To: Marketing Department

Date: June 6, 2023

Strategic Customer Targeting for Heart Disease Supplement Market

Our primary goal as an analytics team is to identify the ideal target customers for our heart health supplement product line. To accomplish this, we look into the risk factors for heart disease, such as age, BMI, smoking habits, and sleeping patterns.

The primary audience for this data presentation would be the marketing team of our organization who need the data-driven insights to create a successful marketing strategy for the heart health supplement product line in order to boost sales and increase revenue.

Our approach emphasizes prevention over cure, appealing to those who wish to proactively manage their heart health. Therefore, it is designed to reach individuals who are at risk for developing heart disease but who have not yet been diagnosed. This strategy aligns with our mission to promote well-being while also appealing to a large customer base in order to increase sales. We recognize that it is not enough to simply reach a large number of people, we must also reach the right individuals. As a result, this strategy helps us to create a significant influence by improving the health outcomes of our targeted demographics, while achieving advertising success.

*Notes:

This analysis will exclude certain groups, such as people with asthma, skin cancer, and diabetes, from your primary target audience since people with chronic conditions are often on long-term medication. Some dietary supplements might interact negatively with these medications, reducing our supplements' effectiveness or causing bad side effects.

Graph 1: Top 5 Age Categories by People

Top 5 Age Categories by Total People
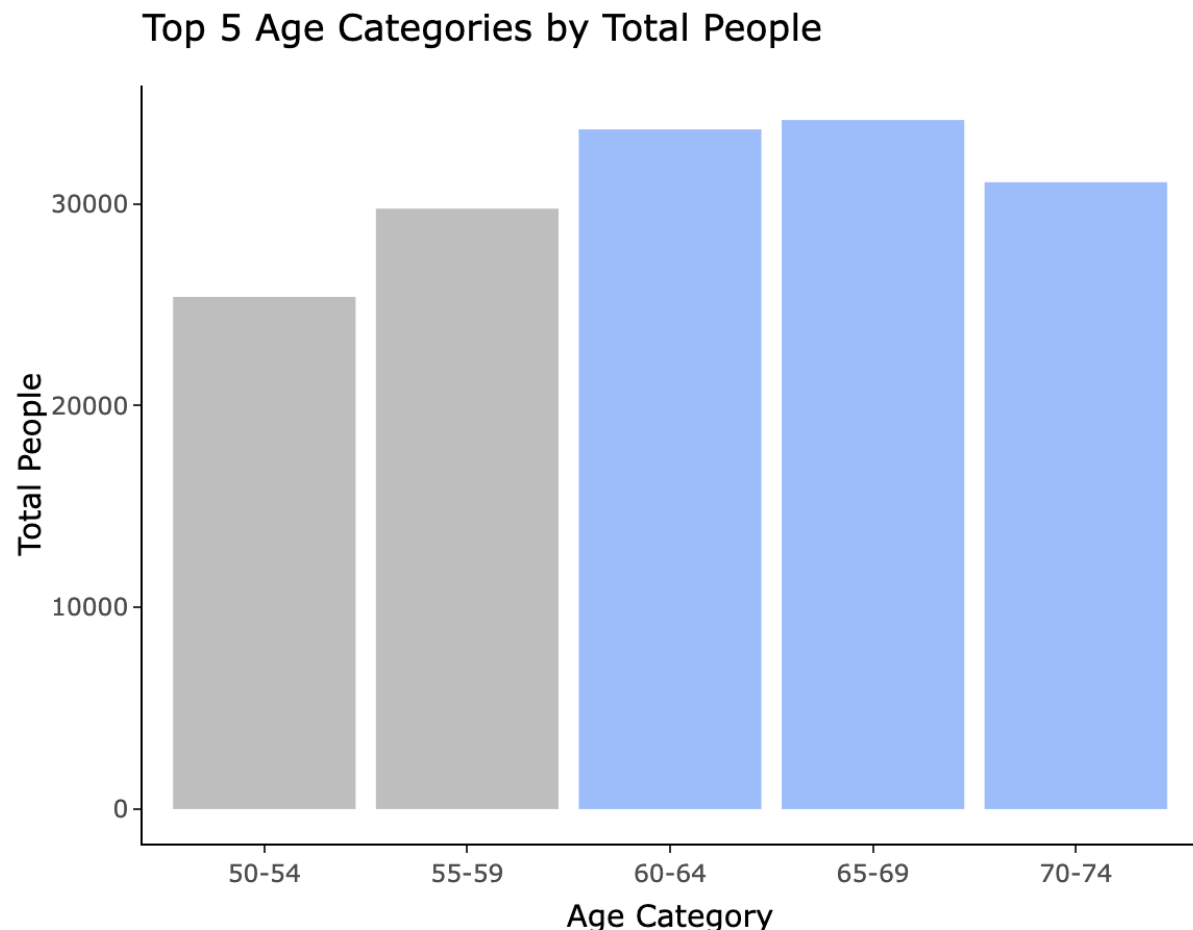
Upon analyzing our data, we've identified that the age groups 60-64, 65-69, and 70-74 have the largest population sizes among our top five age categories. This makes them a significant focus area for us as we aim to promote and enhance sales of our heart health supplement. However, it's also essential for us to examine the prevalence of heart disease within these and other groups. By considering both population size and disease prevalence, we can more accurately identify our target customers, which ensures that our marketing efforts are concentrated on those groups who are most susceptible to heart disease, and hence most likely to use our product, and we also utilize our marketing resources efficiently, potentially leading to a higher revenue. Therefore, while the age groups 60-64, 65-69, and 70-74 have larger sizes, we'll next be considering the prevalence of heart disease across all age groups to make our marketing plan as effective and cost-efficient as possible.

