current Barriers to Comprehensive Obesity Care Management

Comprehensive obesity care management is often lacking due to several barriers.[49,50]
These include:

- limited awareness among providers and individuals of the importance and coordination of all four obesity treatment pillars,
- lack of nutrition screening and referrals to RDNs,
- RDN shortages in some locations,
- poor access to nutrition therapy and other support systems, especially for patients on Medicaid/Medicare and those living in poverty,
- inadequate insurance coverage and reimbursement for nutrition therapy, physical therapy, and behavioral therapy specifically for individuals living with obesity.

Recent research shows that only 8% of individuals prescribed an AOM consult with an RDN within 180 days of starting treatment, despite experts recommending that 100% of individuals do so.[25,51] For those who do see an RDN, it takes an average of 128 days from receiving the AOM prescription to the first RDN visit.[25] By that time, many individuals are already experiencing intolerable gastrointestinal side effects and muscle mass loss, complicating the RDN's efforts and leading to high rates of AOM discontinuation. Compounding matters, some individuals obtain AOMs through online platforms, where regular visits with a RDN and other key support services are either not included in treatment packages or come at an extra cost, making it highly unlikely that individuals who go to these platforms for AOMs receive the full scope of needed care. Even when AOMs are prescribed by physicians who seek to provide comprehensive care, gaps remain, particularly due to a lack of clear clinical guidelines on how to manage AOM treatment and a dearth of easy referral pathways between clinicians, RDNs, and other essential care providers.

From Breakthrough to Practice: *A Blueprint for Action* for the Future of Quality Nutrition and Obesity Care in the Era of AOMs

The breakthrough of new AOMs offers a critical opportunity to establish a model for a more comprehensive obesity care system. Bariatric surgery provides a model for how to successfully develop this: in bariatric surgery, patients are consistently provided with nutrition therapy, physical therapy, and behavioral therapy throughout the course of treatment, all of which contribute to bariatric surgery's long record of success. AOMs however are often prescribed without those components, leading to high rates of medication discontinuation and muscle loss.

This *Blueprint for Action* provides a roadmap to address this gap and establish a system that leverages AOMs not as a standalone cure, but as a medical intervention tool that along with the other pillars of nutrition therapy, physical activity, and behavioral modification, address obesity as the complex, chronic metabolic disease that it is. To realize this vision, the *Blueprint for Action* details specific short-, mid-, and long-term actions necessary for individuals, clinicians, advocates, policymakers, and researchers to create sustainable pathways for long-term, comprehensive obesity care management, supporting the opportunity for overall improved health and wellbeing.

2. DIALOGUING THE SOLUTIONS

Section 2, Dialoguing the Solutions, describes the proceedings and results of the Stakeholder Dialogue, where participants developed solutions to the issues identified in Section 1.

Expert Consensus on Nutrition and Obesity Management in the Context of AOMs

On December 18, 2024, the Obesity Medicine Association (OMA),[c] Academy of Nutrition and Dietetics (the Academy),[d] and ATLAS CLARITY LLC[e] convened a national virtual Stakeholder Dialogue, "Obesity and Nutrition Management in the Context of GLP-1" (the Stakeholder Dialogue).[f,g] The event brought together 26 diverse subject matter experts—people living with obesity, payers, clinicians, advocates, policymakers, and researchers—to address the critical role of nutrition therapy in the context of comprehensive obesity care for people living with obesity who are taking AOMs. The Stakeholder Dialogue focused on identifying actionable solutions to better integrate nutrition therapy into comprehensive obesity care management with AOMs.

[c] The Obesity Medicine Association is the largest organization of physicians, nurse practitioners, physician assistants, and other health care providers dedicated to improving the lives of individuals affected by obesity. More information is available at: https://obesitymedicine.org/

[d] The Academy of Nutrition and Dietetics, the world's largest organization of food and nutrition professionals, is committed to improving the nation's health and advancing the profession of dietetics through research, education, and advocacy. More information is available at: https://www.eatright.org/

[e] ATLAS CLARITY is a San Francisco-based advisory services firm dedicated to improving individuals' health and well-being, focusing on closing health disparities. More information is available at: https://atlasclarity.com/

[f] Support for "Stakeholder's Dialogue: Obesity and Nutrition Management in Context of GLP-1" was provided by Abbott.

[g] For the purposes of the Dialogue, the term "GLP-1" was used as a synonym for AOMs.

Guiding Principles of the Stakeholder Dialogue

Participants in the Stakeholder Dialogue were instructed to make their recommendations with the following guiding principles in mind:

- **Focus exclusively on adults (age 18+).**
- **Solutions should be patient-centric, defined as**
  - incorporating high-quality, individualized care,
  - considerate of social determinants of health, and
  - recognizing quality of life as a key objective.
- **Solutions should be convergent,[52] defined as being:**
  - multi-stakeholder,
  - supported by interdisciplinary teams, and
  - considerate of diverse settings (e.g., hospitals, telehealth, community health centers, etc.).
  - While nutrition was a primary focus, solutions must be situated within the broader framework of comprehensive, high-quality nutrition and obesity care management.

Key Themes from the Stakeholder Dialogue

Participants gave detailed and insightful suggested solutions to the critical barriers currently faced by people living with obesity who take AOMs. Thematically, the top identified barriers were:

- **Developing a comprehensive, convergent standard of care:** Creating a standard that will integrate the expertise of various specialists, including RDNs, psychologists, and exercise physiologists, to ensure comprehensive patient care
- **Strengthening the interdisciplinary care team:** Expanding access to RDNs, mental health providers, and peer support groups, as well as improving communication and collaboration within the care team
- **Implementing targeted education and awareness campaigns:** Creating campaigns that will aim to educate the public, healthcare providers, and policymakers about obesity as a chronic disease, the importance of comprehensive care, and the appropriate use of AOMs

- **Advocating for policy changes:** Supporting the passage of a revised federal Treat and Reduce Obesity Act[h] and a revised Medical Nutrition Therapy Act,[i] and expanding access to telehealth services for obesity care
- **Addressing health equity concerns:** Ensuring access to affordable medications, minimizing coverage gaps, and addressing the specific needs of underserved populations

The co-hosts reviewed detailed notes and transcripts from the Stakeholder Dialogue discussions and operationalized the themes and expert suggestions into 12 recommended solutions. These solutions were then uploaded to an online survey platform, where participants were asked to rank the recommended solutions by impact and feasibility on a scale from 1 (most impactful and feasible) to 12 (least). Nineteen participants provided a ranking. Table 1 shows the 12 solutions in rank order.

[h] The Treat and Reduce Obesity Act expands Medicare coverage of intensive behavioral therapy for obesity. Specifically, the bill allows coverage for therapy that is provided by (1) a physician who is not a primary care physician; or (2) other health care providers (e.g., physician assistants and nurse practitioners) and approved counseling programs, if provided upon a referral from, and in coordination with, a physician or primary care practitioner. Currently, such therapy is covered only if provided by a primary care practitioner.
The bill also allows coverage under Medicare's prescription drug benefit of drugs used for the treatment of obesity or for weight loss management for individuals who are overweight.

