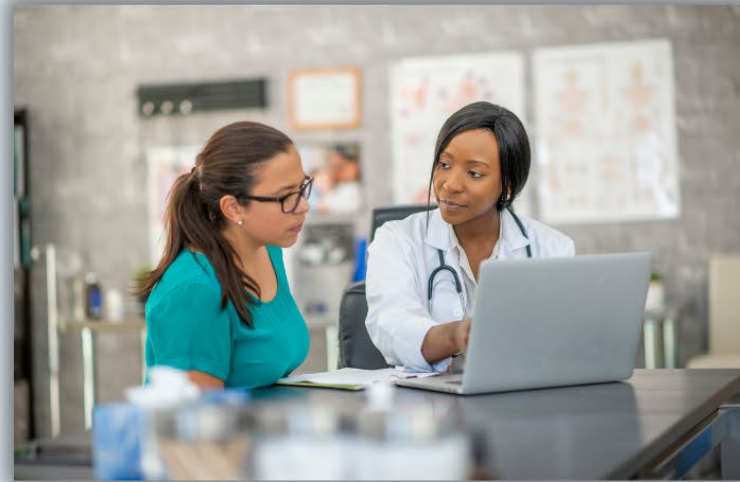




A NEW PATIENT-CENTERED OBESITY ACTION AGENDA



**CHANGING THE TRAJECTORY OF OBESITY THROUGH PATIENT EMPOWERMENT,
HEALTH PROFESSIONAL INTERVENTION, AND SUPPORTIVE GOVERNMENT POLICIES**

**NATIONAL CONSUMERS LEAGUE
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Preface

Imagine a disease that is comparable to smoking as a public health hazard; is directly linked to chronic diseases like type 2 diabetes, heart disease and cancer; and is just as deadly as the opioid epidemic now gripping the nation. However, unlike opioid addiction, this is a disease where many healthcare professionals are not taught how to treat it, individuals are discriminated against for having it, and those with the disease fall through the cracks in obtaining quality care.

This is the current reality for obesity in the United States. While the disease is one of today's most visible public health problems, it is often ignored, discounted as a serious disease, and goes untreated. As a result, the adult obesity rate now exceeds 40 percent¹ – the highest level ever recorded – and childhood obesity is escalating rapidly. Not surprisingly, the costs of obesity are staggering. In 2008, medical expenditures were estimated at \$147 billion annually² and the cost today is likely higher.

The ramifications of overweight and obesity affect virtually every aspect of the healthcare system. Thus, addressing this persistent and pervasive problem cannot wait. Today, extensive research points to evidence-based solutions that will change the course of this epidemic. The question now is what action steps can be readily implemented to accelerate this change?

While the National Consumers League (NCL) is not a health or nutrition organization, NCL represents the voice of consumers on matters affecting the well-being of the American public and often plays the role of a convenor in catalyzing stakeholders to advance meaningful policy solutions. With this “hat” on, NCL, in partnership with the Obesity Care Advocacy Network (OCAN), convened an expert panel meeting on December 7, 2021, to answer this question. Involving leading experts in the fields of public and minority health and obesity, the expert panel reviewed the extent and costs of obesity in the U.S., the state of the science and the pervasive barriers to obesity care to identify immediate priorities for collective action. Responding to this assessment, a group of clinicians, researchers, and advocates participated in a roundtable to chart priorities for education, clinical practice and public policy that have the potential to bring about meaningful change. This was followed by a literature review to gather additional insights that informed NCL's recommendations.

What follows are the results of this review and common-sense recommendations for how stakeholders can work collectively to change the trajectory of obesity through patient empowerment, health professional intervention, and supportive government policies.

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Executive Summary

The obesity epidemic in the United States is full of important milestones. In 1994, former U.S. Surgeon General, Dr. C. Everett Koop put escalating rates of obesity on the national radar. In 1995, the National Heart, Lung and Blood Institute released a landmark report, *Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults*, that thoroughly examined the scientific evidence for the risks associated with overweight and obesity. In 2003, the United States Preventive Services Task Force (USPSTF) issued its first recommendation statement on screening Americans for overweight and obesity. In 2010, a special Surgeon General’s report called for action to decrease obesity. And in 2013, the American Medical Association recognized obesity as “a disease state” requiring a range of interventions to advance obesity treatment and prevention.

Complementing these milestones, the state of the science on obesity has yielded a new understanding of how signaling in the brain affects appetite and metabolism, leading to a new class of effective anti-obesity medications. There have also been advances in non-invasive technologies for bariatric surgery with faster recovery times as well as new tools that aid in behavior modification.

And yet, the obesity crisis in the U.S. has only worsened with time. In 2020, the Centers for Disease Control and Prevention announced that the U.S. adult obesity rate reached the highest level ever recorded. Currently, 42.2 percent of adults have obesity, 73.6 percent either have overweight or obesity, and nearly one in ten Americans (9.2 percent) have severe obesity, which correlates with the most serious health risks. Obesity also affects about 14.4 million children and adolescents, or 19.3 percent of America’s youth, including 13.4 percent of children as young as 2-5 years.

“...obesity is associated with more severe illness, hospitalization and death from COVID-19 and is directly linked to over 230 medical conditions, resulting in annual expenditures of \$ 1.72 trillion for direct and indirect health costs.”

Adding to these grim statistics, obesity is associated with more severe illness, hospitalization and death from COVID-19 and is directly linked to over 230 medical conditions, resulting in annual expenditures of \$ 1.72 trillion for direct and indirect health costs. Additionally, obesity affects Black and Brown communities disproportionately and is a one of the most serious health equity and emergency preparedness issues impacting the country.

Presented with this disturbing picture, the questions are why are we failing in the fight against obesity and what can be done to change the situation? While the National Consumers League is not a public health organization, NCL often plays the role of a convenor in catalyzing stakeholders to advance meaningful policy solutions. Thus, NCL worked with the Obesity Care Advocacy Network to tackle these questions by focusing on the human side of the obesity equation, and specifically the many barriers – including incorrect beliefs about the cause and treatment of obesity, prejudice towards people due to their size, lack of training for health providers, access barriers, and outdated government policies – that keep too many Americans from seeking obesity care.

To understand these barriers, NCL and OCAN co-hosted an expert panel meeting in December 2021 where leaders in their fields assessed the current “state” of obesity care and clinicians and advocates participated in

a roundtable that focused on ways to close the gap in screening and treatment. From this discussion, the expert panel identified these basic requirements for bringing about meaning change:

- Destigmatize and correct misperceptions about obesity, its causes and the effectiveness of treatment options
- End the pervasiveness of weight bias in the healthcare system with solutions for clinicians and patients as healthcare consumers
- Confront the inequities in obesity care among communities of color
- Expand the opportunities for diagnosing overweight and obesity in a variety of settings
- Eliminate the regulatory restrictions that limit patient access to specialists in obesity medicine and nutrition
- Advance common-sense policy solutions to expand access to comprehensive obesity care
- Overcome the reluctance of people with obesity to seek care by empowering them to advocate for their care as patients with a chronic disease.

With these goals as the framework, NCL conducted further research to consider ways to mobilize stakeholders around a ***new people-centered obesity action agenda*** that will change how Americans think about obesity, empower patients with obesity to get the best care, and afford people with obesity the same rights and access to care as those with other serious chronic diseases.

Ultimately involving the support and active participation of many stakeholders – policymakers, professional societies, healthcare practitioners, health educators, and patient advocates -- this platform calls for action in the following areas:

1. Redefine Obesity for the American Public as a Treatable Chronic Disease

Today the American Medical Association classifies obesity as a disease requiring treatment and newer scientific understanding indicates that obesity is due to dysfunctional energy regulation in the brain. Yet, three-quarters of American adults still believe obesity results from a voluntary lack of willpower to consume less calories. Redefining obesity as a treatable chronic condition and linking it to common diseases, such as hypertension and type 2 diabetes, will provide a new context for health providers and patients to have a positive discussion about weight, building trust and enhancing the patient-physician relationship.

2. Adopt Patient-First Language for Obesity

When health professionals interact with patients with chronic disease, they routinely use people-first language, which puts a person before a diagnosis, describing what condition a person "has" rather than asserting what a person "is". The exception is obesity, where terms often used to describe excess weight can be off-putting and demoralizing. To change this situation, the National Consumers supports the agenda of the People-First Initiative, which advocates for widespread adoption of people-first language by practitioners in all healthcare settings. Launched by the Obesity Action Coalition, the initiative also encourages all producers of content about obesity to use person-first language. This includes authors and editors of journal articles, the print and broadcast media, public health departments, disease organizations, patient groups, healthcare providers and insurers.

3. Make Combatting Weight Stigma a National Priority

Discrimination toward people with obesity is common in America. Studies show that 40 percent of healthcare professionals –physicians, nurses, dietitians, psychologists, and medical students – admit to having negative

reactions based on a person's size. Addressing this pervasive problem requires a unified and sustained national initiative that makes the impact of weight stigma "real" for clinicians and the public and disseminates the latest information to health providers on strategies to reduce weight stigma. This includes conducting national awareness campaigns, making existing resources on reducing weight stigma widely available to health professionals, and communicating evidence-based solutions, such as the move by hospitals, clinics and large physician practices to use scales, blood pressure cuffs, chairs and patient gowns that accommodate higher weights.

4. Elevate the Need for Physician Training in Obesity

Physicians are currently unprepared to treat patients with obesity and the lack of training in medical schools and residency programs is a contributing factor. Accordingly, leading obesity medicine societies formed the Obesity Medicine Education Collaborative (OMEC) in 2016 and developed the first set of obesity-related core competencies as a framework for medical, nursing, and physician assistant educators to develop an obesity medicine curriculum at their respective institutions. Yet, little progress has been made since OMEC published the core competencies in 2019. A recent study of 40 U.S. medical schools finds that 30 percent of the institutions provide little or no education in nutrition and behavioral obesity interventions, on appropriate communication with patients with obesity, or pharmacotherapy. Further, one third of schools reported no obesity education program in place and no plans to develop one due to lack of room in the curriculum. These findings underscore the urgency for U.S. medical schools to change their priorities and develop curricula that comprehensively addresses the disease of obesity.

