WEIGHING IN ON WORKPLACE WELLNESS

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THE BURDEN OF OBESITY IN DELAWARE

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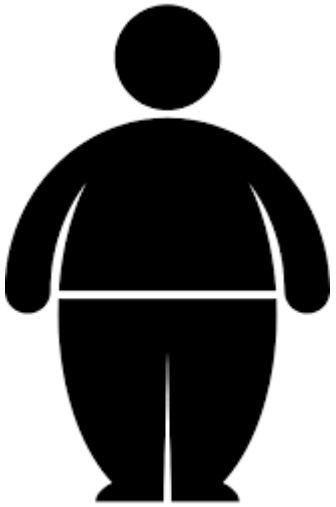
OBESITY DEFINITION – BMI CATEGORIES

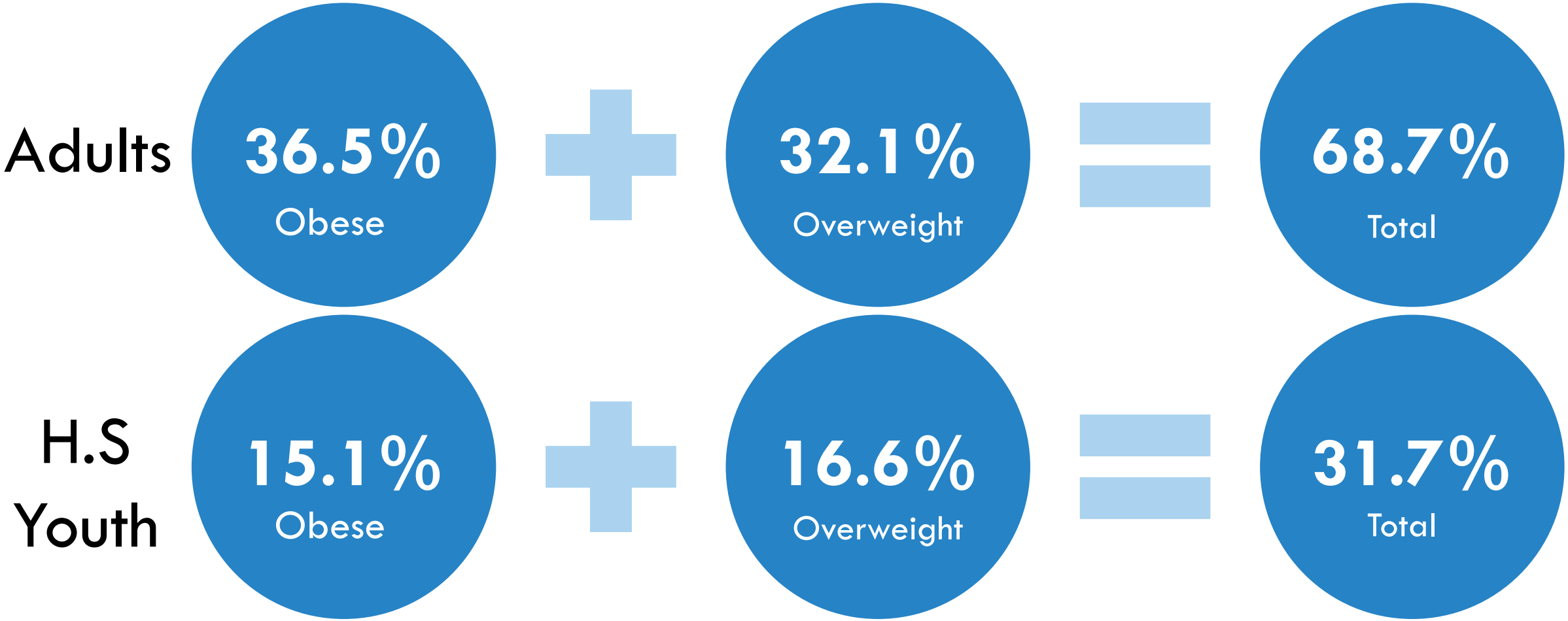
	Adults	Youth
Healthy Weight	18.5 – 24.9	<85%
Overweight	25.0 – 29.9	>= 85% <95%
Obese	30.0+	>=95%