[i] The Medical Nutrition Therapy Act expands Medicare coverage of medical nutrition therapy services. Currently, Medicare covers such services for individuals with diabetes or kidney disease under certain circumstances; such services must also be provided by a registered dietitian or nutrition professional pursuant to a physician referral. The bill extends coverage to individuals with other diseases and conditions, including obesity; such services may also be referred by a physician assistant, nurse practitioner, clinical nurse specialist, or a clinical psychologist.

Table 1: Proposed Solutions to Address Barriers to Comprehensive Obesity Care Management, as Ranked for Impact and Feasibility* by Participants in the National Stakeholder Dialogue

Rank	Solution
1	Develop and disseminate multi-stakeholder, evidence-based clinical practice guidelines for comprehensive obesity care management (drawing from existing guidelines in obesity medicine and nutrition as appropriate)
2	Secure bipartisan support for and passage of the next iteration of the Treat and Reduce Obesity Act (TROA), incorporating comprehensive nutrition care services such as medical nutrition therapy (MNT) and access to interdisciplinary obesity care interventions as key components
3	Build upon the efforts of the International Obesity Collaborative (IOC)[j] to raise public awareness about obesity as a chronic disease, the functions and effects of common forms of treatment, and the importance of comprehensive obesity care management
4	Define, standardize, and adopt key elements of quality obesity care management (e.g., how to define obesity; how to measure body composition; what constitutes nutrition intervention, etc.) for broad applications
5	Highlight medical nutrition therapy (MNT) as a part of comprehensive obesity care management through clinical education and training, payment models, and other pathways
6	Educate every provider about the importance of comprehensive obesity care management, both in health professional schools and in continuing education, given the diversity of expertise needed in this field
7	Launch a national quality improvement (QI) initiative/learning collaborative that will implement comprehensive obesity care management, tailored to each practice setting's (be it in person or virtual) needs and that will include quality nutrition care and facilitate shared learning and research

[j] The International Obesity Collaborative (IOC) is a global initiative aimed at addressing the disease of obesity on an international scale. Composed of 12 international organizations, including the Obesity Medicine Association the IOC strives to raise awareness, share best practices, and implement effective interventions to treat obesity worldwide.

8	Advocate for increased national funding and develop and disseminate a national research agenda, focused on metabolic health and obesity management, drawing from multiple areas of analyses (e.g., healthcare utilization, clinical outcomes, basic biologic science, etc.)
9	Develop, test, and adopt a set of quality measures to help standardize and drive quality improvement in obesity care management
10	Describe and elevate the importance of the interdisciplinary care team in obesity care management (including behavioral health professionals, RDNs, pharmacists, etc.) to providers, the public, and other stakeholders
11	Ensure that gains made in telehealth policy that impact obesity care management (e.g. permanent flexibility for telehealth coverage) are maintained
12	Launch US-based registry that will capture real-world evidence on the treatment and comprehensive management of obesity, including nutrition interventions, and make those data structured and accessible

* Solutions were developed by Stakeholder Dialogue co-hosts, based on suggestions provided by Stakeholder Dialogue participants. The solutions were then ranked by Stakeholder Dialogue participants on a scale from 1 (most impactful and feasible) to 12 (least). This table presents the results of the final ranking.

After reviewing the results of the Stakeholder Dialogue and participants' ranking of the solutions, Stakeholder Dialogue co-hosts and discussion leaders worked together to break the 12 solutions down into specific recommended actions that could be taken by each stakeholder group, and then to categorize the time frame of the actions into short-, mid-, and long-term. Section 3, below, details the outcomes.

3. PLANNING FOR ACTION

Up to this point, the *Blueprint for Action* has primarily emphasized the role of nutrition and nutrition therapy in the management of obesity. However, developing a truly comprehensive obesity care management system requires addressing all facets of care and all contributing factors. Section 3, Planning for Action, identifies actions each stakeholder group (patients, clinicians, advocates, researchers, and policymakers) should take, and the time frame in which the actions should occur. The information presented in this section is a synthesis of Stakeholder Dialogue discussion results, discussions among co-hosts and leaders, and an environmental scan of relevant literature. The actions presented are designed to lead to the implementation of the solutions proposed in Section 2 and advance the development of comprehensive, patient-centered obesity care now and in the future.

Building Toward Better and Comprehensive Obesity Care Management

Figure 3: The Process for Developing and Implementing Comprehensive Obesity Care Management

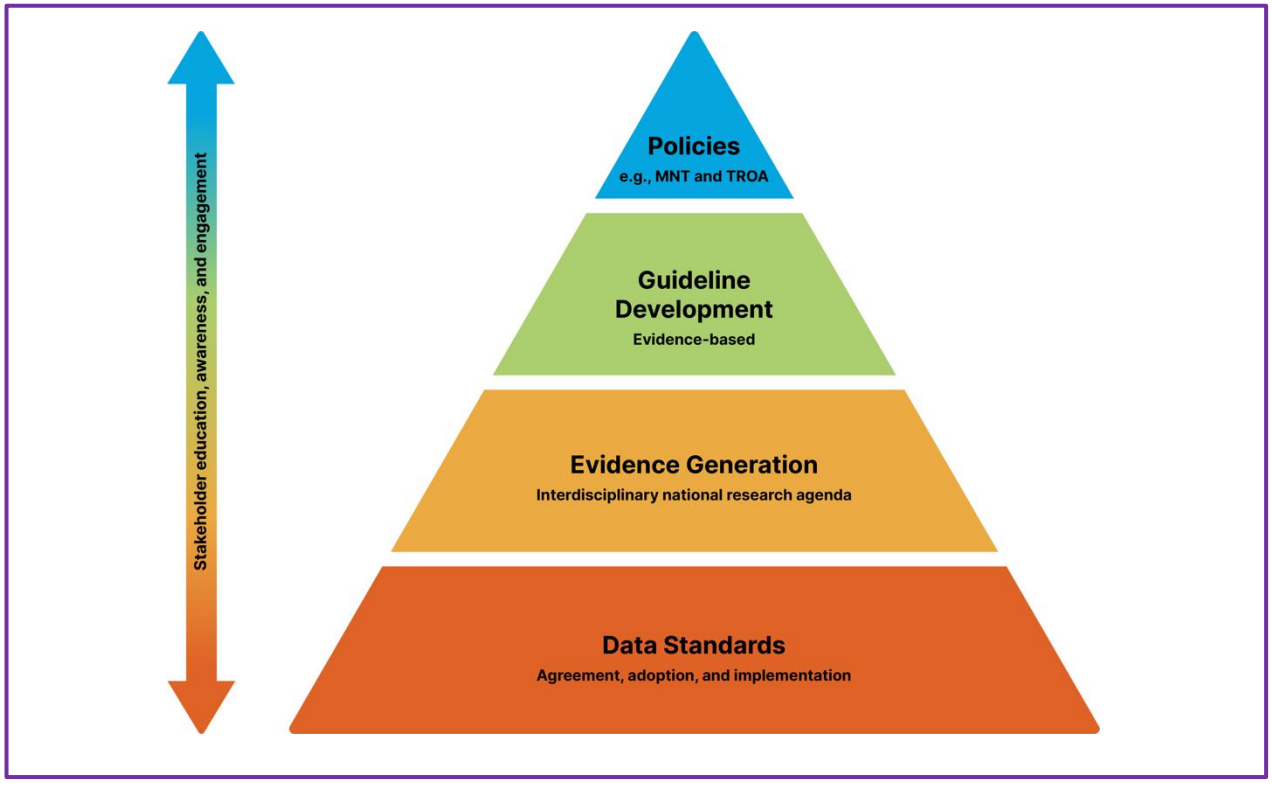
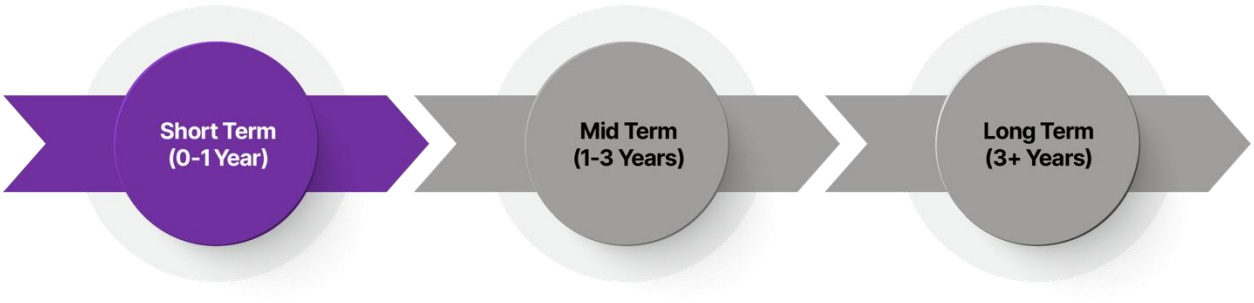