Graph 2: Percentage of Heart Disease by Age Category

Percentage of Heart Disease by Age Category
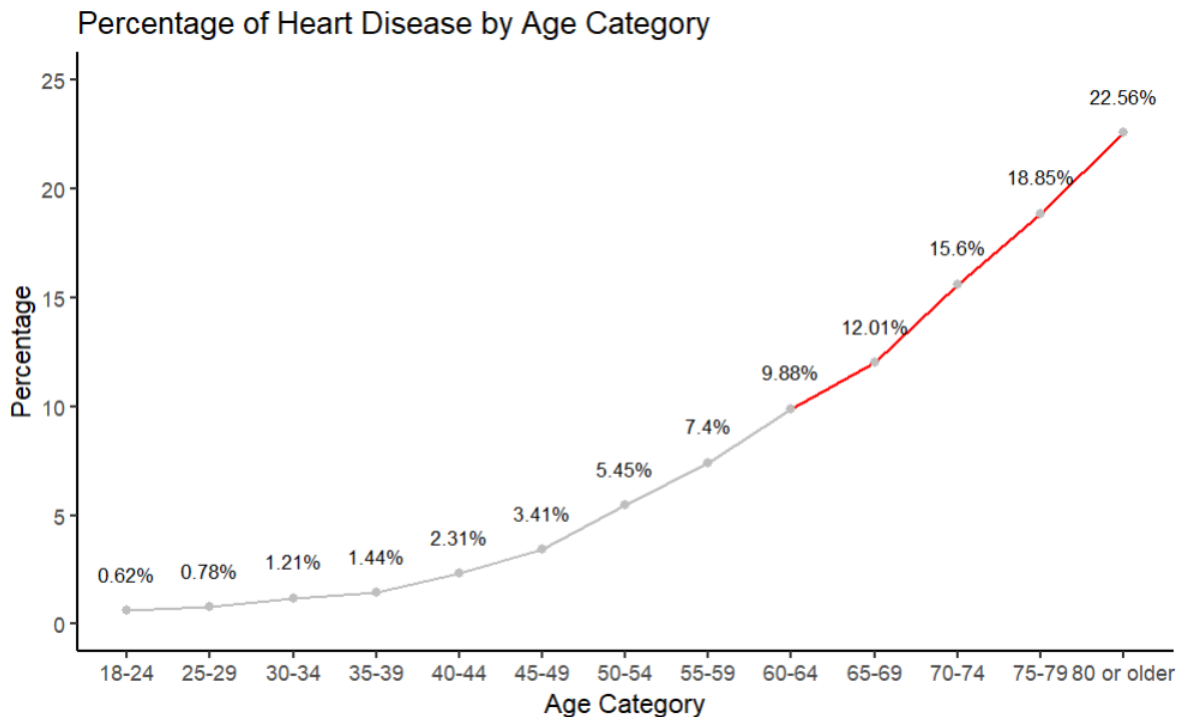
Our line graph "Percentage of Heart Disease by Age Category" shows a concerning trend; heart disease rates increase as the population ages. The top five age groups with the highest percentages of heart disease (which we highlighted in red in the graph) are:

1. Age 80 or above: 22.56%
2. Age 75-79: 18.85%
3. Age 70-74: 15.60%
4. Age 65-69: 12.01%
5. Age 60-64: 9.88%

Interestingly, the three largest age groups (60-64, 65-69, and 70-74) are also heavily represented in these high-risk categories. Despite having smaller populations, the age groups 75-79 and 80 or older have the highest prevalence of heart disease. Understanding these percentages, as opposed to raw numbers, provides a more accurate representation of our potential customer base. It emphasizes the need to reach not only a large audience, but also the right audience – those with the greatest need for our supplement for heart disease. As a result, our

proposed marketing strategy is a well-balanced approach. It includes concentrating on the age groups 60 to 74 due to their large population and significant risk, while also focusing on the age groups 75 and older, where the prevalence of heart disease is highest. This dual-focus strategy ensures that we not only increase sales, but also maximize the potential benefits of our product for those who need it the most.

Graph 3: Relationship between BMI and Heart Disease Risk

Distribution of BMI Category among Individuals with Heart Disease
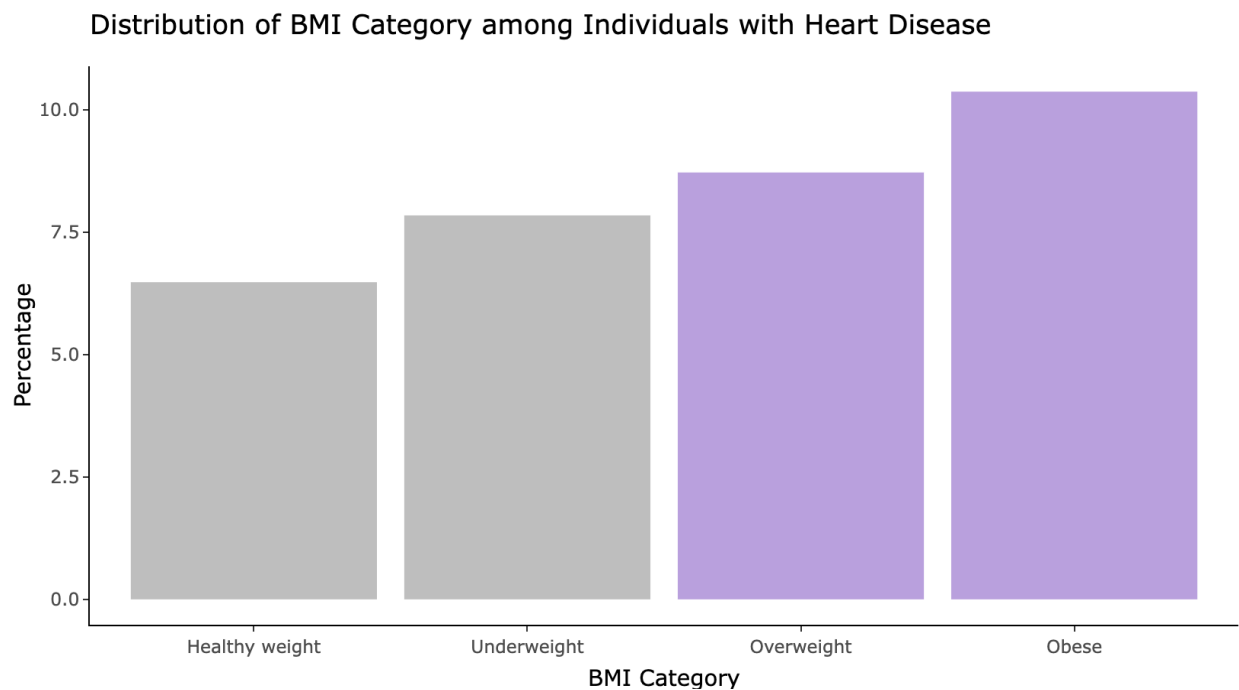
The Centers for Disease Control and Prevention define Body Mass Index (BMI) as a person's weight in kilograms divided by the square of their height in meters. BMI can be a useful indicator of body fatness, and different ranges can help us understand health risks. Here's a quick breakdown:

- A BMI of less than 18.5 falls within the underweight range.
- A BMI between 18.5 to less than 25 is considered a healthy weight range.
- A BMI from 25.0 to less than 30 is within the overweight range.
- A BMI of 30.0 or higher falls within the obesity range.

According to the American Heart Association, obesity, assessed using body mass index (BMI) >25 kg/m2, is an established risk factor for development of coronary heart disease (CHD)

in healthy individuals. Furthermore, obesity is associated with many of the known cardiovascular risk factors, such as hypertension and dyslipidemia. Our data analysis revealed a significant link between being overweight or obese and an increased risk of developing heart disease.

Based on these findings, we found that BMI is strongly related to heart disease risk, making it a key factor in our marketing strategy. As a result, we should prioritize individuals who are overweight or obese but have not yet developed heart disease. By doing so, we can help raise awareness and promote our heart disease supplement to those who need it the most, ensuring that our efforts are not only commercially successful but also contribute to a major health concern.

Graph 4: How does sleep deprivation affect heart disease?

Percentage of People with Heart Disease by Sleep Category
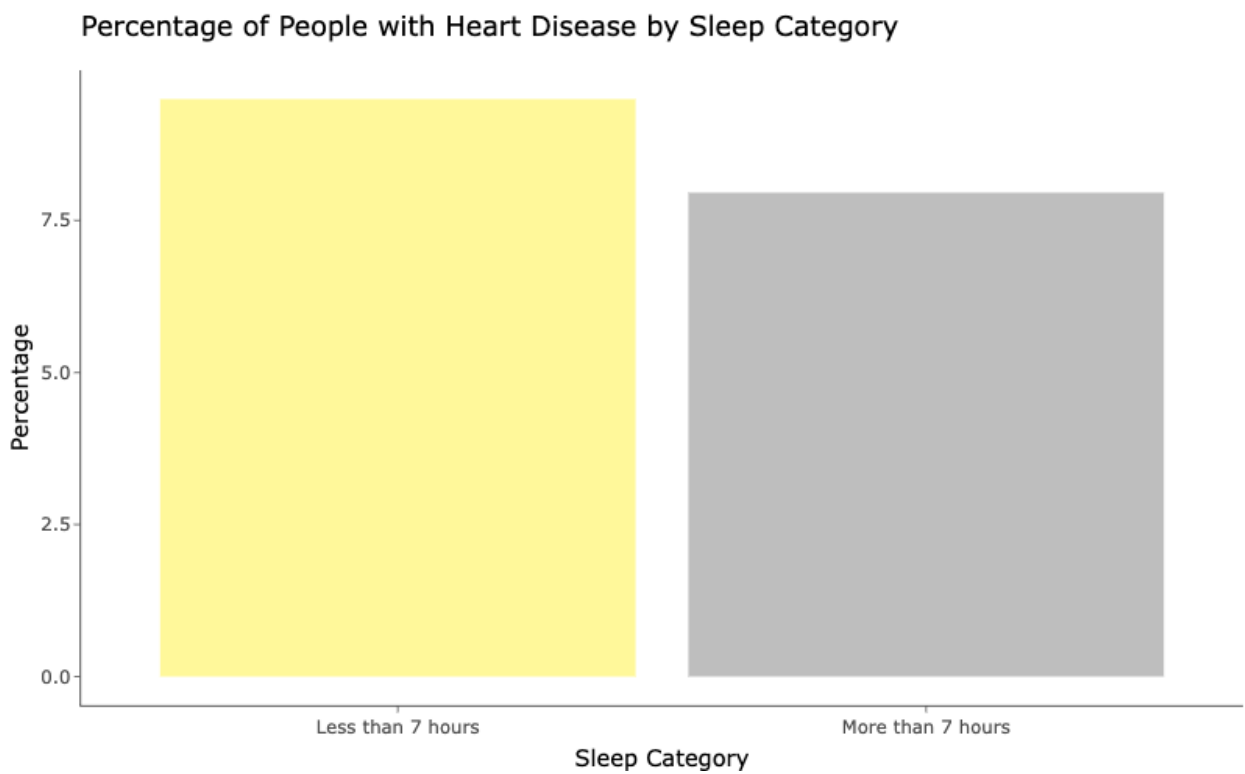
According to the Centers for Disease Control and Prevention (CDC), adults need at least seven hours of sleep each night. Survey findings suggest that adults who sleep fewer than seven hours per night are more likely to experience unhealthy weight gain and particularly high blood pressure, one of the primary risk factors for heart disease. During sleep, the body is primarily in a state of relaxation and recovery, and blood pressure decreases. Conversely, staying awake for extended periods can keep your blood pressure elevated for a longer duration. Without sufficient