OBESITY
is a
SERIOUS
CHRONIC DISEASE

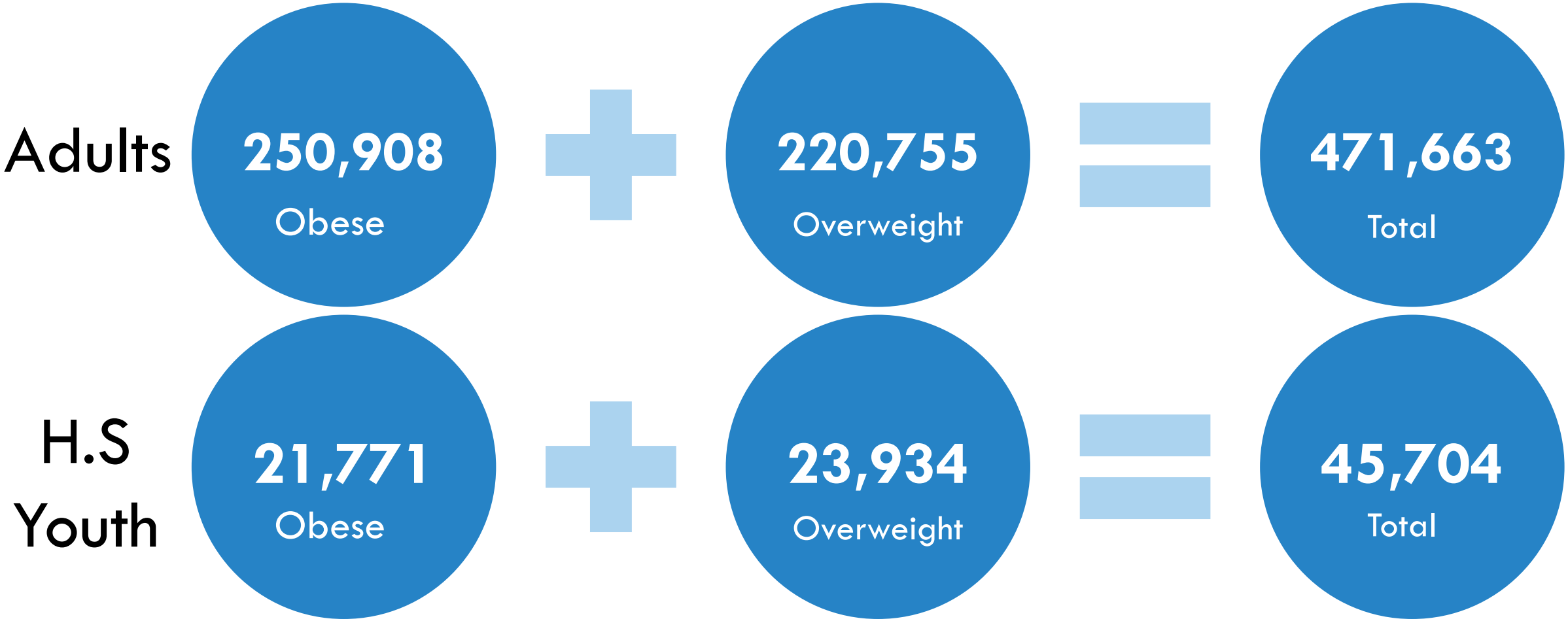
-Centers for Disease Control and Prevention

OVERWEIGHT AND OBESE PREVALENCE IN DELAWARE



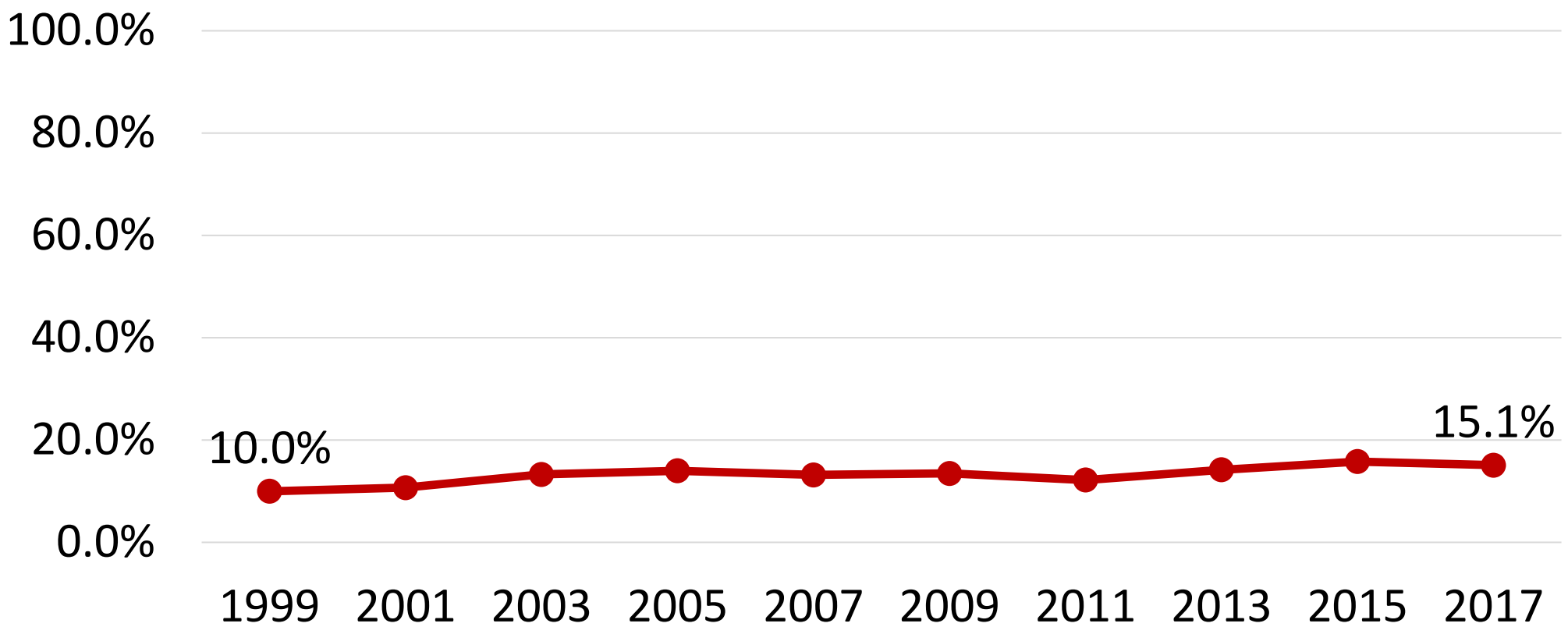
Source: Delaware Health & Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2020
Source: Delaware Health & Social Services, Division of Public Health, Youth Risk Behavior Survey (YRBS), 2017