Figure 3 depicts a thorough approach for developing and implementing a comprehensive obesity care management strategy. The foundation involves achieving widespread

agreement on, adoption of, and consistent implementation of data standards across healthcare and research settings. These unified data standards will enable the construction of a cohesive, interdisciplinary national research agenda, facilitating large-scale, high-quality studies capable of generating robust evidence regarding effective obesity interventions, care delivery models, patient results, and economic outcomes. The evidence derived from this coordinated research effort will subsequently inform the creation of rigorous, evidence-based clinical practice guidelines based on systematic reviews. These guidelines will provide specific recommendations on the optimal composition of the obesity care team and delineate the essential components and interventions that constitute comprehensive care. Finally, using the validated, evidence-based guidelines, policymakers can enact supportive policies that provide the necessary framework, resources, and reimbursement structures to ensure the implementation of high-quality, evidence-based, multi-stakeholder, comprehensive obesity care management programs.

The bidirectional arrow represents two critical concepts. First, it signifies that although the overall process may appear relatively hierarchical as depicted in the pyramid, many activities occur concurrently and are interdependent. Clinicians who prescribe AOMs currently require guidance on AOM management (e.g., titration, optimal dosing, long-term safety, nutrition implications) while the evidence base is still developing. At the same time, policymakers need scientific evidence and guidelines to advocate and secure funding for bills such as the Medical Nutrition Therapy (MNT) Act[53] and the Treat and Reduce Obesity Act (TROA).[54] Thus, while this *Blueprint for Action* categorizes activities based on short-, mid-, and long-term recommendations, in practice many activities take place along a spectrum, and elements of the activities may be initiated or completed during shorter or longer time frames than specified in this *Blueprint for Action*. Second, the arrow also represents the necessity of continuous communication and engagement among all stakeholders working at each level of the pyramid to manage interdependencies, proactively address challenges, and accelerate the implementation of comprehensive obesity care management.



Solutions to be Implemented in the Short-Term (0-1 Year)

Translating the suggestions and key themes of the Stakeholder Dialogue into action, ideally following the process depicted in Figure 3, is of the utmost importance. The activities that can be at least initiated, and ideally completed, within the first year are discussed below and presented in Table 2.

Standardize Definitions

Inconsistent terminology and definitions within the field of obesity management create significant barriers to communication among individuals, clinicians, advocates, researchers, and policymakers. Overlapping terms for fundamental concepts, such as obesity medications (e.g., anti-obesity medications, GLP-1s, weight loss drugs) and varying definitions of obesity (e.g., based on BMI, waist circumference, or DEXA scans), complicate the comparison of research findings. Similarly, the lack of clear definitions for the essential components of nutrition and lifestyle interventions impedes the development of clinical guidelines and public health messaging. Therefore, establishing and adopting a consensus on terminology and definitions is crucial for effective communication and for advancing both research and clinical practice in obesity management.

An efficient way to address this issue would be to convene a second Stakeholder Dialogue. The primary goal of a second Stakeholder Dialogue would be to develop and promote the adoption of a standardized, universal set of terms and definitions for use by individuals, clinicians, advocates, researchers, and policymakers. Stakeholders in this proposed second dialogue would establish an evidence-based, clinically relevant metric for defining obesity, as well as precise and inclusive terminology for obesity medications. The International Obesity Collaborative has made steps towards defining obesity, releasing a consensus statement stating that BMI alone "neither defines [obesity] nor replaces clinical judgement," and that factors such as social determinants, race, ethnicity, and age need to be considered when developing a successful obesity management plan.[55] Furthermore, the second dialogue should identify clinically meaningful outcomes for consistent use in research, addressing nuances such as lean body mass versus muscle mass, visceral fat, functional measures, and standardized thresholds for significant weight loss. Finally, clear definitions are needed for medication phases (initiation, maintenance, discontinuation) and for the components of high-quality, comprehensive obesity care management,

including the pillars that support comprehensive care and the structure of the care team required to deliver it effectively. Once there is agreement, adoption, and implementation of the data standards, it will be easier to launch a interdisciplinary, coordinated research agenda.

Launch a Coordinated Research Agenda

Launching a coordinated research agenda will help advance our knowledge and understanding of the full continuum of comprehensive obesity care management. This is critical since data standards and evidence generation provide the foundation upon which guidelines are developed and policies are created (Figure 3).

The research agenda must address multiple perspectives and all levels of comprehensive nutrition and obesity care, including:

- **Basic nutrition and biological sciences,** including but not limited to:
  - optimal protein intake,
  - optimal AOM dosing,
  - effects of AOM on endogenous GLP-1 levels;
- **Clinical care processes and outcomes,** including but not limited to:
  - examining referral pathways to RDNs and why those pathways have often failed in the current system,
  - analyzing clinical outcomes across various combinations of treatments in a representative sample of the population,
  - examining ways to address the complexity of interrelated obesity challenges including social determinants of health, mental health, and comorbidities;
- **Policies and economic outcomes,** including but not limited to:
  - evaluating funding mechanisms for comprehensive nutrition and obesity care,
  - assessing cost-effectiveness and savings associated with comprehensive obesity care management vs. AOMs alone,
  - assessing the feasibility of applying various obesity assessment tools for large-scale implementation.