5. Establish Excess Weight as a Vital Sign

There is a reason vital signs include the word "vital." The measurements provide critical information about a person's health status. In addition to body temperature, blood pressure, heart rate and respiration, health providers routinely measure height and weight at each visit. Thus, if healthcare professionals were to calculate the patient's BMI while the individual was in the clinical setting, practitioners would have a measurement to start the discussion about excess weight in real time. It is recognized that BMI is a crude measure and not the sole predictor of obesity and this should be addressed with the patient. However, when combined with patient-friendly informational materials that explain the level of weight and options for treatment, this interaction could initiate a positive, respectful conversation about obesity care at a time when patients are most receptive to discussing their health status. If this practice becomes routine, many more Americans will understand that obesity is treatable and learn that different options are available to them to achieve a healthy weight.

6. Provide the Tools for a Doctor-Patient Dialogue on Excess Weight

Just as the obesity medicine community formed the Obesity Medicine Education Collaborative to spur the development of an obesity curriculum, a key priority is creating a structure for obesity stakeholder organizations to produce informational tools that will assist primary care providers when having conversations with patients about their weight status and care options. Currently, HCPs cite lack of patient information tools as a barrier to providing obesity counseling. Thus, a unified effort by government agencies, professional societies, non-profit consumer groups, and chronic disease organizations to produce and make available evidence-based, patient-friendly content on the diagnosis, treatment, and management of overweight and obesity will facilitate a better dialogue between clinicians and patients and promote shared decision-making.

7. Establish Coverage of Obesity as a Standard Benefit Across Insurers and Health Plans

Today, many employers and insurers exclude obesity management services or place access barriers, such as requiring step therapy and prior authorization, which delay or deny treatment. The consequences of these

practices are obvious: obesity remains largely undiagnosed and undertreated, accelerating the prevalence and increasing the expenditures for costly chronic diseases.

The good news is employers are waking up to the costs of untreated obesity and starting to cover behavioral, medical, pharmaceutical, and surgical options in employee benefit packages. This includes the Office of Personnel Management (OPM), which requires that Federal Employee Health Benefits (FEHB) plans cover the full range of obesity treatment options, including bariatric surgery and anti-obesity drugs. In fact, in calendar year 2023, federal employee health plans as well as Tri-Care, which covers military personnel and their families, and the Veterans Administration must cover AOMs for adults who do not achieve weight loss goals through diet and exercise alone.

But this is the tip of the iceberg. Improving obesity outcomes requires supporting legislative efforts, like the “Safe Step Act” that would require group health plans to provide an exception process for step-therapy protocols. It also necessitates collaboration among payers, providers, policymakers, and advocates to establish a standard, affordable benefit for the prevention and treatment of obesity that applies across plan types and payers. Here, *the Proposed Standard of Obesity Care for All Providers and Payers* developed by the STOP Obesity Alliance provides a framework for starting this process.

8. End Outdated Medicare Rules That Exclude Coverage for Necessary Obesity Care

In October 2021, 63.9 million people were enrolled in the Medicare program, or almost 20 percent of the U.S. population. Around 54 million of these Medicare beneficiaries are adults aged 65 and above who, due to age, are most likely to have multiple chronic conditions. In fact, today, about two-thirds of older adults on Medicare have two or more chronic conditions and more than 15 percent have six or more. Thus, the importance of treating obesity in the Medicare population is vital, especially since obesity is directly linked to over 230 chronic diseases.

Yet, despite progress in better obesity benefits for federal employees, Americans enrolled in the Medicare program face significant obstacles to receiving safe and effective obesity treatment. Outdated Medicare Part D rules exclude coverage for FDA-approved anti-obesity medications and Medicare Part B places undue restrictions on intensive behavioral therapy by allowing only primary care providers to deliver IBT and severely restricting the physical locations where this care can occur. Congress has the power to change this situation, which is why NCL has joined with the obesity, public health and nutrition communities is pressing for swift passage of the Treat and Reduce Obesity Act (TROA). Not only would TROA expand Medicare coverage to allow access to IBT from a diverse range of healthcare providers, but it would also end the exclusion on coverage for a new class of anti-obesity medications that are improving the standard of care for adult Americans with obesity. And, since health insurance companies closely align coverage decisions with Medicare policy, passing TROA may also result in increased insurance coverage for obesity-related care for all Americans.

9. Create a Patients’ Bill of Rights for People with Obesity

For too long, people with obesity have encountered a healthcare system that is working against them. They have been stigmatized, discriminated against, not treated with respect by their health providers, and have faced significant hurdles and burdensome requirements to receive care. On behalf of these Americans, the National Consumers League says enough! Now is the time to give people with obesity the knowledge, skills, and confidence to be advocates for their best obesity care. This can be accomplished by working with organizations representing people with obesity to create a *Patients’ Bill of Rights for People with Obesity* that starts with the recognition that obesity is a treatable disease and that everyone with obesity deserves the

same level of attention and care as those with other chronic conditions. Simply put, overcoming the barriers to quality obesity care requires changing how people with obesity think about themselves, empowering them to be equal partners with their health providers in decisions about their care, and mobilizing them as advocates to demand the same quality care and access to treatments as patients with the 230 chronic conditions where obesity is a significant factor.

Introduction: Confronting the Obesity Epidemic: Why Now?

In the United States and around the world, obesity has increased dramatically during the last four decades. According to estimates from the World Health Organization (WHO), more than 1.9 billion adults aged 18 years and older have overweight, and of these, over 650 million adults have obesity.³ This translates into 39 percent of men and 40 percent of women globally.⁴

In the U.S., obesity has become a true public health crisis. In less than 20 years, obesity prevalence increased from 30.5 percent of the public in 1999-2000 to 42.4 percent in 2017-2018. During the same period, the prevalence of severe obesity jumped from 4.7 percent to 9.2 percent, a record high.

However, the impact is far greater than these statistics. More than 230 medical conditions⁵ – from type 2 diabetes and heart disease to some forms of cancer – are directly linked to overweight and obesity, meaning these diseases worsen as the degree of obesity increases. Thus, obesity today is responsible for an estimated 300,000 deaths a year,⁶ making the disease the second leading cause of preventable death after tobacco.

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The dilemma for the public health community is that escalating rates of obesity are not a new challenge. As documented in a 2010 report from the U.S. Surgeon General, the prevalence of obesity began to increase sharply in the 1980s⁷ and by the 1990s, public health leaders were calling obesity a national emergency. In 1994, former US Surgeon General, Dr. C. Everett Koop launched a privately funded anti-obesity campaign (Shape Up America!) to put obesity on the radar and in 1995, the National Heart, Lung, and Blood Institute (NHLBI) convened the first expert panel to develop clinical practice guidelines for primary care practitioners.

Then in 1996, Shape Up America! and the American Obesity Association (now called The Obesity Society) released the first obesity treatment guidance as a wake-up call for America’s doctors. Two years later, NHLBI issued *Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults*,⁸ a landmark report that thoroughly examined the scientific evidence for risks associated with overweight and obesity and their treatments and developed clinical practice recommendations based on their conclusions. This set the stage for continued updates as the science of obesity evolved, including screening recommendations and revised clinical treatment guidelines from the NHLBI, the U.S. Preventative Services Task Force (USPSTF), the Institute of Medicine (now called the National Academies of Science, Engineering and Medicine), and such professional societies as the American Academy of Pediatrics, American Association of Clinical Endocrinologists/American College of Endocrinology, The Obesity Society, American Society for Metabolic & Bariatric Surgery, Obesity Medicine Association, and American Society of Anesthesiologists.

In publishing these guidelines, medical authorities validated these core principles that should underlie obesity care:^{9, 10}

- Obesity is a complex, multifactorial, and chronic disease that requires a comprehensive medical approach to care.
- The goal of obesity treatment is to improve overall health and quality of life, not just to reduce body weight.

- A comprehensive approach to obesity care entails the prevention and treatment of obesity at all stages and for different age groups.
- Care should be evidence-based and utilize the range of safe and effective treatment options available – including intensive behavioral therapy, anti-obesity medications, and bariatric surgery – based on the individual’s degree of obesity and whether the person also has underlying disease.
- There is not a “one size fits all” approach to obesity treatment or care, as treatments do not work the same on everyone.
- Individuals with obesity should be treated with dignity and respect and should not face any type of bias or discrimination based on their size and/or health status
- When it comes to seeking treatment and/or care for obesity, individuals should be afforded with the same rights and access to care as other recognized disease states
- Obesity should be a covered benefit in health insurance, and be both accessible and affordable, for any individual seeking improved health through weight-loss

Yet, these principles are not being followed in a collective way and as a result, obesity is unsuccessfully treated in many Americans. The problem is not a lack of knowledge or effective treatment options. Research shows that intensive behavioral therapy promotes sustained weight loss through high intensity interventions. At the same time, the Food and Drug Administration has approved new prescription anti-obesity medications capable of achieving sizable and sustained body loss.¹¹ Additionally, a number of weight loss surgical procedures are available for people with severe obesity as well as medical problems like heart disease and kidney disease.

The challenge, therefore, is to determine what action steps are needed to accelerate positive change. Towards this end, on December 7, 2021, the National Consumers League and the Obesity Care Advocacy Network (OCAN) hosted an expert panel where public health specialists, leading professional societies, the minority health field, and the obesity policy community assessed the state of the science on obesity today, the scope and cost of the disease in the U.S. and the major barriers impeding quality obesity care.

Of special importance, the expert panel focused on the “human” obstacles that impede quality obesity care. This includes weight bias manifested by stereotypes and prejudice towards people with overweight and obesity, and the stigma among health professionals that cause exclusion and marginalization and leads to poorer outcomes. Additionally, NCL conducted a literature review to gather additional insights, especially regarding how to change how people with obesity see themselves, so they become empowered to advocate for their care as patients with a chronic disease.