OVERWEIGHT AND OBESE PREVALENCE IN DELAWARE



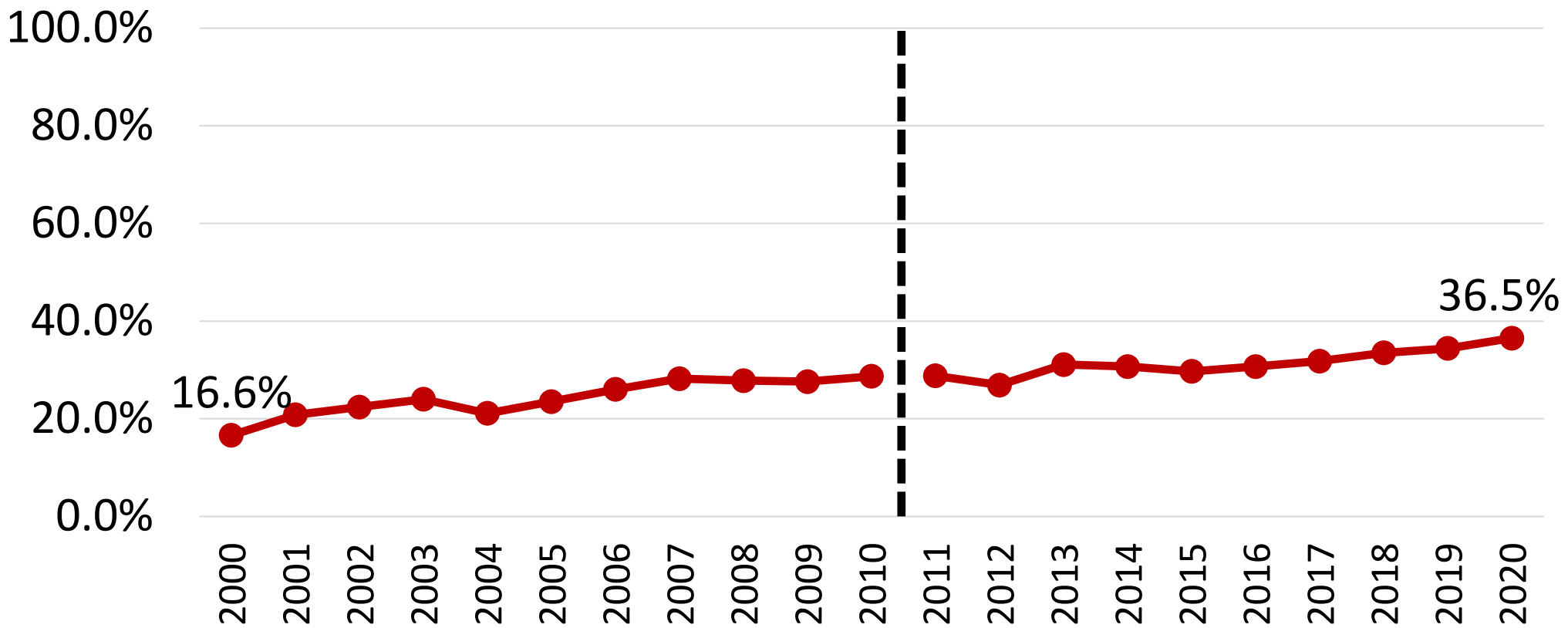
Source: Delaware Health & Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2020
Source: Delaware Health & Social Services, Division of Public Health, Youth Risk Behavior Survey (YRBS), 2017

HIGH SCHOOL OBESITY PREVALENCE IN DELAWARE



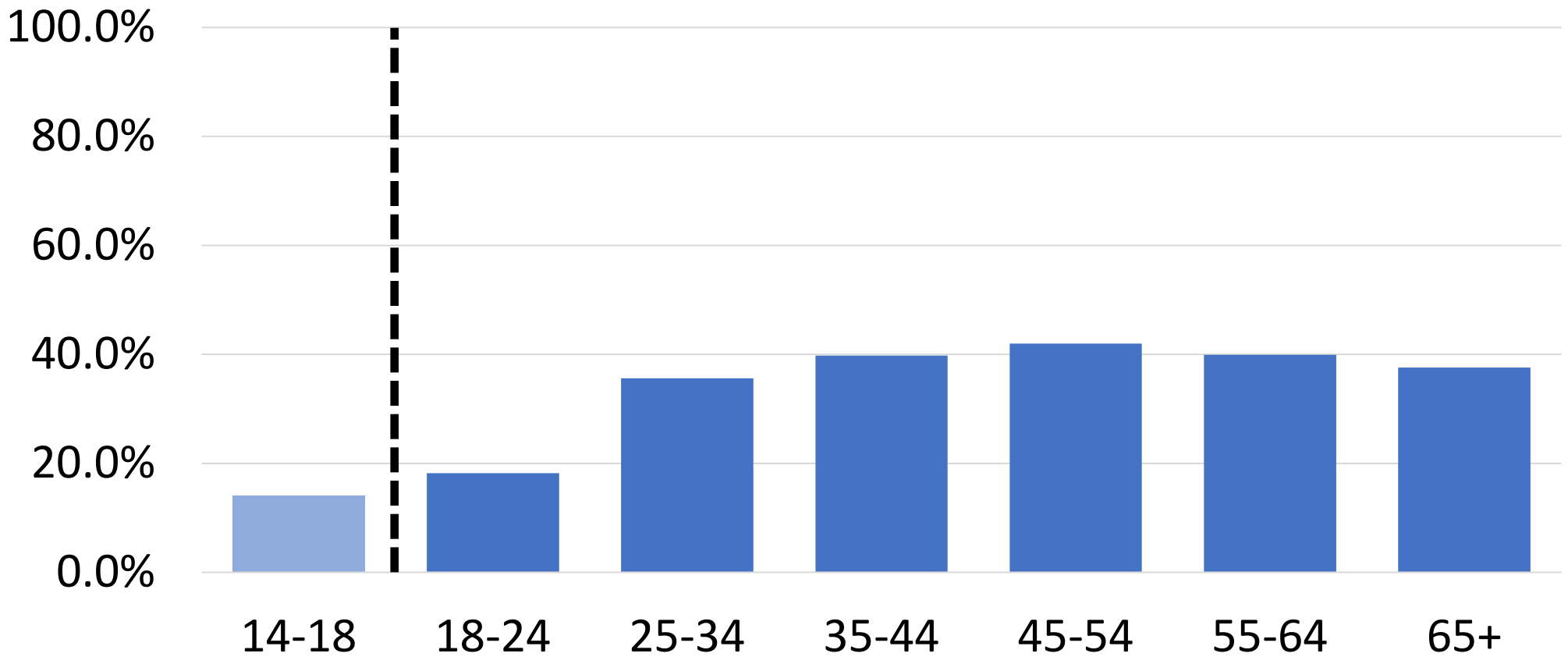
Source: Delaware Health & Social Services, Division of Public Health, Youth Risk Behavior Survey (YRBS), 1999-2017