Developing and launching this agenda will require funding for research from multiple entities. Stakeholder Dialogue participants noted that people who provide research grants must be educated on the importance of funding execution of this research agenda, and how the research will lead to the development of evidence-based guidelines and economically sound, health-promoting policies (Figure 3). Another important facet is the tracking of clinically relevant obesity care and nutritional health data (which can include everything from risk factors to biomarkers to Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes, etc.) using electronic standards, which will facilitate data tracking, data sharing, and data-driven decision-

making. Ultimately, establishing a robust research agenda is essential for developing effective obesity care standards. This agenda should be built upon commonly accepted definitions and involve a range of stakeholders to ensure comprehensive insights and impactful solutions.

Develop a Standard of Care

Clinicians, particularly primary care providers (PCPs), currently prescribe and manage AOMs without comprehensive, multi-stakeholder, evidence-based clinical practice guidelines. They must rely on existing obesity guidelines of uncertain applicability to managing obesity specifically with AOMs. As one obesity medicine specialist said, "I spent all day in my clinic at Johns Hopkins yesterday dealing with a number of patients on, or starting GLP-1s, and made a variety of non-evidence-based suggestions. Until there are well-controlled studies to guide more precisely what we recommend, this area, like so many in medicine, will have to await more data to become truly evidence-based."[56]

As that clinician implies, there is an immediate need for actionable guidance while robust data emerges from the coordinated research agenda described above. Developing interim clinical practice guidelines using the best currently available evidence is crucial. This could be achieved through a multi-stakeholder convening of PCPs and obesity management specialists (e.g., RDNs, behavioral therapists, and physicians who specialize in obesity management) to translate existing knowledge into practical recommendations for managing the care of individuals who use AOMs. Some groups have already started making inroads on this: the American College of Lifestyle Medicine, the American Society for Nutrition, The Obesity Medicine Association, and the Obesity Society have released a joint statement on "Nutritional Priorities to Support GLP-1 Therapy for Obesity."[23] They convened an expert panel to review the available scientific literature, incorporate expert knowledge and clinical experience, and develop recommendations for clinicians prescribing AOMs for obesity. Such an interim approach can improve near-term clinical care while awaiting the development of more definitive evidence-based guidelines.

Building on the interim clinical practice guidelines, it is essential to implement an educational campaign to increase healthcare provider awareness, particularly among PCPs. A potential strategy is for respected professional organizations (e.g., OMA or the Academy) to collaborate with obesity management experts and RDNs to create a primer outlining the interim standard of care for individuals on AOMs, including nutritional considerations and how to address the risk of muscle mass loss. The primer should also emphasize the importance of working with a interdisciplinary team (i.e., RDN, exercise physiologist, behavioral therapist), and for the patient to have regular sessions with care team members. This tool could then be disseminated to PCPs to improve their current management of individuals on AOMs.

Raise Public Awareness

Individuals who are taking AOMs need to have clear, consistent messaging regarding their need for nutrition and comprehensive obesity care management and why it is important. Several strategies could be pursued. First, efforts can build upon the work of the International Obesity Collaborative (IOC) by promoting public understanding of obesity as a chronic disease, the mechanisms and effects of common treatments, and the critical role of comprehensive care. Central to this messaging should be the inclusion of nutrition therapy, physical activity, and behavioral modification as essential components of comprehensive obesity care particularly in individuals using AOMs. Public messaging should emphasize that these "pillars of comprehensive care," as they are called, are not mere optional add-ons to treating obesity with AOMs but instead are central tenets of AOM therapy. Individuals need to be taught the importance of meeting with an RDN, exercise physiologist,[k] and behavioral therapist regularly in order to manage complications, minimize muscle mass loss, and maximize healthy weight loss. Additionally, nutrition education campaigns should emphasize the specific nutrition needs of individuals on AOMs, including the importance of consuming adequate protein and nutrient-dense foods, to help support overall health outcomes and mitigate side effects, including preserving muscle mass. This educational campaign should be disseminated via public health messaging campaigns (e.g., public service advertising, presented alongside AOM advertising) and individually by prescribers in conjunction with any AOM prescription. Public awareness and messaging campaigns should be led by advocacy groups, who can leverage social media, press releases, and any other such activities that will help socialize key information.

Advance Policies

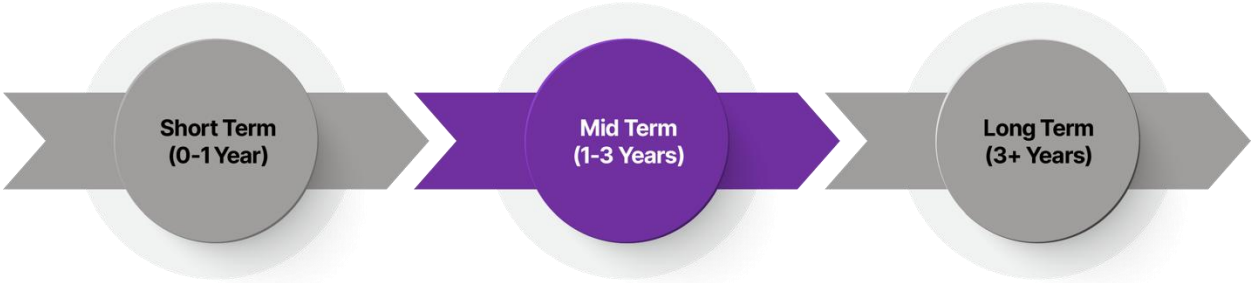
While policy development is ideally built upon a foundation of evidence generation and clinical guidelines (Figure 3), it is crucial to establish policies that can be supported using

[k] The term "exercise physiologists" is intended to include physical therapists, exercise specialists, personal trainers, and the like.

available evidence and to lay the advocacy groundwork that can then support policies based on more thoroughly developed evidence. To that end, the top short-term priority should be securing bipartisan support for and passage of the Treat and Reduce Obesity Act (TROA) as introduced. TROA offers clinically- and cost-effective strategies to address the obesity epidemic by expanding Medicare coverage for treatment at lower cost. It eliminates unnecessary barriers to care by allowing qualified practitioners, such as registered dietitians, to provide Intensive Behavioral Therapy (IBT). Additionally, the bill authorizes coverage for FDA-approved weight-loss medications, ensuring a comprehensive approach that combines pharmacotherapy with IBT to improve patient outcomes.[57] It will also be important to recruit new sponsors for TROA and incorporate the latest available recommendations from interim comprehensive care guidelines for individuals on AOMs. Ensuring that TROA explicitly incorporates comprehensive nutrition care services, such as MNT and access to interdisciplinary interventions, is also a priority. Educating policymakers about the value of comprehensive obesity care is critical to building the necessary political momentum.