What follows is the result of this review, which focuses specifically on mobilizing stakeholders to ensure that all Americans with overweight and obesity are afforded the same access to care as those with other chronic diseases. This means defining obesity as a chronic disease; creating the environment for healthcare providers to screen, diagnose, counsel, and treat obesity; and implementing policies that will enable people with obesity to access quality care, FDA-approved obesity medications and surgical interventions when medically appropriate.

Achieving these goals requires a united front among all constituencies – policymakers, the public health community, minority health leaders, clinicians, patient advocates, and consumer organizations – to confront weight bias and stigma within the healthcare system, change outdated federal policies that restrict coverage and access to anti-obesity treatments, and empower Americans to be stewards of their obesity care. While no

singular effort will change the course of obesity, it is intended that this report will be a catalyst for this necessary and important collaborative effort.

The State of Obesity in the U.S.

To understand the obstacles that contribute to the nation's obesity epidemic, members of the expert panel provided a frank assessment of the prevalence and consequences of overweight and obesity in the U.S. and examined obesity through the lens of health equity. The following is a look at the current state of obesity care – or lack of care – and the factors contributing to poor obesity outcomes.

Obesity Defined

From a medical perspective, obesity is a complex chronic disease in which abnormal or excessive accumulation of body fat impairs health.¹² Using the Body Mass Index or BMI as a screening tool for Caucasians, a healthy weight is defined as having a BMI of 18.5 to less than 25. Overweight is clinically diagnosed as a BMI of between 25 and 29.9 and obesity occurs when the person's BMI is 30 and above. When individuals have a BMI of 40 or more (stage III obesity), they are often more than 100 pounds above their healthy body weight and may have severe obesity, which puts them at highest risk for disability and disease.

While obesity is often discounted as a serious disease, epidemiological studies associate overweight and obesity with decreased survival, poor quality of life, mobility limitations and disability.¹³ In addition, obesity is a comorbid condition for many chronic diseases – meaning the diseases worsen as the degree of obesity increases and conversely, improve as the obesity is treated. Thus, obesity is by far the greatest risk factor contributing to the burden of chronic diseases in the U.S.

The Extent of Obesity in the U.S.

How pervasive are overweight and obesity among the U.S. population? According to Captain Heidi Blanck, PhD, Chief of the CDC's Obesity Prevention and Control Branch, prevalence rates among children/adolescents and adults have reached the highest levels in history.

Translating the results of the 2017–2018 National Health and Nutrition Examination Survey (NHANES), which provide the latest national data on obesity in the U.S. population, Captain Blank reported a significantly increasing trend in obesity from 1999/2000 through 2017/2018. Today, the overall adult obesity rate stands at 42.4 percent, up from 30.5 percent in 1999/2000.¹⁴ When overweight prevalence is combined with obesity rates, 73.6 percent of adult Americans are affected, which translates to nearly three in four adults.

Beyond these statistics, NHANES data on the extent of adult obesity reveal that:¹⁴

- 40 percent of younger adults (aged 20-39) have obesity compared to 44.8 percent of middle-aged adults (aged 40-59),
- 42.8 percent of adults aged 60 and over have obesity, which translates into 27 million Americans,
- Among men, obesity prevalence is highest in those aged 40-59 (46.4 percent), followed by men aged 60 and over (42.2 percent). In younger men aged 20–39, obesity affects 40.3 percent, and
- In young women aged 20-39, four in ten (39.7 percent) have obesity. Among women aged 40-59 and among women aged 60 and above, the number increases to 43.3 percent, respectively.

At the same time, NHANES data document a significant jump in severe obesity. Now, nearly one in ten Americans (9.2 percent) have this medical condition, up from one in 20 nearly two decades ago.¹⁴ More women (11.5 percent) than men (6.9 percent) have severe obesity and rates are highest among adults aged 40-59 (11.5 percent) followed by those aged 20-39 (9.1 percent) and adults aged 60 and over (5.8 percent).

For the public health community, some of the most disturbing findings about obesity in the U.S. involve America's youth. The latest data from CDC reveal that:¹⁵

- Obesity affects about 19.3 percent of U.S. young people, which translates into about 14.4 million children and adolescents.
- Even among very young children (ages 2-5 years) obesity prevalence was 13.4 percent.
- Over one in five children/adolescents ages 6 and above had obesity in 2017/2018. The prevalence rate was 20.3 percent among 6- to 11-year-olds and 21.2 percent among adolescents (ages 12-19 years)
- Obesity prevalence was highest among children of color. The rate was 25.6 percent among Hispanic children and 24.2 percent among non-Hispanic Black children.

Research shows that obesity during childhood can harm the body in a variety of ways. Among the immediate consequences, children with obesity are more likely to have asthma, joint problems and musculoskeletal discomfort, high blood pressure and high cholesterol, type 2 diabetes and other serious medical conditions as well as low self-esteem and psychological problems.¹⁶ Moreover, if children have obesity, their obesity and disease risk factors in adulthood are likely to be more severe in adulthood.

More women (11.5 percent) than men (6.9 percent) have severe obesity and rates are highest among adults aged 40-59 (11.5 percent) followed by those aged 20-39 (9.1 percent) and adults aged 60 and over (5.8 percent).

An Epidemic in Every State

It is not hyperbolic to say that obesity is a public health emergency. Focusing on the extent of obesity across the U.S., Nina Crowley, PhD, RDN, LD, Metabolic and Bariatric Surgery Program Coordinator at the Medical University of South Carolina, reported that obesity now affects over 100,000 million adult Americans¹⁴ and is commonplace in all 50 states, the District of Columbia, and the U.S. territories.

Summarizing the latest state-by-state prevalence rates, Dr. Crowley reported that every state has at least 20 percent of adults with obesity.¹⁷ The data comes from the CDC's Behavioral Risk Factor Surveillance System, an on-going state-based, telephone interview survey conducted by CDC and state health departments. In terms of the geographic spread of obesity, prevalence is highest in the Midwest and South (34.1 percent of the population in both regions) followed by the West (29.3 percent of the population) and the Northeast (28 percent of residents). CDC's data further shows that in 16 states, 35 percent of adults have obesity, putting them at increased risk for disability and disease. These states are Alabama, Arkansas, Delaware, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Ohio, Oklahoma, South Carolina, Tennessee, Texas, and West Virginia.

The Consequences of Obesity

Obesity has a negative impact on almost every aspect of health and well-being, from anxiety and depression to respiratory function and sleep problems. However, it is the link between obesity and increased rates of chronic disease that most worries the public health community. These diseases and disorders are defined as

comorbid conditions for obesity because they worsen as the degree of obesity increases and conversely, improve as the obesity is treated.

The extent of this link is extensive. Dr. Crowley reported obesity is directly associated with more than 230 medical conditions¹⁸ – from type 2 diabetes and heart disease to some forms of cancer. Moreover, because obesity worsens the outcomes of life-threatening diseases like stroke and cancer, approximately 300,000 people die from obesity every year in America,¹⁹ making obesity the second leading cause of preventable death after tobacco. In fact, even moderate weight excess (10 to 20 pounds for a person of average height) increases the risk of death, particularly among adults aged 30 to 64 years.²⁰

Dr. Crowley also pointed to COVID-19 in the U.S. as a cautionary tale for the public health community. Early in the pandemic, clinicians and researchers observed that obesity increases the risk of severe illness from COVID-19 and may triple the risk of hospitalization.²¹ This is because obesity is linked to impaired immune function and decreases lung capacity and reserve, which can make ventilation more difficult.²¹ Of the more than 900,000 adult COVID-19 hospitalizations that occurred in the U.S. between the beginning of the pandemic and November 18, 2020, 271,800 admissions – 30.2 percent – were attributed to obesity.²² A model of COVID-19 outcomes showed that if obesity prevalence had been 25 percent lower at the start of the pandemic, there would have been 119,000 fewer hospitalizations, almost 45,000 less ICU admissions, and 65,000 fewer deaths in the U.S. as of October 2021.²³

The Unequal Burden of Obesity in America

While obesity is widespread among American adults and children, the disease disproportionately affects Black and Brown communities and according to Tammy Boyd, Chief Policy Officer and Counsel for the Black Women’s Health Imperative (BWHI), is one of the most serious health equity and emergency preparedness issues impacting the country.

Compared to 42.2 percent of adult Americans overall, 49.8 percent of non-Hispanic Black adults and 44.8 percent of Hispanic adults have obesity²⁴ and many face pronounced racial and ethnic disparities in obesity prevalence. Putting this into context, African Americans are 1.3 times more likely to have obesity than whites, Hispanics are 1.2 times more likely to have obesity, and four in five Black or Hispanic women have overweight or obesity.²⁵ Moreover, data from the Office of Minority Health show that American Indian and Alaskan Natives are 1.6 times more likely to have obesity and Native Hawaiians/Pacific Islanders are 80 percent more likely to have obesity than white Americans.²⁵

The consequence of these disparities could not be more serious. Today, Black adults are 1.5 times as likely to experience stroke, 40 percent more likely to have high blood pressure and 60 percent more likely to be diagnosed with diabetes than White adults. Additionally, Hispanics are 1.7 times more likely to have diabetes than Whites, Asian Americans are 40 percent more likely to be diagnosed with diabetes, and Native Hawaiians/Pacific Islanders are 2.5 times more likely to have diabetes and 3.9 times as likely to experience a stroke.^{26,27} At the same time, obesity disproportionately impacts Black and Hispanic Americans, who are nearly three times as likely than whites to be hospitalized for severe cases of COVID-19. Minority communities also experience a disproportionate share of COVID-19 deaths.

Although the causes for these disparities are complex and interrelated, higher rates of obesity seen in communities of colors are closely linked to long-standing non-medical factors, called the social determinants of health (SDOH), that have an important influence on health inequities in the U.S. Numerous studies suggest

that SDOH account for between 30 percent and 55 percent of health outcomes²⁸ and can be more important than lifestyle choices in determining the health status of individuals.

Among the social determinants of health contributing to the obesity epidemic among Black and Brown Americans are:

- **Social/Community Context:** Racism, discrimination, and violence in social and medical settings
- **Healthcare Access/Quality:** Limited access to quality healthcare, higher rates of under- or no insurance, lower general health status
- **Economic Stability:** Overrepresentation in essential and lower-wage jobs, higher incarceration rates
- **Education Access/Quality:** Less access to quality education, culturally competent care, and lower rates of health literacy
- **Neighborhood/Environment:** Higher rates of food insecurity and low-nutrition foods, less access to safe and affordable housing, transportation, and physical activity locations.