sleep, the heart can't pump enough blood to ensure the body is adequately supplied with the necessary amount of blood and oxygen for proper functioning.

In our research, we examined sleep habits in the general population, specifically focusing on individuals with heart disease. In our findings, we discovered that people who sleep less than 7 hours, highlighted in yellow, have a higher likelihood of developing heart disease compared to those who sleep more than 7 hours.

"Established in 1984 with 15 states, BRFSS now collects data in all 50 states, the District of Columbia, and three U.S. territories," according to the CDC. This highlights the importance of proper sleep in maintaining heart health. Chronic sleep deprivation can disrupt the body's natural processes, including those that are crucial for maintaining a healthy heart. As a result, individuals who regularly experience insufficient sleep, specifically less than seven hours per day, are a significant target demographic for our heart health supplement.

Graph 5: Percentage of Heart Disease and Smoking

Percentage of People with Heart Disease by Smoking Status
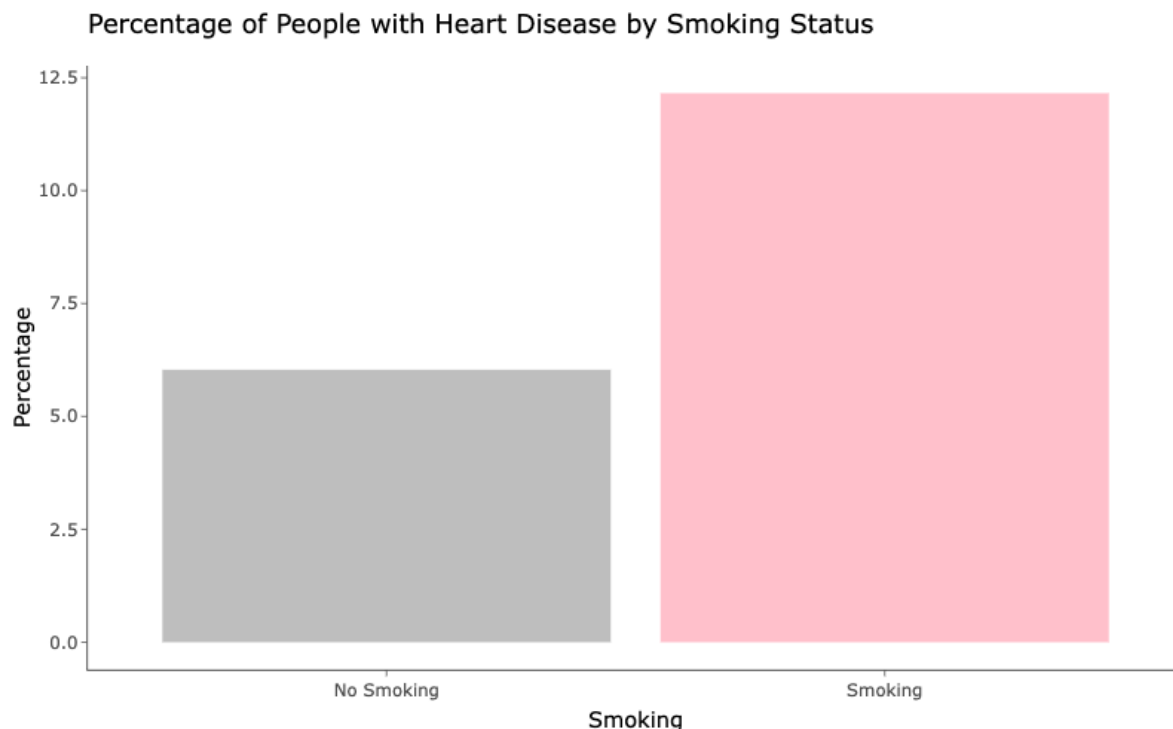
As we continue to look into risk factors for heart disease, we come across smoking. The CDC has identified smoking as a major cause of cardiovascular disease (CVD), accounting for