ADULT OBESITY PREVALENCE IN DELAWARE



Source: Delaware Health & Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2000-2020

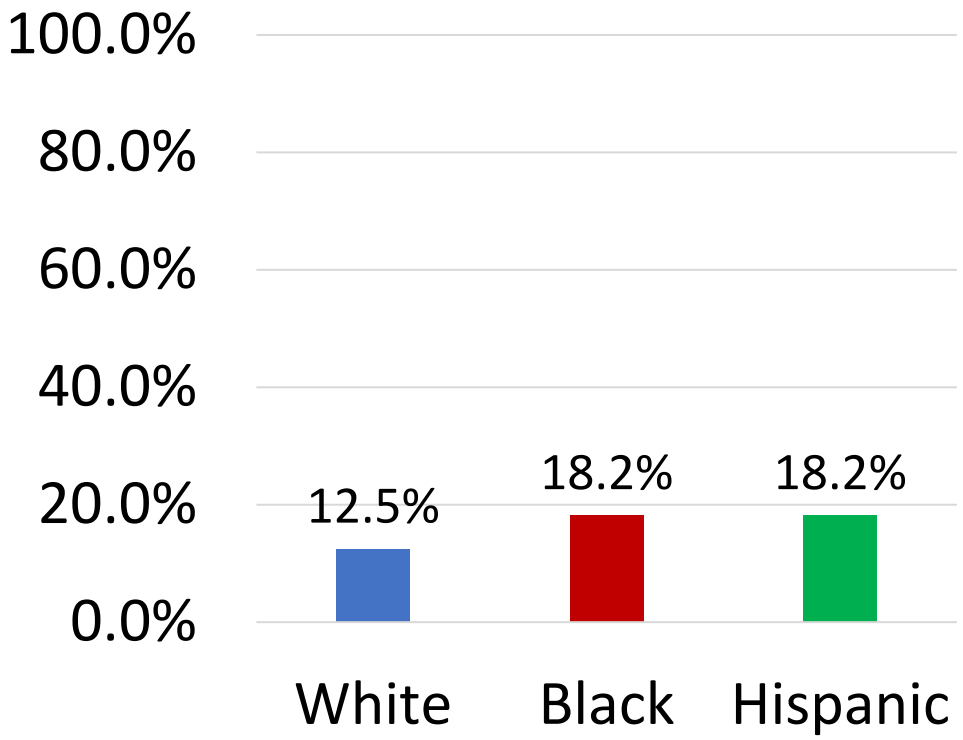
OBESITY PREVALENCE IN DELAWARE BY AGE



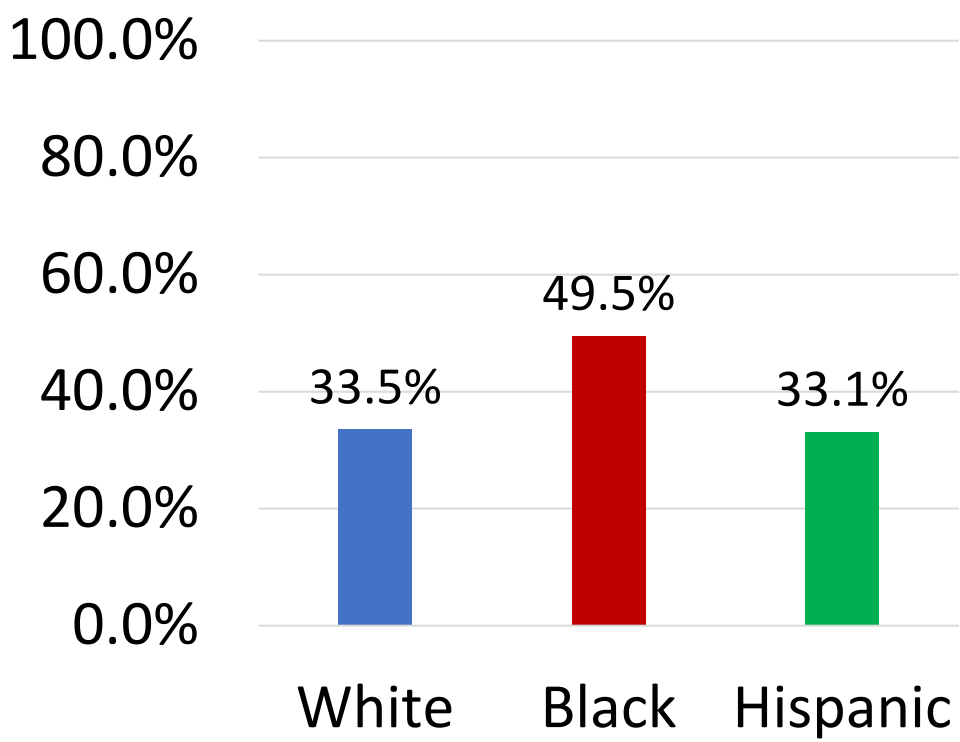
Source: Delaware Health & Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2020
Source: Delaware Health & Social Services, Division of Public Health, Youth Risk Behavior Survey (YRBS), 2017

OBESITY PREVALENCE IN DELAWARE BY RACE

High School Students



Adults



Source: Delaware Health & Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2020
Source: Delaware Health & Social Services, Division of Public Health, Youth Risk Behavior Survey (YRBS), 2017