The Cost of Obesity to the Nation

In terms of dollars spent on medical care, lost wages, absenteeism, lost productivity and other expenditures, the cost of obesity is much too high. Due to its role in causing or worsening chronic disease, overweight/obesity accounted for 47.1 percent of the total direct and indirect costs of treating chronic conditions in 2016. ²⁹Accordingly, some estimates put the national cost of obesity at \$1.72 trillion a year. This includes \$480 billion a year for the direct medical costs of treating obesity-related diseases and conditions, \$2.9 billion in direct costs for childhood obesity, and \$1.24 trillion in indirect costs, which include the economic impact of work absences, lost wages, and reduced productivity of patients and caregivers.²⁹

Research also puts a price tag on the high toll of obesity on the Medicare program, where studies attribute 8.5 percent of total annual Medicare expenditures to obesity-related healthcare costs.³⁰ By this measure, approximately \$70.5 billion of the \$829.5 billion spent by the Medicare Program in 2020³¹ was attributable to obesity. In terms of what individual adult Americans spend, one study, published in 2010, calculated the annual expenditures at approximately \$4,879 for women with obesity and \$2,646 for men.³² More recent estimates associate obesity with nearly \$1,900 in excess medical costs per person.³³

However, the costs of obesity-related expenditures to employers and how they are responding is especially noteworthy for policymakers. According to Gus Georgiadis, Area President of the insurance brokerage firm Arthur Gallagher & Company, obesity is associated with large employer costs from direct healthcare and insurance claims and indirect costs from lost productivity owing to workdays lost due to illness and disability. For example, a study published in 2014 found that employees with a BMI in the healthy weight range (BMI of 18.5-24.9) cost an average of \$4,260 per year in covered medical, sick day, short-term disability and workers' compensation claims whereas employees with overweight (BMI of 25-29.9) cost \$4,729, an 11 percent increase.³⁴ Similarly, a study of injuries among aluminum manufacturer employees found that employees with a BMI of 30 and above experienced 64 percent of these injuries. ³⁵

Recognizing the higher healthcare and disability costs associated with obesity in the workplace, Mr. Georgiadis said that employers are paying attention to research documenting the therapeutic benefit outcomes and reduced costs when obesity is treated. Based on this evidence, a growing number of employers are strengthening their approach to obesity management, by recognizing obesity as a disease and creating a continuum of approaches including incorporating new therapies and surgical options in employee benefit packages. Employers are the largest single provider and purchaser of health insurance in the United States, covering over 150 million workers and their dependents and purchasing 34 percent of all healthcare dispensed

in the country.³⁶ Thus, employers can be a potential force for change that will result in expanded access to comprehensive obesity care.

Understanding the Disease of Obesity and Obesity Care

Obesity is a treatable disease, just like type 2 diabetes and hypertension. Yet, unlike diabetes, hypertension and other serious diseases, obesity remains largely undertreated by healthcare providers with costly repercussions in high rates of obesity-related diseases and preventable deaths. Overcoming this pervasive gap in obesity care requires understanding the disease of obesity, how obesity is diagnosed and treated, and the barriers impeding access to science-based treatment and comprehensive obesity care. The following explains these issues and the implications for systems change.

A Changing Definition

Clinical guidelines define obesity as a complex chronic disease in which abnormal or excess body fat (adiposity) impairs health, increases the risk of long-term medical complications and reduces lifespan.³⁷

However, as the understanding of the disease process of obesity improves, how obesity is defined is starting to change. The emerging thinking is that overeating does not cause obesity, which should help overcome misperceptions among clinicians that having excess weight is usually a person's "fault."

According to B. Gabriel Smolarz, MD, Clinical Associate Professor of Medicine at Rutgers University, the latest science indicates that obesity is due to dysfunctional energy regulation in the brain. This dysfunction promotes signals of hunger in the brain, motivating the individual to overeat, which results in excess accumulation of calories and increased body fat. This understanding has accelerated the development of new prescription drugs that treat obesity by targeting receptors in the brain that control appetite and food cravings. Currently, the Food and Drug Administration (FDA) has approved four anti-obesity medications (AOMs) that reduce appetite by targeting receptors in the brain.³⁸

Mechanisms by Which Excess Body Fat Increases Health Risk

Clinical guidelines for obesity treatment are based on the extent of a person's obesity and the increased risk for poor outcomes from chronic diseases where obesity is a comorbid condition. The current thinking is that excess fat (adiposity) increases health risk through several mechanisms. In terms of osteoarthritis, the heaviness of the excess fat tissue on joints is a significant factor. In fact, studies show that ten pounds of excess weight increases the force on the knee by 30-60 pounds with each step.³⁹

Additionally, fat tissue is known to be an active endocrine organ that releases hormones (such as leptin and insulin) that influence appetite, metabolism, and body fat distribution. In people with obesity, the levels of these hormones lead to too much visceral fat, which in turn increases insulin resistance, blood pressure, LDL cholesterol, and triglycerides and is a major risk factor for metabolic syndrome, type 2 diabetes, and cardiovascular disease.⁴⁰

Why Treat Obesity

There is substantial evidence that modest weight loss (a drop of 5-10 percent) can produce significant improvements in weight-related diseases, including lower blood glucose levels, lower blood pressure, and reduced cholesterol levels. The following findings from clinical studies demonstrate just some of the therapeutic benefits of weight loss:⁴¹

- A weight loss of 5 percent or less achieves a maximum therapeutic benefit for hypertension and hyperglycemia
- A 5- 10 percent loss produces a maximum therapeutic benefit for polycystic ovary syndrome, dyslipidemia, type 2 diabetes prevention, asthma, and non-alcoholic fatty liver disease

- A weight loss of 10-15 percent achieves a maximum therapeutic benefit for cardiovascular disease and such conditions as urinary stress incontinence and GERD
- A 15 to 20 percent weight loss produces remission of type 2 diabetes and a maximum therapeutic benefit for congestive heart failure and cardiovascular mortality
- For every 11 pounds of weight loss in women of normal height, the risk of osteoarthritis drops by 50 percent⁴²

How Obesity Is Diagnosed

Citing the benefits of detection and early intervention to reduce the negative impact of obesity in the U.S. population, in 2012 the United States Preventive Services Task Force (USPSTF) revised its 2003 recommendation statement on screening for obesity and overweight in adults. The updated guidelines recommend screening all U.S. adults aged 18 and above and encourage clinicians to treat or refer adults with a BMI of 30 or higher to intensive, multicomponent behavioral interventions, known as Intensive Behavioral Therapy (IBT).⁴³ Similarly, USPSTF issued screening guidelines that encourage clinicians to evaluate children and adolescents aged 6-19 for obesity, which is defined as having an age- and gender-specific BMI at the 95th percentile.⁴⁴

Based on these recommendations, obesity is diagnosed in adults by using screening tools to determine if there is excessive fat accumulation and how much. Two methods that provide proxy measurements for harmful fat accumulation are to calculate the person's BMI or to measure the individual's weight circumference (which identifies the weight to hip ratio). The other option is to determine excess fat accumulation quantitatively using Magnetic Resonance Imaging (MRI) or scans like Dual-energy X-ray Absorptiometry (DXA), which can measure body fat composition.

How Is Obesity Treated

Once overweight or obesity is diagnosed, clinical practice guidelines provide a roadmap for health professionals to evaluate and treat overweight and obesity. The first step is to classify the person's obesity based on the amount of excess fat accumulation and the risk factors for complications, such as age, smoking, family history and the presence of obesity-related comorbid conditions.

Determined by calculating the person's BMI and other risk factors, there are five categories of overweight and obesity as follows:⁴⁵

- Underweight – BMI of 18.5 or less
- Normal weight – BMI of 18.5-24.9
- Overweight (increased risk) – BMI of 25.0 -29.9
- Stage I Obesity (high risk) – BMI of 30.0 -34.9
- Stage II Obesity (very high risk) – BMI of 35.0 -39.9
- Severe Obesity (extremely high risk) – BMI of 40.0+

Based on these risk categories, obesity treatment guidelines offer health providers a range of evidence-based treatment options to consider– behavioral interventions including behavior modification programs, nutrition counseling, commercial weight-loss programs, and physical activity interventions; prescription anti-obesity medications (AOM); and bariatric surgery. For adults with overweight, the guidelines recommend self-directed lifestyle change (healthy eating, increased physical activity and behavior modification).

When adults have a BMI of 30 or above, the guidelines recommend lifestyle intervention and drug therapy, although anti-obesity medications may be recommended at a lower BMI (27 or greater) when the person has an obesity-related condition, such as hypertension or type 2 diabetes, for example.⁴⁶ Bariatric surgery is recommended for adults who have a BMI of 40 or greater with no comorbid conditions or who have a BMI of 35 and above and significant obesity-related comorbidities, including severe hypertension, type 2 diabetes, or obstructive sleep apnea as some examples.⁴⁶

Due to significant advances in the field of obesity medicine, clinicians today have a range of treatment options that are improving the standard of care for adult Americans with obesity. Over the last decade, a better understanding of the biochemistry, physiology and behaviors that lead to weight gain has produced significant advancements in the field of obesity medicine. The result is new medicines that target control appetite and cravings and achieve significant weight loss. Additionally, recent advances in technologies and non-invasive approaches have made bariatric surgery safer and yielded faster recovery times.

The Barriers Impeding Quality Obesity Care

Despite important advances in the diagnosis and treatment of overweight and obesity, the vast majority of Americans with obesity – as many as 96 percent⁴⁷ – are not receiving quality obesity care. Of the estimated 108 million adults who have obesity,¹⁴ only 30 million have been diagnosed with the disease⁴⁸ and only around 2 percent of those eligible for anti-obesity medications have been prescribed these drugs.⁴⁹ Numerous public perception, provider and policy-related factors contribute to this treatment gap and must be addressed if obesity outcomes are to improve in the U.S.

