Optum | Optum Life Sciences

Funded by and developed in collaboration with Novo Nordisk.

Obesity Health Disparities

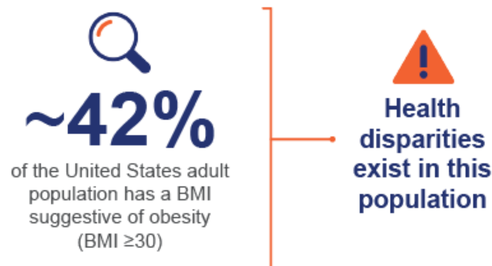
Examining the relationship between health equity and obesity for commercial health plan members with overweight and obesity status.

Introduction

Specific health and healthcare disparities exist among people living with overweight and obesity, and these conditions can adversely affect employee productivity and raise absenteeism rates.[1,2] Barriers to access care can ultimately lead to further health complications.[1] All of these factors can impact payer coverage of obesity treatment options. Novo Nordisk and Optum Life Sciences are working together to better understand these disparities in the privately insured population. A retrospective data analysis was conducted to uncover potential opportunities for enhancements to employer-sponsored health plans that would address unmet needs. It examined social determinant of health (SDoH) risks and access barriers to obesity care (*see appendix for the study design*).[3]

Background

Overweight and obesity are complex diseases with biological, psychological, social, and environmental influences.[4] Individuals with overweight or obesity are at an increased risk for many health conditions that have been shown to increase morbidity and mortality.[5,6] In 2017 to 2018, approximately 42.4% of the United States adult population had a body mass index (BMI) suggestive of obesity, and when accounting for both obesity (BMI ≥30) and overweight (BMI 25.0-29.9), the number increased to 73.1%.[7]



When examining the private health plan population, specifically commercial coverage, this burden of disease is still prevalent. Although commercial health plan coverage is perceived as comprehensive, enrollees face varying challenges in accessing care, especially for enrollees of racial/ethnic minority backgrounds and those with low or modest incomes.[8] These challenges can often lead to health disparities, which impact the management of chronic conditions, such as obesity.[8] Associations exist between health disparities and the SDoH risks,[1] and understanding this association is important to improve access to care and the management of obesity.[1,9]

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Analysis

Overweight and Obesity Care Challenges

Employer-based coverage plans, which account for a majority of non-elderly, commercial health plan members in the United States,[10] do not share a standard offering for overweight and obesity treatment.[11] Offerings vary by plan and employer. [10] State and federal requirements for obesity care, ranging from screening to intervention therapies, also influence access to overweight and obesity care, leaving additional variance in coverage for overweight and obesity treatment across the membership.[1]

13% of employees

said they were **even aware** that their employer **offered weight-management** solutions.[13,a]

32% of United States employers

offer weight-management programs, but the features of the weight-management platforms vary by employer.[12,b]

<10% of employees

participate in employer health programs, and there is variation in participation rates by demographics.[14,c]

While highly variable, obesity care coverage is important to employees. Although the weight-management solutions offered by employers do not always include access to obesity treatment, there are still other weight-management options offered by employers; 32% of employers offer some program,[12,b] but these programs are being overlooked by employees. Only 13% of employees with obesity care coverage were even aware their employer offered weight-management solutions.[13,a] Additionally, employee participation remains low, with less than 10% of employees participating in employer health programs.[14,c]

Social Risks and Overweight and Obesity[3]

The systemic challenges to obesity care are further complicated with social risks present in a population with overweight and obesity. A descriptive analysis of the Optum Resource Database (ORD) identified a population of 1,140,752 commercial health plan members that were coded with overweight or obesity and analyzed for SDoH risks. Almost half of the population had obesity-related conditions, including dyslipidemia or hypertension (*see appendix for full study design*). Furthermore, as the BMI increased in the population, the proportion of members with obesity-related conditions also increased. This demonstrates a probable need for solutions that would be able to address obesity as a primary condition and help manage all the obesity-related complications for the population. Members could benefit most from solutions that comprehensively treat obesity as a chronic condition to help the members manage their current obesity-related conditions and prevent the addition of others.[3]

~50%

of the 1.14M members had at least 1 obesity-related condition (ORC) with dyslipidemia, hypertension, and type 2 diabetes most prevalent.

Obesity needs to be treated as a root cause condition to address the high prevalence of obesity-related conditions.

[a]Data were collected through online surveys conducted from October 29 to November 12, 2015.
[b]Derived from the 2022 Employee Benefits Survey.
[c]Based on self-reported data from the Workplace Health in America Survey conducted between November 2016 and September 2017.

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12.9%

of members had at least 1 SDoH risk measure that was very high risk, which is higher than the expected 10%.

Members with overweight and obesity in a commercial population may be at greater risk for unmet SDoH needs due to the burden of the disease.