OBESITY AS A RISK FACTOR

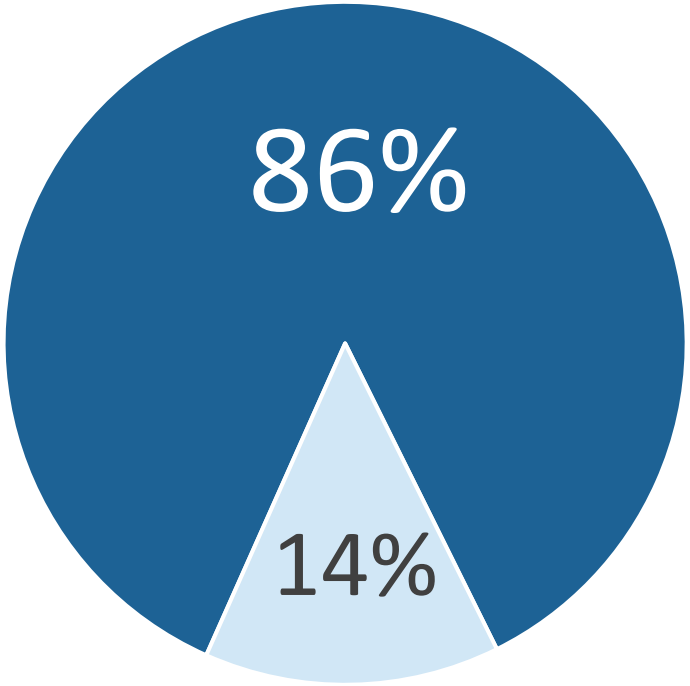
Diabetes

Cancer

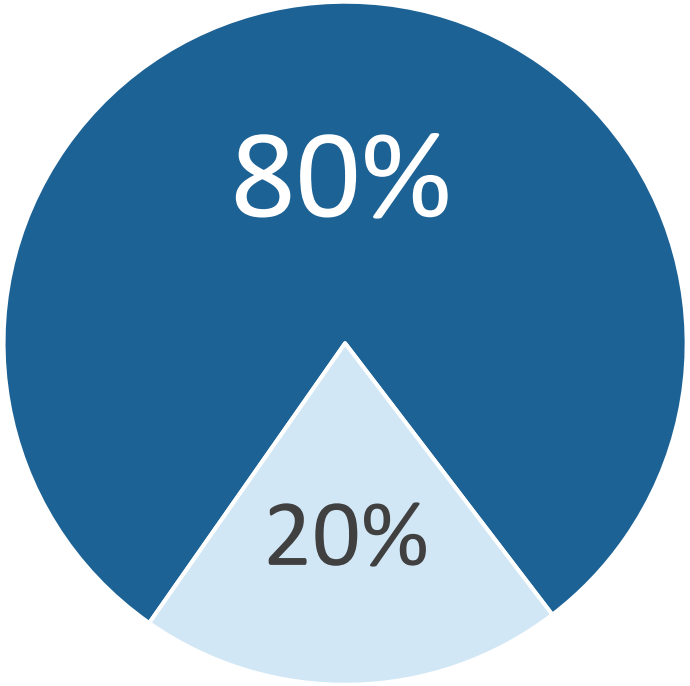
Heart Disease

OBESITY PREVALENCE

Among Diabetes Patients



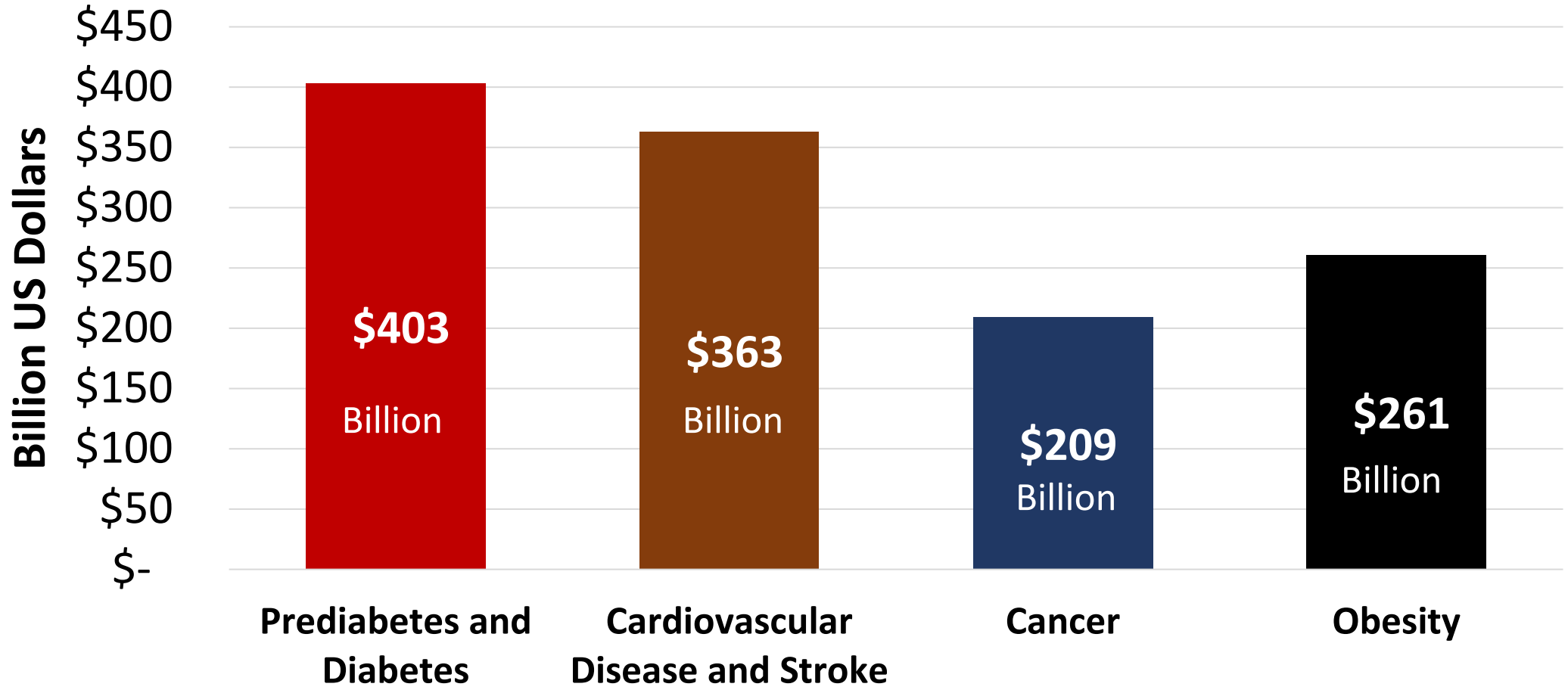
Among Hypertension Patients



Obese or Overweight Normal Weight

Source: Delaware Health & Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2019 & 2020

NATIONAL OBESITY COSTS ESTIMATES



"Much of the aggregate national cost of obesity,

$260.6 billion,

represents external costs,

providing a rationale for interventions to prevent and reduce obesity."

Cawley et al., 2021

Module 1:

Recognize the Impact

Why obesity and weight management matter to your organization

Employers

The Weigh Forward is a comprehensive program designed to assist with weight management for appropriate patients within your organization. As part of the program, this module is designed to increase awareness of the extent of obesity's prevalence, health risks, and costs, and the benefits of weight management for your employees and your organization.

the weigh forward

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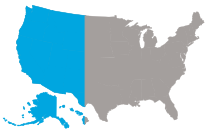
Overview of key topics presented in this module

Understanding obesity and weight loss

The body weight of people with obesity is affected by multiple factors. Weight loss changes the way the body deals with hunger and how it burns calories.[1,2]



Obesity's prevalence and associated complications

The prevalence of obesity will only continue to rise. Importantly, obesity is associated with numerous health consequences, such as hypertension, type 2 diabetes, osteoarthritis, and even cancer.[3,4]

Obesity is costing your organization more than you know

Obesity is associated with increased sick days, disability claims, and healthcare costs. An estimated $92.1 billion was determined to be the aggregate cost of obesity among full-time employees in the United States.[5-7,a]

Weight management considerations for your organization