Public Perception Barriers

A series of related perceptions and beliefs among the American public and those with obesity contribute to the obesity treatment gap. One challenge impeding obesity care is how consumers perceive their weight status. According to research by the Gallop Organization, U.S. adults recognize there is a national obesity problem and increasingly understand the health risks. Yet, many Americans do not connect the nation's

According to research by the Gallop Organization, U.S. adults recognize there is a national obesity problem and increasingly understand the health risks. Yet, many Americans do not connect the

obesity epidemic to themselves. When comparing people's self-reported weight during 2003-2007 with adults' perceptions in 2013-2017, Gallup found that the definition of an "ideal weight" has increased an average of four pounds. This perception, reports Gallup, contributes to many Americans not seeing themselves as having overweight, which aligns with

the finding that they are also less likely to want to lose weight.⁵⁰

Even when people with obesity decide to lose weight, research shows few know the cause of obesity and how to achieve long-term, sustained weight loss. A study from the American Society for Metabolic and Bariatric Surgery (ASMBS) and the Nutrition Obesity Research Center (NORC) of Chicago finds that three-quarters of the public believe obesity results from a lack of willpower and therefore, both overestimate the effectiveness of diet and exercise alone for long-term weight loss and underestimate the effectiveness of medical and surgical treatments. As a result, 20 percent of Americans with obesity have made 20 or more attempts to lose weight through diet and exercise. Yet only one in four reports ever looking into whether their health insurance covers treatments for long-term weight loss and only 3 percent report having some form of weight-loss surgery.⁵¹

Beyond these perception barriers, the stigma of having obesity keeps many affected adults from consulting a physician for counseling and treatment. Due to pervasive weight bias among healthcare professionals (HCPs), patients with excess weight often feel unwelcome in the doctor's office or believe that seeking help for obesity signifies moral failure.⁵² Moreover, physician reluctance to discuss weight status stymies care because people with obesity expect HCPs to raise the topic of excess weight and if they do not, patients may assume their weight status is not a concern.⁵³

Provider-Related Barriers

In 2013, the American Medical Association officially recognized obesity as "a disease state with multiple pathophysiological aspects requiring a range of interventions to advance obesity treatment and prevention."⁵⁴ The goal was to put obesity on a par with other serious chronic diseases, like type 2 diabetes and hypertension, so healthcare professionals (HCPs) will be motivated to diagnose, counsel and treat obesity. A 2013 meta-analysis of 32 published studies on the impact of HCP weight loss counseling on actual changes in

patient behavior found that people with obesity are nearly four times more likely to attempt weight loss when their HCP provides weight loss advice.⁵⁵

Yet, almost a decade later, obesity remains chronically undertreated by healthcare providers. According to published reports, up to 90 percent of people with obesity have not received a formal diagnosis from their physician⁵⁶ and just 4.9 percent of adult office visits in 2011 were for obesity.⁵⁷ Even when obesity is diagnosed, studies show that a minority of PCPs engage in counseling and treatment. A 2012 survey of people with overweight and obesity conducted by the Associated Press-NORC Center for Public Affairs Research found only 29 percent of people with overweight have ever been told by a doctor that they have overweight or obesity. Additionally, just over half of respondents, 53 percent, say their healthcare provider has ever given them advice about strategies to maintain a healthy weight or to lose weight.⁵⁸ When it comes to treating obesity, studies find only 2 percent of U.S. adults eligible for an anti-obesity medication receive the drug.⁵⁹

Why is this the case? According to Donna Ryan MD, Past President of The Obesity Society, numerous barriers keep HCPs from providing effective obesity management, including lack of physician training in obesity. One study of 40 medical schools found only 7.5 percent of these institutions offer obesity as a standalone course while 60 percent integrated elements of obesity education into a broader nutrition or preventive medicine course.⁶⁰ The study also revealed that U.S. medical students receive on average 10 hours of specific obesity education across a four-year curriculum and very few schools cover core strategies to develop a comprehensive obesity management care plan, such as nutrition interventions, physical activity, behavioral interventions, and pharmacological treatments. Other challenges that HCPs cite are limited time for counseling, not enough training in obesity management, inadequate reimbursement for obesity care, and needing better tools to help patients recognize obesity risks.⁶¹

Weight Bias

Among provider barriers, one of the most serious is weight bias, a range of harmful attitudes many HCPs hold about Americans based on their size. Responsible for practitioners behaving in discriminatory ways that impede effective disease management decisions, weight bias is commonplace among a range of health providers – including physicians, nurses, dietitians, mental health professionals and medical students –and remains a socially accepted form of prejudice that is rarely challenged.

How pervasive is the problem? According to the medical literature:

- Weight bias has increased by 66 percent over the previous decade in employment, education and healthcare settings and is equivocal to racial discrimination.⁶²
- Roughly 40 percent of healthcare professionals admit to having negative reactions to patients with obesity.⁶³
- In one study, 69 percent of individuals with overweight/obesity experienced weight bias from physicians, and 52 percent reported experiencing weight stigma from doctors on multiple occasions.⁶⁴
- Three in four medical students (74 percent) in a large study exhibited implicit weight bias (where one's decisions are unconsciously influenced by negative attitudes and stereotypes), and 67 percent showed explicit bias (when individuals are aware of their pre-existing beliefs and make intentional decisions accordingly).⁶⁵
- Primary care physicians spend less time counseling patients with obesity (22.14 minutes for those with serious obesity) compared to those of normal weight (31.13 minutes), according to a national study.⁶⁶

- Around 53 percent of women with obesity reported hearing inappropriate comments about their weight from healthcare professionals. The same study found that women reported weight stigma from nurses (46 percent), dietitians (37 percent) and mental health professionals (21percent) ⁶⁸
- About 52 percent of women say their weight is a barrier to receiving appropriate healthcare. Concerns about weight are also associated with delaying or avoiding preventative care. ⁶⁸
- Weight bias disproportionately affects communities of color. Research conducted for the Obesity Action Coalition reveals that 47 percent of both African Americans and Latinos/Hispanics say they have experienced weight bias compared to 42 percent of all adults. ⁶⁷

At the same time, research on weight bias paints a disturbing picture of how people with obesity are viewed by HCPs. This includes an analysis of more than 700 studies of practitioners in primary care settings, which revealed many HCPs perceive patients with obesity to be lazy, weak-willed, or lacking self-control and respond with contemptuous, patronizing and disrespectful language and actions. ⁶⁸ Common experiences for patients include verbal insults, inappropriate humor, fat shaming, incorrect assumptions about how weight gain occurred, and advice that insinuates a simple solution to a patient’s excess weight. Studies also show people with obesity receive insensitive and rushed communication from health professionals when undergoing preventive screenings and get less emotional rapport during physician visits compared to normal weight patients.

Another consequence of weight bias in healthcare settings is low trust in clinicians’ advice, which further impedes obesity care. Studies show that many people with obesity expect to receive different healthcare treatment because of their size, feel embarrassed about being weighed, and, thus, are less likely to seek medical care. This results in a series of poor health outcomes, including more advanced and poorly controlled chronic diseases and an increased vulnerability to depression, anxiety, low self-esteem, poor body image and suicidal thoughts. ⁶⁸

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Reflecting these disturbing trend, Dr. Ryan stressed that discrimination in healthcare must end. This will require transforming societal attitudes, better education and training for HCPs, programs at major health centers to overcome weight bias in the clinical setting, and enacting laws that prohibit discrimination based on weight.

Access Barriers

Although obesity impacts three in four adult Americans and one in five children and adolescents, only 10 percent of people with obesity get help from medical professionals, ⁶⁹ meaning the disease remains largely undiagnosed and undertreated. What is responsible are access barriers that keep people with obesity from getting the care they need, whether through exclusion of obesity treatments in many insurance plans, restrictive insurance practices that delay or deny treatment, improper equipment in healthcare settings, or out-of-date government policies.

Addressing what actions are necessary to improve access to care for obesity, Joe Nadglowski, President and CEO of the Obesity Action Coalition (OAC), stressed the importance of expanding insurance coverage for obesity treatment services. While government and commercial insurers will pay for treating conditions like hypertension and diabetes caused or worsened by obesity, he said the picture is very different when the

disease is obesity itself. In fact, he reported a disturbing trend across the country as employers and insurance companies completely exclude obesity management services and place significant barriers in front of individuals before they can use their insurance to help cover the cost of weight counseling, medications, or surgery.

As a step in the right direction, the Affordable Care Act (ACA) requires that most health insurers cover obesity screening and counseling with no out-of-pocket costs as preventative care, and diet counseling is also available for adults at higher risk of chronic disease. Even so, studies show that obesity is underdiagnosed in primary practice and many diagnosed patients do not receive adequate counseling.⁷⁰ On the other hand, the ability of people to access the full contingent of treatment for obesity, which includes intensive behavioral therapy (IBT), prescription anti-obesity medications and bariatric surgery, remains limited. Moreover, coverage for these treatments and services depends on whether the beneficiary is insured by a commercial health plan, a government employee health plan, Medicare or Medicaid.

Starting with commercial insurers, most large group plans cover IBT and at least some weight loss surgeries. However, this is not the case for new and effective weight loss drugs where a scant 2.4 percent of people with obesity now receive FDA-approved anti-obesity medications for long-term use.⁷¹ Based on outdated notions about the safety of obesity drugs tracing back to the Fen-Phen withdrawal in the 1990s, only a third of private plans cover treatment with AOMs and another third cover AOMs with limits and restrictions.⁷² This means a third of commercial health plans do not cover these drugs at all.