The descriptive analysis also illustrated risks for unmet social needs. It revealed overall that commercial members with overweight and obesity are at increased SDoH risk compared to the total commercial members in the dataset. 12.9% of the members were associated with very high risk for at least 1 unmet SDoH need, which was higher than the anticipated 10%. The Optum SDoH risk indices are divided into deciles with the top decile representing the very high-risk group, so it is anticipated 10% of the population would fall into this decile. However, it is shown that for the population with overweight and obesity there is an increased risk as compared to the risk indices. This correlation shows commercial members with overweight, and obesity may be at an increased risk for SDoHs due to the burden of their disease.[3]

The analysis also revealed that SDoH risks increased as the BMI cohort increased. This demonstrated a greater SDoH risk in higher BMI cohorts.[3] Even though the analysis did not show the causal relationship between SDoH and BMI, it did show that there is a relationship. This finding illustrates the need for solutions to also factor in SDoH risks for commercial members with overweight and obesity to help them manage their condition.[3]

BMI & SDoH

For the 5 SDoH risks analyzed, SDoH risk increased as the BMI obesity class increased, with Class 3 obesity having the greatest risk.

Although no direct causation is shown, this does show an association between BMI and SDoH risks.

The final portion of the population analysis analyzed health ownership. More than 50% of the studied population had low engagement in their own health, meaning the member is not engaged in managing their health, including their chronic conditions. Low health ownership scores increased as the BMI increased.[3] Members may become less engaged as obesity-related complications increase along with SDoH stressors. These members may be struggling to find or access the right resources to best manage their obesity and obesity-related complications.

51.3%

of the members have low health ownership, meaning they are not engaged in managing their own health.

The complexity and cost of managing obesity with its ORCs may be impacting members, causing them to disengage in their health.

Summary[3]

Commercial health plan members with overweight and obesity are still struggling. Increased challenges for these members can lead to unintended health disparities for the membership. Employees desire comprehensive access and are currently working with highly variable access to treatment options. Programs and services being offered do not treat obesity as a primary clinical condition, leading to an increase in obesity-related conditions. Members living with obesity or overweight may benefit from employer-sponsored health plan programs or services that include comprehensive obesity care access and address obesity as a root cause. Additionally, commercial members with overweight and obesity are at risk for unmet social needs and are at an increased risk compared to commercial members overall. Future health plan solutions should proactively consider health equity influences and options to provide inclusive choices for members who seek obesity-related care. If the solutions and programs for members and employees with overweight and obesity could address SDoH-related risks, there could be better health outcomes and greater engagement in their own health.[3]

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Proposed actions[3]

To begin to address the health disparities that exist for people living with overweight and obesity, the following are key to consider:

1. **Address obesity as a root cause disease**[3]
   Individuals can benefit from programs that are comprehensive in care and address obesity as a root cause, which helps the members better manage the ORCs.

2. **Understand the increased SDoH risks to support health plan decision-making**[3]
   Although no direct causation is evident, an association was made between BMI and very high SDoH risk. SDoH risks should be considered when life sciences companies and health plans are designing solutions.

3. **Enable obesity care management for better engagement**[3]
   Greater access to care for obesity can enable individuals to better manage their weight, which can lead to overall improved engagement and outcomes.

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Appendix[3]

Study design: Commercial members with evidence of overweight or obesity were identified from the Optum Research Database (ORD), a large United States healthcare claims database. The ORD contains fully adjudicated medical and pharmacy claims, linked with enrollment data for commercial enrollees and Medicare Advantage prescription drug beneficiaries, spanning from 1993 to the present. The database includes over 73 million individuals. Optum's administrative claims database is de-identified and HIPAA-compliant. In 2019, the ORD represented about 8% of the commercially insured population and 18% of the Medicare Advantage population, both with medical and pharmacy claims data.[3]

The Optum Social Determinants of Health (SDoH) indices dataset was utilized to assess risks of unmet SDoH needs among commercial members. These indices are model-based scores, derived from predictive models using both individual data, such as medical and pharmacy claims, and group-level data, such as United States Census information. These models help inform actionable programs that aim to improve outcomes for health plans and members. The 5 SDoH indices cover financial stress, food insecurity, housing insecurity, social isolation, and transportation difficulties. In the analysis, each SDoH index was given a value from 0 to 9, where 0 was the highest predictive risk of unmet need and 9 was the lowest predictive risk of unmet need.[3]

Analysis Period and BMI Cohorts: The analysis observation period extended from January 1, 2021, to December 31, 2022. To be included, members were required to have continuous enrollment in a commercial health plan with both medical and pharmacy benefits during the calendar year of their most recent claim containing a BMI diagnosis code. During the index year, key variables were collected and analyzed. The member population was further broken down according to cohorts defined by member BMI. BMI values were assigned based on the latest claim (ie, the claim closest to the SDoH indices) for the set of Z-codes and E-codes that can be directly cross walked to a BMI cohort based on their BMI: Overweight Unspecified (25 < BMI <30), Overweight (BMI 27 to <30), Class 1 (BMI 30 to <35), Class 2 (BMI 35 to <40), Class 3 (BMI ≥40), and Obesity Unspecified (BMI ≥30).[3]

Obesity-Related Comorbidities (ORCs): For the analysis, short-term ORCs include conditions such as type 2 diabetes, hypertension, dyslipidemia, obstructive sleep apnea, prediabetes, gastroesophageal reflux disease, and heart failure with preserved ejection fraction. Over the long term, ORCs may progress to more serious conditions like cardiovascular disease, atherosclerotic cardiovascular disease, nonalcoholic fatty liver disease, nonalcoholic steatohepatitis, and chronic kidney disease.[3]

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