Even a small amount of weight loss (5% to 10%) can provide meaningful health benefits to your employees with obesity.[4] It may also help curb annual medical expenditures.[8] Consider treatment options, including anti-obesity medications (AOMs).[4,9]

BMI=body mass index.

[a]2006 data adjusted to 2019 inflation rate.[6,7]

What is obesity and how is it defined?

> *"**Obesity is a complex, multifactorial condition** characterized by excess body fat. It must be viewed as a **chronic disorder** that essentially **requires perpetual care, support, and follow-up**. Obesity causes many other diseases, and it **warrants recognition by health-care providers and payers**."*[10]

American Association of Clinical Endocrinologists
American College of Endocrinology Obesity Task Force

National organizations recognize obesity as a multifaceted, chronic disease.

Obesity is defined by a BMI of 30 kg/m² or higher[9]

Why is it so hard to lose weight? Why does weight return?

Multiple factors affect the body weight of people with obesity

Appetite signals

When weight is lost, the body increases the hunger hormone and decreases fullness hormones.[2]

Genetics

Genes may play an important role in how much weight is gained.[11,12]

Behavior

Not enough sleep and lack of physical activity may be contributing factors.[13]

Environment

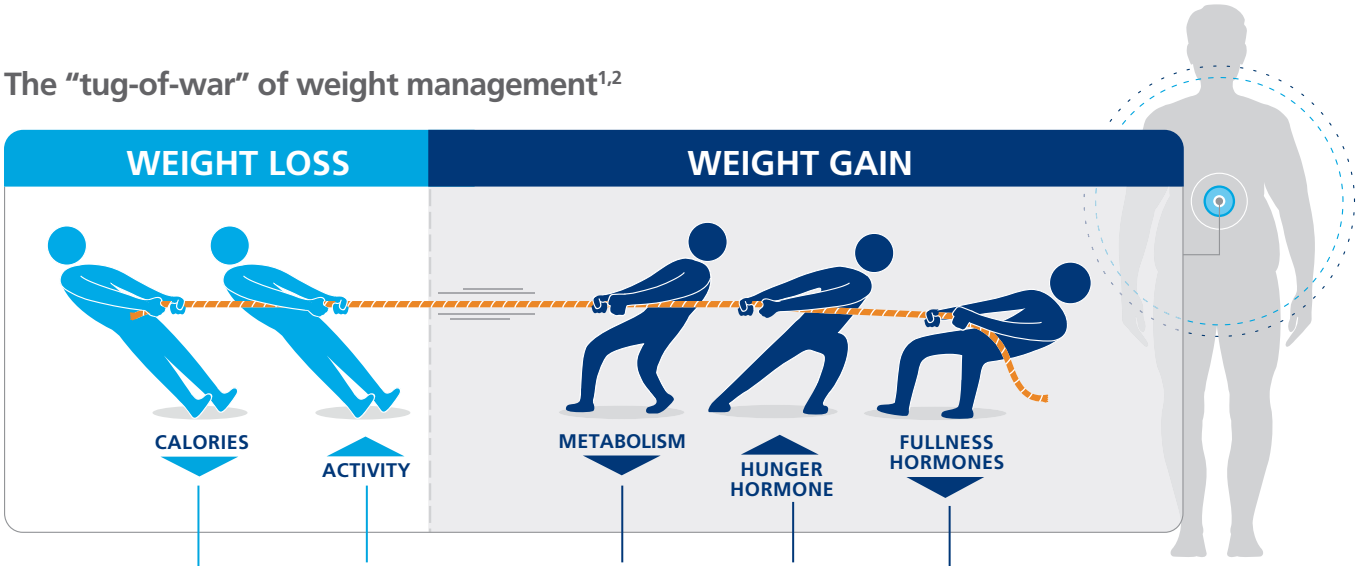
Having healthy food may be challenging (eg, location, price, time to prepare), which may result in buying more convenient, fatty, and calorie-dense food. Some individuals have no place to exercise.[12,13]

Obesity, classified as a BMI of 30 kg/m^2 or greater, is driven by many factors that contribute to its widespread prevalence and complexity.[9,14]

After weight loss, your body fights to put weight back on[1,2]

Willpower vs biology: Metabolic and hormonal responses affect the ability to maintain weight loss.[1,2]

The "tug-of-war" of weight management[1,2]



Decreased calories

People may see results when they limit calories, such as when they reduce the size of their meals.