Collaboration among key policy stakeholders—including major advocacy groups, individuals, and policymakers—is needed to modernize current Medicare MNT coverage. The MNT Act (still awaiting introduction) provides Medicare Part B coverage for MNT for the treatment of obesity, and allows more providers to refer their patients for MNT, thereby allowing more patients to access the care they need.[58] Medicare MNT coverage must be updated to reflect the evolving landscape of obesity management and the increased use of AOMs. Additionally, advocates should examine why past efforts to pass legislation expanding Medicare coverage for MNT to include obesity has failed and use learnings to design a refreshed approach that can successfully move forward.

Advocacy efforts must also work to preserve gains made in telehealth policy that benefit obesity care management, ensuring permanent flexibility beyond 2025. Policies that support telehealth will improve access to interdisciplinary, quality care for many individuals using AOMs. Finally, strategies should be developed to better integrate intensive behavioral therapy into Medicare coverage for beneficiaries using AOMs, aligning with a more comprehensive care model.[59] Together, these policy activities will help individuals using AOMs receive better care in both the short- and long-term.



Solutions to be Implemented in the Mid-Term (1-3 Years)

The goal of mid-term activities is to build upon the successes of short-term activities and provide a bridge to long-term, sustainable, high-quality obesity care management for individuals who use AOMs. The necessary mid-term steps to connect short-term and long-term efforts are described below and presented in Table 3.

Implement the Standard of Care

Once the standard of care for comprehensive obesity care management has been developed, it is time to implement it in a wide array of healthcare settings. This will involve an educational campaign to increase awareness and understanding of the interim standard of care among healthcare providers, especially PCPs. Such a campaign will rely upon relevant organizations, such as the CDC, Obesity Medicine Association, and the Academy of Nutrition and Dietetics, to provide credibility and facilitate wide dissemination via multiple channels (e.g., primer documents, continuing medical education programs, webinars, and workshops). Further, it is critical to use rigorous evaluation methods to identify and address the strengths and weaknesses of any implemented standard of care. Conducting this evaluation requires the establishment of robust quality measures for operational tracking, quality performance, and patient-centered care in primary care settings.[60] Standardized measures are needed to track progress toward key goals, including reductions in obesity prevalence, obesity-related complications, quality performance (e.g., rates of RDN referrals and completed visits), and patient-reported outcomes specifically among individuals using AOMs. These quality measures must be feasible and fiscally viable to implement and use across diverse health

care organizations, particularly in primary care, and must also deliver clear value to both clinicians and individuals.

Advance the Quality of Care

Advancing initiatives to improve quality of comprehensive obesity care management in settings across the country is crucial for ensuring individuals receive high-quality, tailored, comprehensive care. To achieve this, testing and adopting a robust set of quality measures will be instrumental in standardizing protocols and driving systematic improvements in obesity care.[61] Standardized protocols outline the recommended actions that should be tracked, monitored, and measured to improve quality of care. This will allow tracking to determine if what was done was evidence-based. These standardized protocols will clearly outline recommended actions that should be tracked, monitored, and measured, allowing for consistent evaluation of adherence to evidence-based practices. The standardized protocol, informed by clinical practice guidelines, can be translated into specific measures that are tracked within quality improvement initiatives. To effectively utilize these measures, precise data elements must be consistently defined and tracked. This necessitates the development of comprehensive value sets within the Electronic Health Record (EHR) system or the consistent application of relevant Current Procedural Terminology (CPT) and International Classification of Diseases (ICD)-10 codes.[l] This systematic approach allows for robust tracking and monitoring, ensuring that care delivery aligns with evidence-based recommendations.

Furthermore, creating standardized protocols for capturing and sharing dietary, clinical, and treatment-related data is essential for seamless continuity of care, especially as individuals transition between care team members (e.g., from a PCP to an RDN to a behavioral therapist). Such standardization also significantly advances a coordinated research agenda. The Stop Obesity Alliance has already begun work in this area, developing "a comprehensive measure or standardized/uniform set of measures for obesity that [they anticipate will] be broadly accepted and widely implemented."[62]

Relatedly, it is critical to develop a value set compatible with EHRs, which will also facilitate communication between care teams. As these protocols for capturing and sharing data are implemented, policymakers should be engaged to ensure that billing for services identified by these value sets can occur. Furthermore, regarding billing for services, comprehensive obesity care must be integrated into innovative payment models

[l] CPT codes are a standardized set of codes used to describe medical, surgical, and diagnostic services performed by healthcare providers for billing and analytical purposes. ICD-10 codes are a system used to classify and report diseases, injuries, symptoms, and external causes of morbidity for purposes of diagnosis reporting, public health tracking, and research. CPT codes describe the medical services or procedures performed, while ICD-10 codes specify the patient's diagnoses or reasons for the visit.

and quality incentive programs. This fosters alignment between financial incentives and high-quality care delivery.

Comprehensive Nutrition Model to Address Obesity Care

In addition, launching a national quality initiative and/or learning collaborative tailored to diverse practice settings (e.g., in person vs. telehealth, obesity medicine vs. primary care) will help promote shared learning and research opportunities among providers, particularly regarding commonly espoused knowledge gaps (i.e., what to say when providing initial nutrition counseling to individuals on AOMs, how to refer individuals to RDNs, etc.).[63] For example, the American Medical Group Association Foundation has established an "Obesity Management Quality Improvement Collaborative," serving as a model for how healthcare organizations and medical groups can share best practices and insights from implementation and quality improvement efforts.[64] Employing these strategies can significantly enhance the quality and efficacy of comprehensive obesity care management.

Improve Clinician Education

In the mid-term, the education campaign for PCPs should be updated with the latest evidence and expert recommendations and expanded to include additional key stakeholders. The content of the update should address key topics, including RDN referral processes, what to say to individuals who are struggling on AOMs, and preventing the loss of muscle mass. All current educational materials, such as the Academy's "Intensive Behavioral Therapy for Obesity benefit for Medicare Part B" toolkit,[59] should be revised to address issues concerning care management specifically for individuals using AOMs.

Additionally, the clinician education campaign should be incorporated into health professional training curricula and continuing education programs, which will equip both current and future practitioners with the knowledge and skills necessary for effective comprehensive obesity care management. At a minimum, the American Medical Association (AMA) recommends all PCPs know and understand the content in the Gaples Institute's[m] "Nutrition Science for Health and Longevity: What Every Physicians Needs to Know," including how to give good nutrition advice when time is short, what foods can spike a patient's glucose, how to help individuals recognize and utilize science-based recommendations versus fad diets, how to address food insecurity, and how to provide nutrition advice that is good for both the individual and the global environment.[65] The U.S. Department of Health and Human Services (HHS) has already begun addressing the need for better nutrition education for doctors. They are calling for higher nutrition education standards throughout medical school and beyond, stating that medical schools must

[m] The Gaples Institute is an educational nonprofit focused on enhancing the role of nutrition and lifestyle in medicine.