one-quarter of all CVD-related deaths. This shows the seriousness of smoking's impact on heart health. Smoking's physiological effects, such as making blood thicken and clot more easily, can obstruct blood flow to the heart and brain. (CDC, 2021)

Our data mirrors these findings. We find that smokers have significantly higher rates of heart disease than nonsmokers. In particular, smokers have a higher proportion of heart disease, accounting for 12.16%, compared to 6.03% in nonsmokers, which is twice as much. This noticeable difference highlights the significant impact smoking has on heart health. Based on these findings, it is clear that smokers are an important target group for our heart health supplement.

Graph 6: Potential Heart Disease Risk Groups: A Comparative Analysis of Prevalence
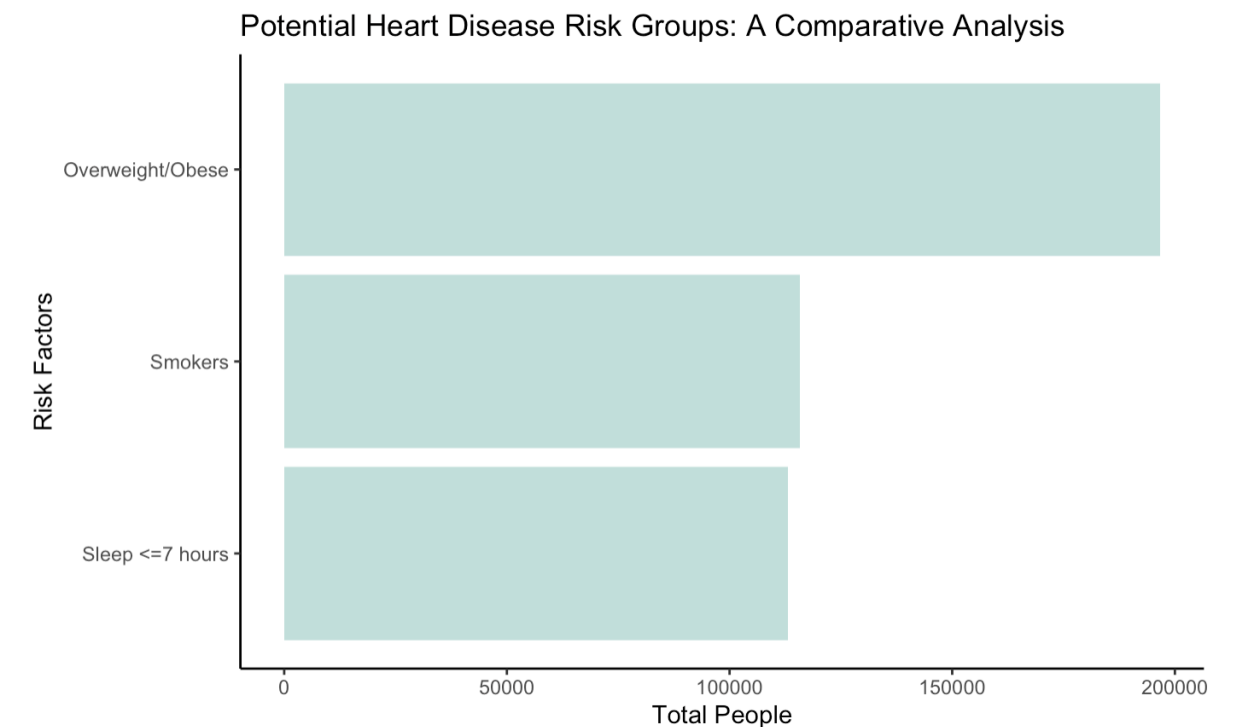