Increased activity

Increased physical activity, such as walking regularly around the block, can help burn calories.

However, the body reacts to weight loss by trying to regain weight.

Slower metabolism

Metabolism (burning calories) slows down and gets more efficient, requiring fewer calories to do its job.

Increased hunger hormone

Hormonal signals can also change.

The body increases a hunger hormone, called ghrelin, which tries to induce calorie intake.

Decreased fullness hormones

There are also hormones that tell the brain that it's time to stop eating. When these decrease, the "feeling full" signal also decreases.

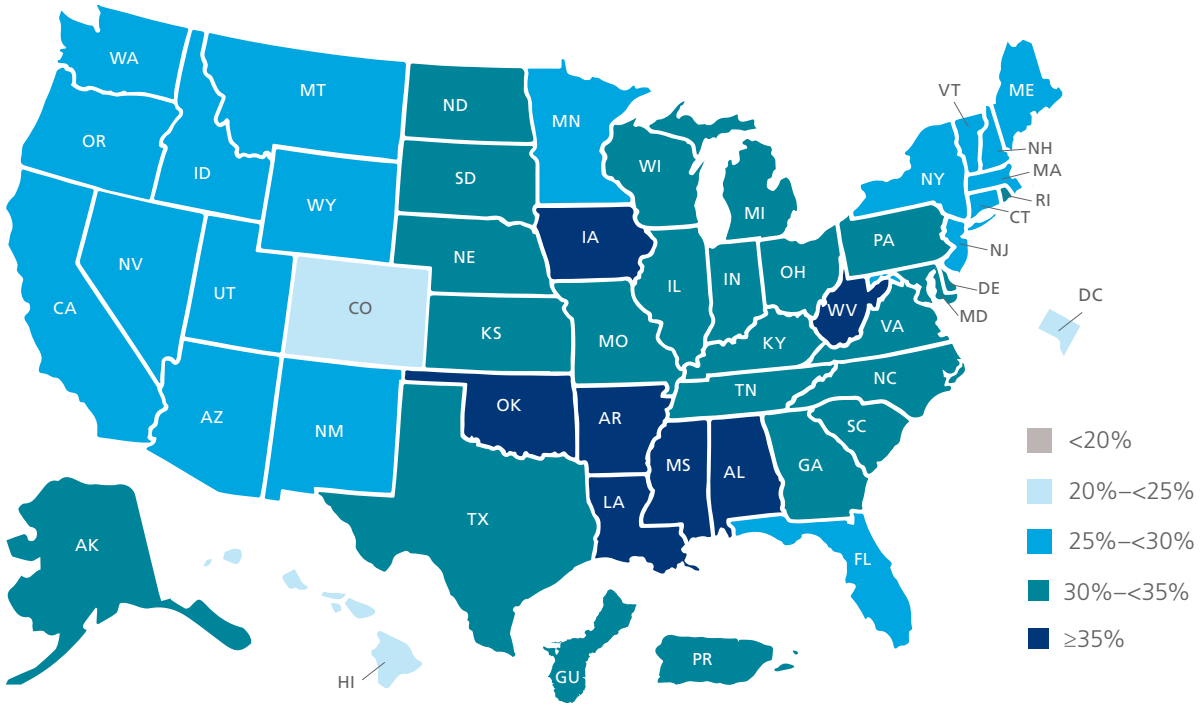
These are just some of the factors that make weight regain so common.

In people with obesity, the body will try to put the weight back on for at least 12 months after weight loss.[2]

How widespread is obesity in the United States?

The prevalence of obesity in the United States continues to grow[3]

2017 prevalence of self-reported obesity among US adults by state and territory[14,a]



Out of ~327 million people, **~77 million adults**
are affected by obesity in the United States[15,16]

- Obesity rates are highest in African-American and Hispanic adults[16,b]
  - At ~46%, African-American adult women have the highest obesity rate of any demographic[16]

If the current trend continues, 51% of the US adult population will have obesity by 2030.[3]