"close the current gap in nutrition knowledge."[66] This will help equip both current and future clinicians with the skills to provide their patients with evidence-based nutritional guidance.

While the clinician education campaign should continue to focus on PCPs, it should also be expanded to include pharmacists, endocrinologists, exercise physiologists, online prescription providers and, as appropriate, individuals who are currently using or may consider using AOMs. Such an expansion would enhance public knowledge and diversify the sources from which individuals can access accurate, current, and high-quality information.

Advance Policy & Advocacy

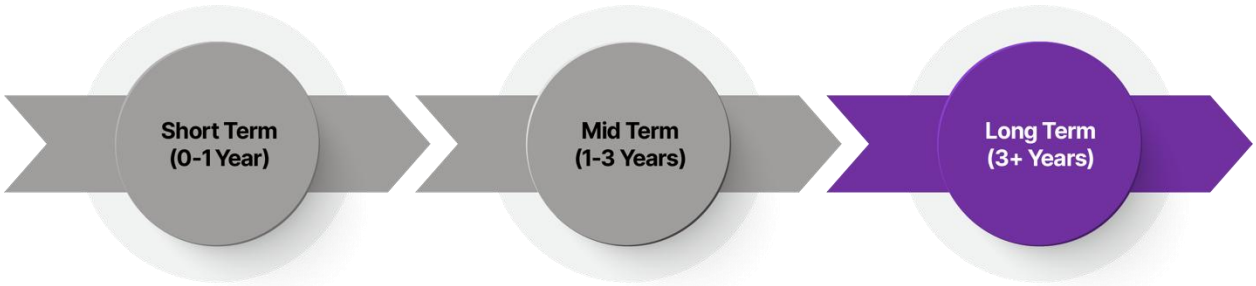
To advance comprehensive nutrition and obesity care, it is important to include MNT as an integral component through education, refined payment models, and other strategic avenues. This effort necessitates a revision of current MNT advancement strategies, drawing on past experiences to align with present priorities and to secure legislative support for broader comprehensive obesity care management. Furthermore, advocating for policies that ensure consistent application of comprehensive obesity care management standards across all healthcare settings, including telehealth and community health centers, is essential for equitable and widespread access to care. Figure 4 illustrates key actions policymakers and advocates can take to help advance comprehensive obesity care management.

Figure 4: Key Actions for Policymakers & Advocates

Continue Research

While the short-term research agenda addresses foundational questions, the mid-term research agenda builds upon that and transitions to a greater focus on evaluating clinical care processes and implementing established standards of care. For example, research should aim to optimize referral pathways between AOM prescribers and other

interdisciplinary team members, such as RDNs, exercise physiologists, and behavioral therapists. Identifying current care coordination inefficiencies will reveal barriers and guide solutions. At the same time that comprehensive obesity care programs are piloted, data collection for cost-effectiveness and cost-benefit analyses can commence. These mid-term findings will be crucial for informing long-term guidelines and policy development.



Solutions to be Implemented in the Long-Term (3+ Years)

Largely, the goal for the long-term is to institutionalize high-quality, patient-centered, sustained, comprehensive care that improves quality of life for individuals who use AOMs. That care should be evidence-based, supported by interdisciplinary teams, and consistently delivered in all healthcare settings. The solutions below, and presented in Table 4, can help ensure that vision.

Evaluate the Standard of Care

Over the long-term, there should be sufficient data to begin evaluating real-world data regarding the adoption and implementation of clinical practice guidelines for individuals using AOMs. This evaluation process is crucial to ensure individuals are participating in comprehensive nutrition and obesity care. This evaluation necessitates a multi-faceted approach.

First, the evaluation must assess the effectiveness and impact of guideline-recommended best practices, including comprehensive obesity care management, on both patient outcomes (e.g., weight loss, cardiometabolic risk reduction, quality of life) and clinical practice patterns. For example, evaluations should assess what percent of individuals on AOMs visit with an RDN, when those visits happen, and patient-reported outcomes related to the visits, among other topics. Simultaneously, the evaluation must use implementation science techniques to understand the degree to which comprehensive obesity care management is being properly implemented in a variety of settings, identify barriers to successful implementation, and develop solutions to address identified barriers. To support this evaluation effort, launching a dedicated US-based data registry is essential to capture structured, accessible, real-world evidence on obesity treatment strategies, including AOM use and associated nutrition interventions. Furthermore, successful implementation depends on integrating comprehensive obesity care management into sustainable payment and delivery models, potentially reinforced by quality incentive programs. To the extent possible, these models should be developed, implemented, and studied in the long-term. Finally, widespread adoption of a standardized set of relevant quality measures, such as those endorsed by CMS, will provide benchmarks for performance and drive consistent, high-quality care for this patient population.

Broaden the Education Campaign

In the long term, the clinician education campaign should be expanded to encompass all stakeholders, offering targeted information tailored to specific subgroups. For clinicians, this entails providing advanced training that covers the latest research, updated clinical guidelines, and best practices for managing individuals on AOMs, alongside practical guidance on patient education. For individuals, the campaign must be accessible in multiple languages and formats, including brochures, interactive online modules, and patient decision aids. The campaign should also incorporate cultural considerations into nutrition interventions, for example offering options like vegetarian meals, the inclusion or exclusion of particular food types, and guidance on adapting traditional foods and preparation methods. Furthermore, encouraging individuals to share their success stories can significantly inspire and motivate others to seek comprehensive care. Ultimately, advocacy groups are best positioned to lead this broadened education campaign, leveraging their expertise and reach to disseminate vital information as widely as possible.

Public policymakers should be informed about successful implementations of comprehensive care on smaller scales, which can serve as templates for larger-scale or jurisdictional implementation. Researchers should contribute by launching a data registry to capture real-world evidence on obesity treatment and management, including nutrition interventions. This data registry will provide structured, accessible data, enabling educators to share timely and substantive findings with individuals living with obesity.

CONCLUSION AND CALL TO ACTION

Comprehensive obesity care management is at a pivotal juncture, spurred by the advent of highly effective AOMs like GLP-1s and the many more classes of medications soon to come to market. However, AOMs are not "magic bullets" that can address the multifaceted nature of obesity by themselves. Realizing the full potential of these therapies requires a concurrent shift towards comprehensive, patient-centered care that best integrates nutrition therapy, physical activity, behavioral support, and medical interventions. Central to this process is ensuring patients receive adequate nutrition support, provided by an RDN, with a particular focus on protein intake to prevent the loss of muscle mass. To that end, and to the goal of providing comprehensive obesity care to every individual using AOMs, every stakeholder group must take leadership of a particular set of actions:

Patients: Patients are at the center of comprehensive obesity care management. As such, their role is largely to provide clinicians and researchers with the data needed to improve care. This includes participating in research, completing patient-reported outcome measures, and voicing their treatment preferences. In addition, patients can serve as advocates and educators, using their lived experiences as a means to improve public perception of the importance and value of comprehensive obesity care management.