In this graph, we focused on individuals who have not yet experienced heart disease but are at higher risk because of these risk factors. Here, we are using counts which could help understand the actual market size for each risk group. This can be useful in terms of estimating potential sales and revenues. The results include:

Overweight/obese: This is the largest group with 196,691 people. Because obesity is strongly linked to heart disease, this population would most likely benefit from a heart health supplement. As a result, marketing efforts directed primarily at this group may have the greatest impact.

Smokers: With 115,871 people, this group is smaller but still significant. Because smoking is a well-known risk factor for heart disease, targeting smokers could also be an effective strategy.

Sleep less than 7 hours: With 113,182 people this group represents an important percentage of the population. Because there is a significant link between sleep deprivation and heart disease, focusing on this group may also give positive results.

Graph 7: Venn Diagram Risk Factors
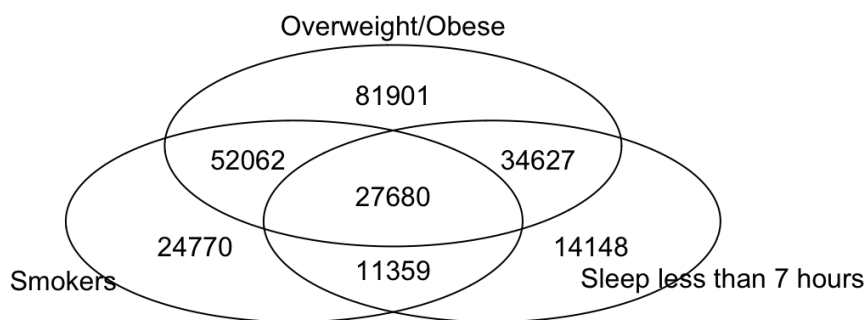
Next, we plan to look into the intersections of risk factors among individuals aged 60 and older. This Venn diagram allows us to better comprehend and quantify the demographic overlaps that exhibit multiple heart disease risk factors. Based on the overlap of risk factors, this helps us

identify our primary, secondary, and tertiary target markets, so we suggest the following strategy for our marketing team:

Instead of focusing solely on the sheer number of potential customers, we aim to reach those who are in the greatest need. To do this, we've divided our target market into three groups who are 60 and above.

1. The first group includes individuals who are overweight/ obese smokers, and sleep 7 hours or less (The overlap part in the middle). Our data indicates that these people are at the highest risk of developing heart disease, making them the primary target for our heart health supplement.

2. The second group consists of those who meet any two of the above criteria. We further prioritize within this group based on the total number of individuals in each subset. For instance, the combination of overweight/ obese and smoking appears to be most common, with a total of 52,062 individuals, then the combination of overweight/ obese and sleeping and the last in the second group would be the combination of smokers and sleeping

3. Lastly, our third target group includes individuals who meet any one of the factors.

Conclusion:

In conclusion, based on our data analysis, our final target customer group comprises individuals aged 60 and above who have not yet been diagnosed with heart disease. This group can be further categorized into three specific groups based on three main risk factors.

1. The primary group consists of individuals who meet all three risk factors, namely: having a high BMI, sleeping less than 7 hours, and being smokers.

2. The second group comprises individuals who meet any two of the aforementioned criteria. Within this group, we prioritize subsets based on the total number of individuals in each subset.

3. Lastly, our third target group includes individuals who meet any one of the identified risk factors.

By implementing this targeting strategy, we can effectively reach those in most need of our supplement, optimize our resource allocation, and maximize our revenue, all while ensuring our product line serves its intended purpose.

Reference.

CDC. (2021). Health Effects of Cigarette Smoking: Heart Disease. Retrieved from https://www.cdc.gov/tobacco/basic_information/health_effects/heart_disease/index.htm ↵

Heart Disease and Stroke | CDC. (2022, September 8). Retrieved from https://www.cdc.gov/chronicdisease/resources/publications/factsheets/heart-disease-stroke.htm