A similar pattern of coverage exists for health plans regulated by the states. Regarding individual, family and small group plans (less than 50 employees) subject to ACA provisions, 16 states mandate coverage for dietary or nutritional screening, counseling and/or therapy for obesity while another seven require coverage, but only with a diabetes-related diagnosis or treatment.⁷³ Additionally, 23 states require some coverage for bariatric or gastric bypass surgery.⁷² Similarly, under state Medicaid programs, 49 states cover one or more types of weight loss surgery, 41 states allow for at least one obesity screening and counseling visit, 20 states allow for at least one nutritional counseling visit but only 16 cover one or more AOMs.⁷⁴

As to government employee health plans, 43 states cover one or more surgical procedures, and 42 states cover at least one obesity screening and counseling visit and at least one nutritional counseling visit. However, only 23 states cover one or more anti-obesity medications for state employees and their families.⁷³ The most comprehensive coverage is available to federal employees due to Office of Personnel Management requirements that health plans cover the full range of obesity treatment options, including bariatric surgery and anti-obesity drugs.⁷⁵ In fact, in calendar year 2023, federal employee health plans as well as Tri-Care, which covers military personnel and their families, and the Veterans Administration must cover AOMs for adults who do not achieve weight loss goals through diet and exercise alone.

This leaves the Medicare program, which today represents the biggest obstacle impeding access to quality obesity care. The good news is Medicare fully covers bariatric surgery for beneficiaries with a BMI of 35 and above, even though the number of beneficiaries who have this surgery is extremely low. At the same time, Medicare covers IBT for adults with a BMI of 30 and over. However, coverage of IBT is limited to primary care providers in primary care settings, which excludes obesity medicine specialists, registered dietitians, psychologists, or evidence-based community-based programs from delivering IBT and severely restricts the physical locations in which this care can occur. The result is that very few medical practices provide IBT for Medicare beneficiaries and less than one percent of qualified beneficiaries now get this counseling.⁷⁶

Even more problematic, FDA-approved anti-obesity medications are part of a short list of excluded drug categories in Medicare, including hair loss drugs, erectile dysfunction medication, and cold and flu treatments. When Congress passed Part D in 2003, these categories were meant to exclude cosmetic or traditional over-the-counter treatments. Yet, despite the latest science on obesity as a serious chronic disease and major advances in drug discovery, Medicare Part D remains unchanged. This leaves millions of seniors, particularly members of Black and Latino communities, vulnerable to disability, disease, and premature death due to lack of treatment.

To close these treatment gaps, policymakers must remove the statutory prohibition on Medicare Part D coverage for FDA- approved anti-obesity drugs and permit all qualified health practitioners to provide IBT to Medicare beneficiaries. Accordingly, more than 100 obesity, nutrition, public health, aging and consumer organizations have pressed for swift passage of The Treat and Reduce Obesity Act or TROA (H.R. 1577 and S.596) which, if enacted, will finally give Medicare beneficiaries access to the full array of obesity treatment options.

At the same time, advocates are calling for an end to the discriminatory policies used by health plans to delay or deny coverage for bariatric surgery, anti-obesity medications, and meetings with dietitians. As stated earlier, some health plans exclude obesity treatments completely. Among plans that include obesity treatments, insurers routinely employ a range of “utilization management” practices that place unneeded restrictions on patients and clinicians to access this care. In the case of AOMs, health plans regularly require “prior authorization” where the health provider must obtain advance approval from the health plan before the medication will be covered. In a 2010 American Medical Association survey of 2,400 physicians, two-thirds reported waiting several days to receive authorization for prescribed drugs, while 10 percent waited more than a week.⁷⁷

Another burdensome practice called “step therapy” is often used to delay coverage of both AOMs and bariatric surgery. In the case of prescription weight-loss drugs, patients must take and fail on less expensive treatment first before the insurer will authorize the AOM prescribed by the provider. With bariatric surgery, plans often require a different type of step therapy in which patients must undergo a medically supervised weight management (MWM) first, adding 4-6 months to the time before the surgery is approved.⁷⁸ Moreover, insurers often require high co-pays for prospective bariatric surgical candidates, which many patients cannot afford.

Further complicating matters, Americans obtain health insurance through a variety of public and private sources that operate under different financial constraints, priorities, rules, and regulations. As a result, improving insurance coverage for obesity care is a challenging task that will require action from payers, providers, policymakers, and advocates. Towards this end, the STOP Obesity Alliance convened a group of experts to develop a practical, tangible, measurable and simple standard of care for the treatment of adult obesity. The product of this effort, a Proposed Standard of Obesity Care for All Providers and Payers, was published in the July 2019 issue of the journal *Obesity*⁷⁹ and represents an important step forward in improving the obesity care benefits offered across plan types and payers.

The People-Centered Obesity Agenda

Mounting evidence shows that obesity is pervasive and costly. Obesity affects an increasing number of both children and adults, is prevalent in every state, and disproportionately impacts communities of color. The consequence for the nation is higher rates of disability and preventable diseases, a lower quality of life for people with obesity, and too often, premature death.

Due to the nature and extent of this public health threat, the American Medical Association officially recognized obesity as a disease requiring treatment and numerous professional societies have published clinical practice guidelines. Additionally, the U.S. Preventive Services Task Force issued guidance recommending that children and adolescents ages 6-19 be evaluated for obesity and that all U.S. adults aged 18 and above be screened for obesity and overweight. USPSTF further encourages clinicians to treat or refer adults with a BMI of 30 or higher with Intensive Behavioral Therapy (IBT).

But no amount of medical recommendations will move the needle in combatting obesity if the intractable “human” factors continue to prevent Americans from seeking care and keep IBT, FDA-approved obesity medications and surgical interventions out of people’s reach. These obstacles – incorrect beliefs about the cause of obesity, prejudice towards people due to their size, lack of training for health providers about the disease of obesity, access barriers to treatments and outdated government policies – persist because obesity remains overlooked as a serious health issue.

Because the stakes are so high, NCL played the role of a convenor in catalyzing stakeholders to advance meaningful policy solutions. This entailed working with the Obesity Care Advocacy Network to hold an expert panel meeting where leaders in their fields assessed the current “state” of obesity care and clinicians and advocates participated in a roundtable that focused on ways to close the gap in screening and treatment.

From this discussion, the expert panel identified these basic requirements for bringing about meaningful change:

- Destigmatize and correct misperceptions about obesity, its causes and the effectiveness of treatment options
- End the pervasiveness of weight bias in healthcare system with solutions for clinicians and patients as healthcare consumers
- Confront the inequities in obesity care among communities of color
- Expand the opportunities for diagnosing overweight and obesity in a variety of settings
- Eliminate the regulatory restrictions that limit patient access to specialists in obesity medicine and nutrition
- Advance common-sense policy solutions to expand access to comprehensive obesity care
- Overcome the reluctance of people with obesity to seek care by empowering them to advocate for their care as patients with a chronic disease.

Based upon the findings from the expert panel meeting and the principles articulated to improve the lives of people with overweight and obesity, NCL conducted further research to consider ways to mobilize stakeholders around **a new people-centered obesity action agenda** that will change how Americans think about obesity, empower patients with obesity to get the best care, and afford people with obesity the same rights and access to care as other serious chronic diseases.

Ultimately involving the support and active participation of many stakeholders – policymakers, professional societies and healthcare practitioners, health educators, and patient advocates -- this platform calls for action in the following areas:

1. Redefine Obesity for the American Public as a Treatable Chronic Disease

Today the American Medical Association classifies obesity as a disease requiring treatment and newer scientific understanding indicates that obesity is due to dysfunctional energy regulation in the brain. Yet, three-quarters of American adults still believe obesity results from a voluntary lack of willpower to consume less calories. Redefining obesity as a treatable chronic condition and linking it to common diseases, such as hypertension and type 2 diabetes, will provide a new context for health providers and patients to have a positive discussion about weight, building trust and enhancing the patient-physician relationship.

2. Adopt Patient-First Language for Obesity

When health professionals interact with patients with chronic disease, they routinely use people-first language, which puts a person before a diagnosis, describing what condition a person "has" rather than asserting what a person "is. The exception is obesity, where terms often used to describe excess weight can be off-putting and demoralizing. To change this situation, the National Consumers supports the agenda of the People-First Initiative, which advocates for widespread adoption of people-first language by practitioners in all healthcare settings. Launched by the Obesity Action Coalition, the initiative also encourages all producers of content about obesity to use person-first language. This includes authors and editors of journal articles, the print and broadcast media, public health departments, disease organizations, patient groups, healthcare providers and insurers.

3. Make Combatting Weight Stigma a National Priority

Discrimination toward people with obesity is common in America. Studies show that 40 percent of healthcare professionals –physicians, nurses, dietitians, psychologists, and medical students – admit to having negative reactions based on a person’s size. Addressing this pervasive problem requires a unified and sustained national initiative that makes the impact of weight stigma “real” for clinicians and the public and disseminates the latest information to health providers on strategies to reduce weight stigma. This includes conducting national awareness campaigns, making existing resources on reducing weight stigma widely available to health professionals, and communicating evidence-based solutions, such as the move by hospitals, clinics, and large physician practices to use scales, blood pressure cuffs, chairs and patient gowns that accommodate higher weights.

4. Elevate the Need for Physician Training in Obesity

Physicians are currently unprepared to treat patients with obesity and the lack of training in medical schools and residency programs is a contributing factor. Accordingly, leading obesity medicine societies formed the Obesity Medicine Education Collaborative (OMEC) in 2016⁸⁰ and developed the first set of obesity-related core competencies as a framework for medical, nursing, and physician assistant educators to develop an obesity medicine curriculum at their respective institutions. Yet, little progress has been made since OMEC published the core competencies in 2019. A recent study of 40 U.S. medical schools finds that 30 percent of the institutions provide little or no education in nutrition and behavioral obesity interventions, on appropriate communication with patients with obesity, or pharmacotherapy. Further, one third of schools reported no obesity education program in place and no plans to develop one due to lack of room in the curriculum.⁸¹ These findings underscore the urgency for U.S. medical schools to change their priorities and develop curricula that comprehensively addresses the disease of obesity.

5. Establish Weight as a Vital Sign

There is a reason vital signs include the word “vital.” The measurements provide critical information about a person’s health status. In addition to body temperature, blood pressure, heart rate and respiration, health providers routinely measure height and weight at each visit. Thus, if healthcare professionals were to calculate the patient’s BMI while the individual was in the clinical setting, practitioners would have a measurement to start the discussion about excess weight in real time. It is recognized that BMI is a crude measure and not the sole predictor of obesity and this should be addressed with the patient. However, when combined with patient-friendly informational materials that explain the level of weight and options for treatment, this interaction could initiate a positive, respectful conversation about obesity care at a time when patients are most receptive to discussing their health status. If this practice becomes routine, many more Americans will understand that obesity is treatable and learn that different options are available to them to achieve a healthy weight.