Clinicians: There is a wide array of clinicians who take part in the provision of comprehensive nutrition and obesity care: primary care providers, including physicians and advanced practice providers such as nurse practitioners and physician associates, pharmacists, obesity medicine specialists, RDNs, exercise physiologists, mental health providers, and more. It is their responsibility to provide the foundation upon which comprehensive obesity care is built by defining the standard of care and creating comprehensive obesity care management guidelines. Clinicians must also be responsible for leading education and training initiatives for current and future practitioners, as well as the public.

Advocates: Advocates play a pivotal role at the intersection of science and policy. The primary role of advocates is to ensure the uptake and adoption of the care standards developed by clinicians.

Researchers: Researchers provide the essential evidence base for effective obesity care. Their work should demonstrate the impact of interventions, tests innovative models, and generate findings that lead to the development and refinement of clinical care guidelines.

Policymakers: Policymakers' role is to ensure accountability across the healthcare system, including clinicians, hospital systems, and payers. To do so, policymakers must create mechanisms to support the adoption of comprehensive obesity care management practices.

This *Blueprint for Action* outlines a necessary, multi-stakeholder path forward, emphasizing the critical need for standardized data, a coordinated research agenda, evidence-based guidelines, supportive policies, and widespread education. Implementing these short-, mid-, and long-term recommendations demands urgent and collaborative action from patients, clinicians, advocates, researchers, and policymakers. Embracing this integrated approach can help prevent fragmented care, address the complexities of obesity effectively, mitigate associated health risks, identify cost-effective strategies, and ultimately improve the health, quality of life, and long-term well-being for millions of individuals using or considering AOMs. The time for concerted action is now.

TABLES

TABLE 2: RECOMMENDED SHORT-TERM ACTIONS (0-1 YEAR) FOR ADVANCING COMPREHENSIVE OBESITY MANAGEMENT

Domain	Recommended Actions	Key Stakeholders*				
		Patients^	Clinicians#	Advocates	Researchers	Policymakers
Standardize Definitions	Establish a standardized and evidence-based metric for defining obesity (e.g., BMI, BMI with waist circumference, DEXA, body composition).		X			
	Develop precise, inclusive terminology for obesity pharmacologic agents (e.g., obesity medications, anti-obesity medications, incretin-based therapy, etc.).		X			
	Identify key outcomes (e.g., patient-reported outcomes, functional measures, reductions in comorbid conditions).	X	X			
	Establish clear definitions for initiation, maintenance, and discontinuation phases of AOMs.		X			
	Define and standardize key elements of comprehensive obesity care management (e.g., obesity definition, body composition measurement, nutrition intervention) for broad application.		X			X

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.
^Note: The term "patients" includes all individuals living with obesity.
#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

Launch a Coordinated Research Agenda	Set a coordinated research agenda for basic/clinical science and policy/implementation/payment to guide ideal obesity care standards, involving relevant stakeholders.		X		X	
	Advocate for increased national funding and develop/disseminate a national research agenda focused on metabolic health and obesity management (healthcare utilization, clinical outcomes, basic biology).			X	X	
	Identify knowledge gaps in comprehensive obesity care (from basic science to clinical care to policy) and formulate research to address them.		X		X	
	Define and track clinically relevant obesity care and nutritional health data via electronic data standards.		X		X	
Develop a Standard of Care	Develop and disseminate multi-stakeholder, evidence-based clinical practice guidelines for obesity care management (drawing from existing guidelines).		X			
	Raise clinician awareness of the importance of comprehensive care by developing a primer on AOMs, nutrition, and lean mass loss for primary care clinicians (building on OMA and Academy efforts).		X			
	Develop a set of measure concepts for standardizing and driving quality improvement in obesity care management (building on AMGA and TOS efforts).		X			

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.
^Note: The term "patients" includes all individuals living with obesity.
#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

Raise Public Awareness	Enhance public awareness of obesity as a chronic disease, treatment modalities, and the importance of comprehensive obesity care management (building on IOC efforts).	X		X		
	Emphasize medical nutrition therapy as integral to comprehensive obesity care through PSAs and AOM advertising.		X	X		
	Increase awareness of the importance of specific nutritional needs (e.g., high-protein, nutrient-dense foods) for individuals taking AOMs.			X		
Advance Policy	Educate policymakers on the need for comprehensive obesity care management, particularly for individuals using AOMs.			X		X
	Convene policy stakeholders to update MNT Act in the context of comprehensive care and AOMs; research past MNT Act implementation challenges.			X		
	Revitalize TROA efforts: Secure bipartisan support, identify new sponsors, understand past failures, incorporate current clinical guidance on care delivery, and consider additional relevant components.		X	X		
	Ensure policies that support telehealth for obesity care are maintained.			X		
	Develop and examine payment strategies for integrating nutrition, physical activity, and intensive behavioral therapy for all patients using AOMs.		X			X

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.
^Note: The term "patients" includes all individuals living with obesity.
#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

TABLE 3: RECOMMENDED MID-TERM ACTIONS (1-3 YEARS) FOR ADVANCING COMPREHENSIVE OBESITY MANAGEMENT

Domain	Recommended Actions	Key Stakeholders*				
		Patients^	Clinicians#	Advocates	Researchers	Policymakers
Implement the Standard of Care	Implement the multi-stakeholder, evidence-based clinical practice guidelines for obesity care management in a wide array of healthcare settings.		X			
Advance Quality of Care	Test and adopt standardized quality measures for obesity care management.		X		X	X
	Establish and implement required EHR value sets to support comprehensive obesity care management.				X	
	Standardize data capture (dietary, clinical, treatment) using ICD-10 codes and value sets in EHRs.		X		X	
	Integrate comprehensive obesity care into payment models and quality incentive programs.			X		X
	Launch a national quality improvement (QI) initiative/learning collaborative for comprehensive obesity care management across diverse practice settings (in-person and virtual), including quality nutrition care.		X	X		

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.
^Note: The term "patients" includes all individuals living with obesity.
#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

Improve Clinician Education	Expand education campaigns to include pharmacists and relevant specialists (e.g., endocrinologists, gastroenterologists, psychiatrists, etc.).		X	X		
	Incorporate comprehensive obesity care management training into professional school and continuing education curricula, particularly for primary care providers.		X			
	Provide updates and training to primary care providers and pharmacists on short-term lessons learned (referral processes, medication titration, lean muscle mass, protein adequacy) and comprehensive care as data become available.		X			
	Update intensive behavioral therapy toolkits to incorporate treatment specifically for patients who use AOMs.		X			
Advance Policy & Advocacy	Emphasize medical nutrition therapy as integral to comprehensive obesity care management through education, payment models, and other avenues.		X	X		
	Revise MNT advancement strategies based on past experiences to align with current priorities and secure legislative support for broader comprehensive obesity care management.			X		
	Advocate for policies ensuring comprehensive obesity care management standards are applied across all settings, including telehealth and community health centers.			X		X