6. Provide the tools for a Doctor-Patient Dialogue on Excess Weight

Just as the obesity medicine community formed the Obesity Medicine Education Collaborative to spur the development of an obesity curriculum, a key priority is creating a structure for obesity stakeholder organizations to produce informational tools that will assist primary care providers when having conversations with patients about their weight status and care options. Currently, HCPs cite lack of patient information tools as a barrier to providing obesity counseling. Thus, a unified effort by government agencies, professional societies, non-profit consumer groups, and chronic disease organizations to produce and make available evidence-based, patient-friendly content on the diagnosis, treatment, and management of overweight and obesity will facilitate a better dialogue between clinicians and patients and promote shared decision-making.

7. Establish Coverage of Obesity as a Standard Benefit Across Insurers and Health Plans

Today, many employers and insurers exclude obesity management services or place access barriers, such as requiring step therapy and prior authorization, which delay or deny treatment. The consequences of these practices are obvious: obesity remains largely undiagnosed and undertreated, accelerating the prevalence and increasing the expenditures for costly chronic diseases.

The good news is employers are waking up to the costs of untreated obesity and starting to cover behavioral, medical, pharmaceutical and surgical options in employee benefit packages. This includes the Office of Personnel Management (OPM), which requires that Federal Employee Health Benefits (FEHB) plans cover the full range of obesity treatment options, including bariatric surgery and anti-obesity drugs.⁷⁵ In fact, in calendar year 2023, federal employee health plans as well as Tri-Care, which covers military personnel and their families, and the Veterans Administration must cover AOMs for adults who do not achieve weight loss goals through diet and exercise alone.

But this is the tip of the iceberg. Improving obesity outcomes requires supporting legislative efforts, like the “Safe Step Act” that would require group health plans to provide an exception process for step-therapy protocols. It also necessitates collaboration among payers, providers, policymakers, and advocates to establish a standard, affordable benefit for the prevention and treatment of obesity that applies across plan types and payers. Here, the Proposed Standard of Obesity Care for All Providers and Payers developed by the STOP Obesity Alliance provides a framework for starting this process.

8. End Outdated Medicare Rules That Exclude Coverage for Necessary Obesity Care

In October 2021, 63.9 million people were enrolled in the Medicare program,⁸² or almost 20 percent of the US population.⁸³ Around 54 million of these Medicare beneficiaries are adults aged 65 and above⁸⁴ who, due to

age, are most likely to have multiple chronic conditions. In fact, today, about two-thirds of older adults on Medicare have two or more chronic conditions and more than 15 percent have six or more.⁸⁵ Thus, the importance of treating obesity in the Medicare population is vital, especially since obesity is directly linked to over 230 chronic diseases.

Yet, despite progress in better obesity benefits for federal employees, Americans enrolled in the Medicare program face significant obstacles to receiving safe and effective obesity treatment. Outdated Medicare Part D rules exclude coverage for FDA-approved anti-obesity medications and Medicare Part B places undue restrictions on intensive behavioral therapy by allowing only primary care providers to deliver IBT and severely restricting the physical locations where this care can occur. Congress has the power to change this situation, which is why NCL joins the obesity, public health and nutrition communities in pressing for swift passage of the Treat and Reduce Obesity Act (TROA). Not only would TROA expand Medicare coverage to allow access to IBT from a diverse range of healthcare providers, but it would also end the exclusion on coverage for a new class of anti-obesity medications that are improving the standard of care for adult Americans with obesity. And, since health insurance companies closely align coverage decisions with Medicare policy, passing TROA may also result in increased insurance coverage for obesity-related care for all Americans.

9. Create a Patients' Bill of Rights for People with Obesity

For too long, people with obesity have encountered a healthcare system that is working against them. They have been stigmatized, discriminated against, not treated with respect by their health providers, and have faced significant hurdles and burdensome requirements to receive care. On behalf of these Americans, the National Consumers League says enough! Now is the time to give people with obesity the knowledge, skills, and confidence to be advocates for their best obesity care. This can be accomplished by working with organizations representing people with obesity to create a *Patients' Bill of Rights for People with Obesity* that starts with the recognition that obesity is a treatable disease and that everyone with obesity deserves the same level of attention and care as those with other chronic conditions. Simply put, overcoming the barriers to quality obesity care requires changing how people with obesity think about themselves, empowering them to be equal partners with their health providers in decisions about their care, and mobilizing them as advocates to demand the same quality care and access to treatments as patients with the 230 chronic conditions where obesity is a significant factor.

The Time is Now

Implementing a people-centered obesity action agenda is essential to reducing the adverse health outcomes and economic consequences associated with the nation's epidemic of obesity. Although there has been significant progress in the science of obesity, consensus on the diagnosis and treatment across the disease continuum, and important advancements in therapeutic options, the simple fact is intractable "human" factors continue to keep quality obesity care out of reach.

While no single strategy will guarantee that patients with obesity get the care they need and deserve, it is hoped that the priorities identified in this report will serve as a catalyst for action and offer realistic goals for improving the lives of people with overweight and obesity. Now is the time to make a difference.

References

- ¹ Centers for Disease Control and Prevention (CDC). Hales CM, et al. Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017-2018. NCHS Data Brief No. 360, February 2020
- ² Finkelstein EA1, et al. Annual medical spending attributable to obesity: payer-and service-specific estimates. Health Aff (Millwood). 2009 Sep-Oct;28(5):w822-31
- ³ Haththotuwa RN, et al. Obesity and Obstetrics (second Edition), Chapter 1: Worldwide epidemic of obesity. 2020, pages 3-8. Accessible at: <https://www.sciencedirect.com/science/article/pii/B9780128179215000011#!>
- ⁴ World Health Organization. Obesity and overweight. June 9, 2021. Accessible at: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight#:~:text=Worldwide%20obesity%20has%20nearly%20tripled,years%20and%20older%2C%20were%20overweight.&text=Most%20of%20the%20world's%20population,overweight%20or%20obese%20in%202020.>
- ⁵ Obesity Care Advocacy Network. Fact Sheet: Obesity Care Beyond Weight Loss
- ⁶ Allison DB, et al. Annual deaths attributable to obesity in the United States JAMA 1999Oct 27 282(16)1530–8.
- ⁷ Department of Health and Human Services. Office of the Surgeon General (U.S.). The Surgeon General’s Vision for a Healthy and Fit Nation. 2010.
- ⁸ NHLBI Obesity Education Initiative Expert Panel on the Identification, Evaluation, and Treatment of Obesity in Adults (U.S.). National Heart, Lung and Blood Institute. 1998 Sept. Report No.: 98-4083
- ⁹ Obesity Action Coalition. Our Beliefs and Demands. Accessible at: www.obesityaction.org/about/purpose/beliefs-and-demands
- ¹⁰ STOP Obesity Alliance. Dietz WH, Gallagher C. A Proposed Standard of Obesity Care for All Providers and Payers. Obesity (2019) 27, 1059-1062
- ¹¹ National Institute of Diabetes and Digestive and Kidney Diseases. Prescription Medications to Treat Overweight and Obesity. January 23, 2021. Accessible at: <https://www.niddk.nih.gov/health-information/weight-management/prescription-medications-treat-overweight-obesity>
- ¹² World Health Organization. Obesity. https://www.who.int/health-topics/obesity#tab=tab_1
- ¹³ The Surgeon General’s Call to Action To Prevent and Decrease Overweight and Obesity.2001
- ¹⁴ Hales CM,, et al. Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017-2018. Centers for Disease Control and Prevention. NCHS Data Brief. No. 360. February 2020.
- ¹⁵ Center for Disease Control and Prevention. Childhood Obesity Facts. Prevalence of Childhood Obesity in the United States. April 5, 2021. Accessible at: <https://www.cdc.gov/obesity/data/childhood.html#:~:text=Prevalence%20of%20Childhood%20Obesity%20in%20the%20United%20States&text=The%20prevalence%20of%20obesity%20was,to%2019%2Dyear%2Dolds.>
- ¹⁶ Center for Disease Control and Prevention. Childhood Obesity CaU.S.es & Consequences. March 19, 2021. Accessible at: <https://www.cdc.gov/obesity/childhood/caU.S.es.html>
- ¹⁷ Centers for Disease Control and Prevention. CDC 2020 Adult Obesity Prevalence Maps.
- ¹⁸ Obesity Care Advocacy Network. Fact Sheet: Obesity Care Beyond Weight Loss
- ¹⁹ Allison DB, et al. Annual deaths attributable to obesity in the United States JAMA 1999Oct 27 282(16)1530–8.
- ²⁰ Calle EE, et al. Body mass index and mortality in a prospective cohort of U.S. adults N Engl J Med1999 Oct 7 341(15)1097–105.
- ²¹ CDC. Obesity, Race/Ethnicity, and COVID-19. Accessible at: <https://www.cdc.gov/obesity/data/obesity-and-covid-19.html>
- ²² O’Hearn M, et L. CoronavirU.S. Disease 2019 Hospitalizations Attributable to Cardiometabolic Conditions in the United States: A Comparative Risk Assessment Analysis. Journal of the American Heart Association. 2021 Feb;10(5):e019259
- ²³ AmeriSourceBergen. Xcenda. The impact of obesity on COVID-19 outcomes of hospitalizations and mortality. Accessible at: https://www.xcenda.com/-/media/assets/xcenda/english/content-assets/white-papers-issue-briefs-studies-pdf/xcenda_covid_obesity_update_june2021.pdf?la=en&hash=5F2453A6E21F811539ACCF3EB6D0F67064BA9C5E
- ²⁴ Hales CM,, et al. Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017-2018. Centers for Disease Control and Prevention. NCHS Data Brief. No. 360. February 2020.
- ²⁵ HHS Office of Minority Health, HHS (2020). “Obesity and African Americans.” <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=25>
- ²⁶ CDC (2021), “Adult Obesity Facts”
- ²⁷ CDC (2021), “Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018”
- ²⁸ World Health Organization. Social Determinants of Health. https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1
- ²⁹ Milken Institute (October 2018), “America's Obesity Crisis: The Health and Economic Costs of Excess Weight.”
- ³⁰ ASMBS Access to Care Fact Sheet. May 2011.
- ³¹ Centers for Medicare and Medicaid Services, National Health Spending in 2020 Increases due to Impact of COVID-19 Pandemic. December 15, 2021. <https://www.cms.gov/newsroom/press-releases/national-health-spending-2020-increases-due-impact-covid-19-pandemic#:~:text=Medicare%20spending%20totaled%20%24829.5%20billion,growth%20of%202.1%25%20in%202019.>