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.
^Note: The term "patients" includes all individuals living with obesity.
#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

Continue Research	Investigate and pilot strategies to optimize referral pathways between AOM prescribers and other members of the comprehensive obesity care management team.		X		X	

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.
^Note: The term "patients" includes all individuals living with obesity.
#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

TABLE 4: RECOMMENDED LONG-TERM ACTIONS (3+ YEARS) FOR ADVANCING COMPREHENSIVE OBESITY MANAGEMENT

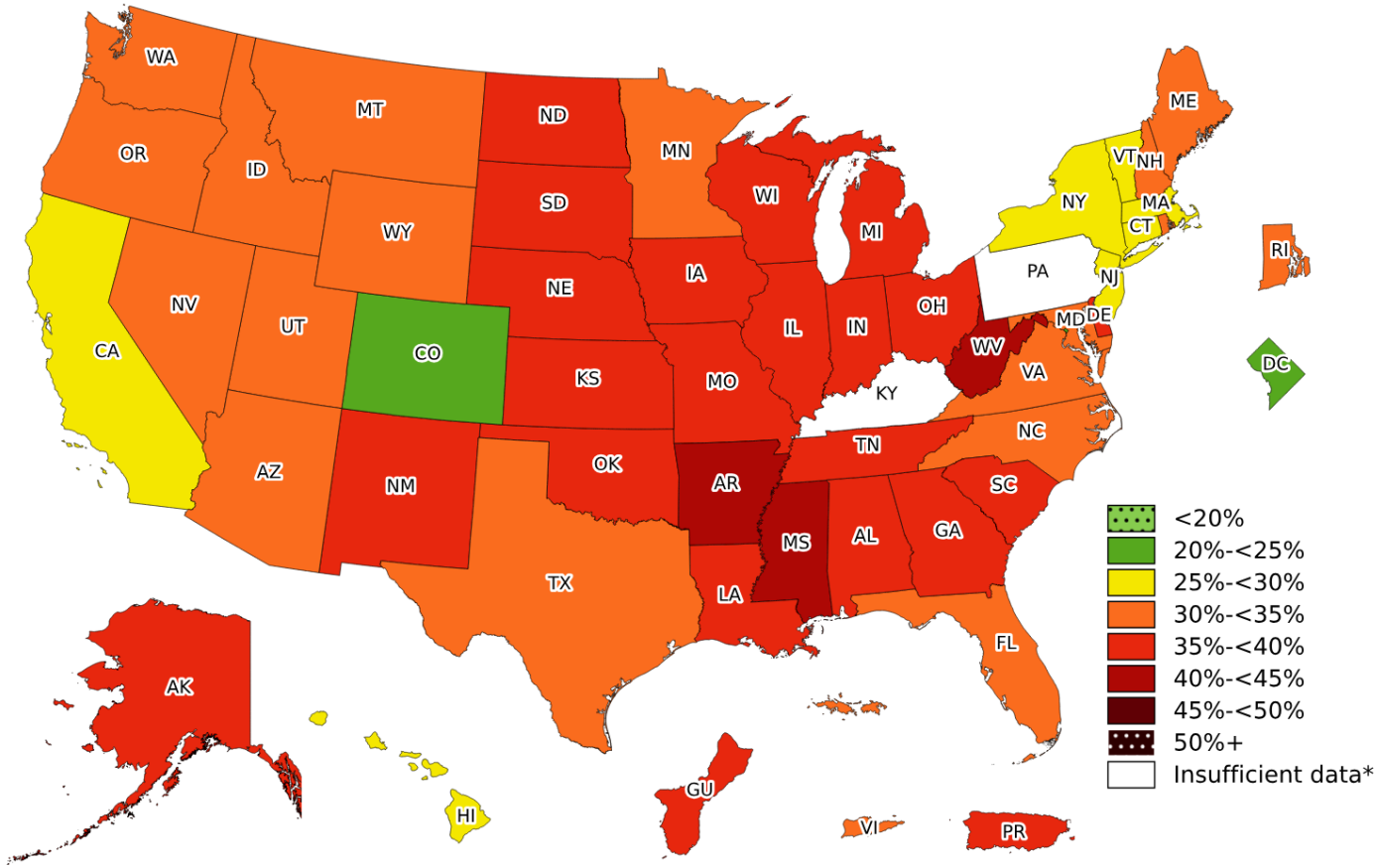
Domain	Recommended Actions	Key Stakeholders*				
		Patients^	Clinicians#	Advocates	Researchers	Policymakers
Evaluate the Standard of Care	Evaluate the effectiveness and impact of best practices on patient outcomes and clinical practice.		X		X	
	Integrate comprehensive obesity care management into payment and delivery models and quality incentive programs.		X			X
	Launch a US-based registry to capture real-world evidence on the treatment and comprehensive management of obesity, including nutrition interventions, making data structured and accessible.		X	X	X	
Continue Education / Communication Campaign	Continue to educate all stakeholders on goals, policies, and guidelines for comprehensive obesity care, expanding reach to pharmacists and patients.	X	X	X		

*Note: A green X indicates this group is primarily responsible for leading these actions. An orange X indicates this group should play a large, supportive role in these actions.

^Note: The term "patients" includes all individuals living with obesity.

#Note: The term "clinicians" includes all healthcare providers who should be involved in comprehensive obesity care management, such as primary care physicians, nurse practitioners, pharmacists, dietitians, physical therapists, mental health care providers, obesity medicine specialists, endocrinologists, etc.

APPENDIX A: 2023 ADULT OBESITY PREVALENCE MAP – OVERALL OBESITY



Source: Centers for Disease Control and Prevention. Adult Obesity Prevalence Maps. U.S. Dept of Health and Human Services; 2023. Available at: https://www.cdc.gov/obesity/data-and-statistics/adult-obesity-prevalence-maps.html. Accessed 7/31/2025.

APPENDIX B: ACKNOWLEDGEMENTS

The Stakeholder Dialogue: Obesity and Nutrition Management in the Context of AOMs Meeting was made possible through the collaborative efforts of three co-hosts:

- **The Obesity Medicine Association** is the largest organization of physicians, nurse practitioners, physician associates, and other health care providers dedicated to improving the lives of individuals affected by obesity. More information is available at: https://obesitymedicine.org/
- **The Academy of Nutrition and Dietetics,** the world's largest organization of food and nutrition professionals, is committed to improving the nation's health and advancing the profession of dietetics through research, education, and advocacy. More information is available at: https://www.eatright.org/
- **ATLAS CLARITY** is a San Francisco-based advisory services firm dedicated to improving individuals' health and well-being, focusing on closing health disparities. More information is available at: https://atlasclarity.com/

The co-hosts also generously contributed staff time and resources to ensure the success of this event.

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