- ³² Dor A, et al. A Heavy Burden: The Individual Costs of Being Overweight and Obese in the United States. The George Washington University School of Public Health and Health Services. September 21, 2010.
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.173.3487&rep=rep1&type=pdf>
- ³³ Ward ZJ, et al. Association of body mass index with healthcare expenditures in the United States by age and sex. PLOS ONE. March 24, 2021.
- ³⁴ Van Nuys K, et al. The Association between Employee Obesity and Employer Costs: Evidence from a Panel of U.S. Employers. May 2014. AJHP 28(5):277-285
- ³⁵ Dement OT, et al. Obesity and workers' compensation: Results from the Duke Health and Safety Surveillance System. Arch Inter Med. 2007; 167:766-773.
- ³⁶ Harvard BU.S.iness Review. To Control Healthcare Costs, U.S. Employers Should Form Purchasing Alliances. November 2, 2018.
<https://hbr.org/2018/11/to-control-health-care-costs-u-s-employers-should-form-purchasing-alliances#:~:text=Employers%20are%20the%20largest%20single,can%20rival%20America's%20bU.S.iness%20community.>
- ³⁷ Prospective Studies Collaboration. Whitlock G, et al. Body-mass index and caU.S.e-specific mortality in 900,000 adults: collaborative analyses of 57 prospective studies. Lancet 2009;373:1083–96
- ³⁸ National Institute of Diabetes and Digestive Diseases. Prescription Medications to Treat Overweight & Obesity. June 2021. <https://www.niddk.nih.gov/health-information/weight-management/prescription-medications-treat-overweight-obesity>
- ³⁹ Felson DT: Weight and osteoarthritis. J Rheumatol. 1995;43:7-9
- ⁴⁰ Bays H. Central obesity as a clinical marker of adiposopathy; increased visceral adiposity as a surrogate marker for global fat dysfunction. *Curr Opin Endocrinol Diabetes Obes.* 2014 Oct;21(5):345–51.
- ⁴¹ Ryan, DH et al. Weight loss and improvement in comorbidity: differences at 5%, 10%, 15%, and over. Current Obesity Reports, 2017;6(2), 187-194.
- ⁴² Felson DT: Weight and osteoarthritis. J Rheumatol. 1995;43:7-9
- ⁴³ U.S. Preventive Services Task Force. Screening for and management of obesity in adults. Ann Intern Med. 2012;157(5):373-378.
- ⁴⁴ U.S. Preventive Services Task Force. Screening for Obesity in Children and Adolescents :U.S. Preventative Services Recommendation Statement. PEDIATRICS Volume 125, Number 2, February 2010
- ⁴⁵ Weir CB, et al. BMI Classification Percentile and Cut Off Points. [Updated 2021 Jun 29] StatPearls [Internet]. 2022 Jan
- ⁴⁶ American Academy of Family Physicians. Obesity in adults (screening for and management).
https://www.aafp.org/dam/AAFP/documents/patient_care/fitness/obesity-diagnosis-mono.pdf
- ⁴⁷ Stokes et al. Obesity 2018;26:814-818
- ⁴⁸ PharMetrics-Ambulatory EMR database, 2018. Novo Nordisk Inc.
- ⁴⁹ Kanj A, et al. Overcoming obesity: weight loss drugs are underused. Cleveland Clinic Journal of Medicine October 2020, 87 (10) 602-604
- ⁵⁰ Gallup. Americans Weight More, but Shun “Overweight” Label. November 22, 2017.
<https://news.gallup.com/poll/222578/americans-weigh-shun-overweight-label.aspx>
- ⁵¹ NORC at the University of Chicago.
- ⁵² Gunther S, et al. Barriers and enablers to managing obesity in general practice: a practical approach for U.S.e in implementation activities. Qual Prim Care. 2012; 20: 93-103
- ⁵³ Bravender T, et al. Teen CHAT: development and utilization of a web-based intervention to improve physician communication with adolescents about healthy weight. Patient Educ Couns. 2013; 93: 525-531
- ⁵⁴ Advisory Board. AMA declares obesity a disease. June 18, 2013. <https://www.advisory.com/daily-briefing/2013/06/18/ama-is-obesity-a-disease>
- ⁵⁵ Rose SA, et al. Physician weight loss advice and patient weight loss behavior change: a literature review and meta-analysis of survey data. Int J Obes (Lond). 2013; 37:118-128
- ⁵⁶ Crawford AG, et al. Prevalence of obesity, type II diabetes mellitU.S., hyperlipidemia, and hypertension in the United States: findings from the GE Centricity Electronic Medical Record database. Popul Health Manag. 2010; 13: 151-161
- ⁵⁷ Talwalkar A, et al. Characteristics of physician office visits for obesity by adults aged 20 and over: United States, 2012. NCHS Data Brief. 2016; 1-8
- ⁵⁸ Associated Press-NORC Center for Public Affairs Research. Obesity in the United States: Public Perceptions. January 2013/
- ⁵⁹ Velazquez A, et al. Updates on obesity pharmacotherapy. Ann NY Acad Sci 2018; 1141(1); 106-119
- ⁶⁰ Butch WS, et al. Low priority of obesity education leads to lack of medical student' preparedness to effectively treat patients with obesity; results from the U.S. medical school obesity education benchmark study. BMC Med Educ 20, 23 (2020)
- ⁶¹ Petrin C, et al. Current attitudes and practices of obesity counselling by healthcare providers. Obes Res Clin Pract. May-Jun 2017;11(3):352-359
- ⁶² Andreyeva T, et al. Changes in perceived weight discrimination among Americans, 1995-1996 through 2004-2005. Obesity 2008; 16(5); 1129-1134
- ⁶³ Fruh SM, et al. Obesity Stigma and Bias. J Nurse Pract. 2016 Jul-Aug; 12(7): 425–432.

-
- ⁶⁴ Puhl RM, et al. Confronting and coping with weight stigma: an investigation of overweight and obese adults. *Obesity*. 2006. Oct;14(10):1802-15.
- ⁶⁵ ACP Internist. Doctor, your weight bias is showing. February 2017 *Int J Obes Relat Metab Disord*. 2001;25(8):1246–1252
- ⁶⁶ Hebl MR, et al. Weighing the care: physicians' reactions to the size of the patient.
- ⁶⁷ Obesity Action Alliance. Weight Bias in Racial and Ethnic Groups. <https://stopweightbias.com/weight-bias/weight-bias-in-racial-and-ethnic-groups/>
- ⁶⁸ Alberga AA, et al. Weight bias and healthcare utilization: a scoping review. *Prim Healthcare Res Dev*. 2019; 20: e116.
- ⁶⁹ Stokes A, et al. Prevalence and Determinants of Engagement with Obesity Care in the United States. *Obesity*. Vol. 26, Issue 5; May 2018, 814-818
- ⁷⁰ Rose S, et al. Physician weight loss advice and patient weight loss behavior change: a literature review and meta-analysis of survey data. *Int Obes* 2013;37:118-128
- ⁷¹ Elangovan A, et al. Pharmacotherapy for Obesity- Trends U.S.ing a Population Level National Database. *Obes Surg* 2021 Mar;31(3):1105-1112.
- ⁷² Kaiser Health News. Many Insurers Do Not Cover Drugs Approved to Help People Lose Weight. January 6, 2015
- ⁷³ National Conference of State Legislatures. Health Reform and Health Mandates for Obesity. January 23, 2019.
- ⁷⁴ Jannah N, et al. Coverage for Obesity Prevention and Treatment Services: Analysis of Medicaid and State Employee Health Insurance Programs. *Obesity*. Vol. 26, Issue 12. December 2018:1834-1840.
- ⁷⁵ U.S. Office of Personnel Management. FEHB Carrier Letter No. 2014-04. March 14, 2014,
- ⁷⁶ Bipartisan Policy Center. Expanding Access to Obesity Treatments for Older Adults. February 2022.
- ⁷⁷ American Medical Association. Standardization of prior authorization process for medical services white paper. June 2011.
- ⁷⁸ ASMBS. Horwitz D, et al. Insurance-Mandated Medical Weight Management Before Bariatric Surgery. May 2016.
- ⁷⁹ Dietz WH, et al. A Proposed Standard of Obesity Care for All Providers and Payers. *Obesity*. 2019 Jul;27(7): 1059-1062
- ⁸⁰ KU.S.hner RF, et al. Development of Obesity Competencies for Medical Education: A Report from the Obesity Medicine Education Collaborative. *Obesity*, July 2019; Vol 27, Issue 7; 1063-1067
- ⁸¹ Butsch SW, et al. Low priority of obesity education leads to lack of medical students' preparedness to effectively treat patients with obesity: results from the U.S. medical school obesity education benchmark study. *BMC Med Educ* 20, 23 (2020)
- ⁸² Centers for Medicare & Medicaid Services. CMS Releases Latest Enrollment Figures for Medicare, Medicaid and Children's Health Insurance Program. December 2021
- ⁸³ Statista. Resident population of the United States by sex and age as of July 1, 2020
- ⁸⁴ HHS Administration for Community Living. 2020 Profile of Older Americans. May 2021.
- ⁸⁵ Lochner KA, et al. Country-Level Variation in Prevalence of Multiple Chronic Conditions Among Medicare Beneficiaries, 2012. *Prev Chronic Dis* 2015;12:140442.