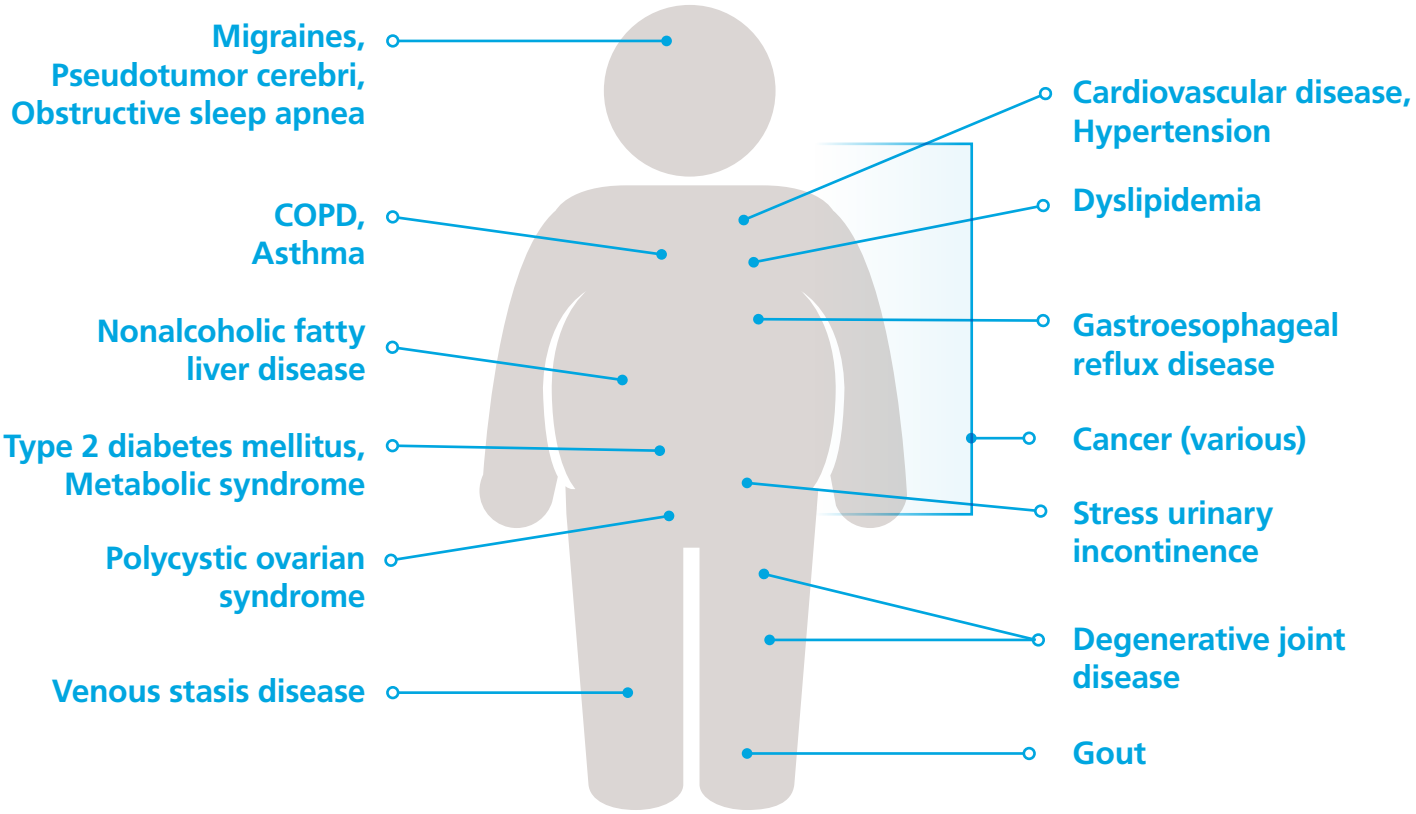
How does this affect you?

31,685,988
Full-time employees with overweight[15,16,b]

23,076,851
Full-time employees with obesity[15,16,b]

How does obesity impact the lives of people with the disease?

There are many comorbidities associated with obesity[4,17-20,c]



COPD=chronic obstructive pulmonary disease.

[a]Prevalence reflects Behavioral Risk Factor Surveillance System methodological changes started in 2011, and these estimates should not be compared with those before 2011.[14]

[b]Adults aged ≥18 years.[16]

[c]The above list is not exhaustive and is intended to illustrate only a range of key complications.

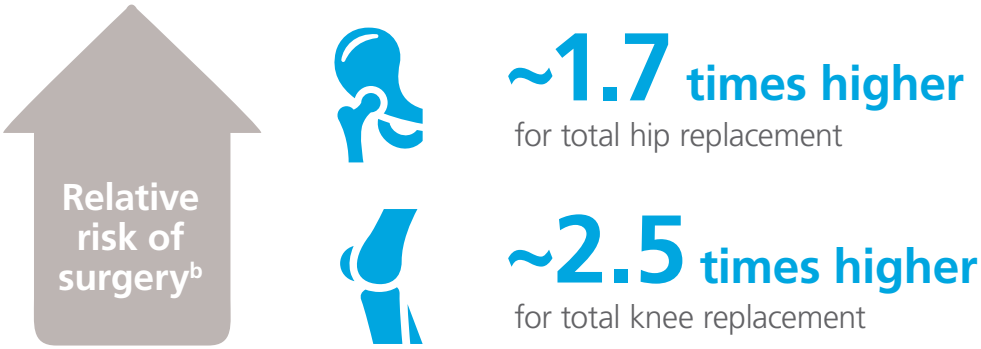
How does obesity impact the lives of people with the disease? (cont'd)

Obesity increases the risk of developing type 2 diabetes, hypertension, and coronary artery disease[21,22]

Relative risk of developing costly comorbid conditions in adults with BMI ≥30 kg/m^2 [a]

	Type 2 diabetes	Hypertension	Coronary artery disease
Male	6.7x	1.8x	1.7x
Female	12.4x	2.4x	3.1x

In osteoarthritis, weight gain may lead to increases in surgical intervention and postoperative pain[23,24]



[a]Compared with employees of normal weight.[21]

[b]BMI 25 to 29.9 kg/m^2 vs BMI 30 to 34.9 kg/m^2.[23]

If obesity is left untreated, long-term incidence rates of comorbidities can increase over time[25,c]

Obesity can be a debilitating disease that may be already impacting the health of your employees and your organization.[4,14]

[c]Population included 100,000 adults with obesity and 100,000 demographically matched normal-weight adults. Data taken from 2005-2012 National Health and Nutrition Examination Survey (NHANES) and shown in the graph as cumulative over 5 and 10 years and as absolute difference in prevalence.[25]

[d]With the exception of type 2 diabetes.

What is the financial impact of obesity?

The effects of obesity have a distinct financial impact on employers[26]

According to data from a 2006 survey and adjusted to 2019 inflation rates,

$92.1 billion

is the aggregate cost of obesity among full-time employees in the United States.[6,7]

This is roughly equivalent to the cost of hiring

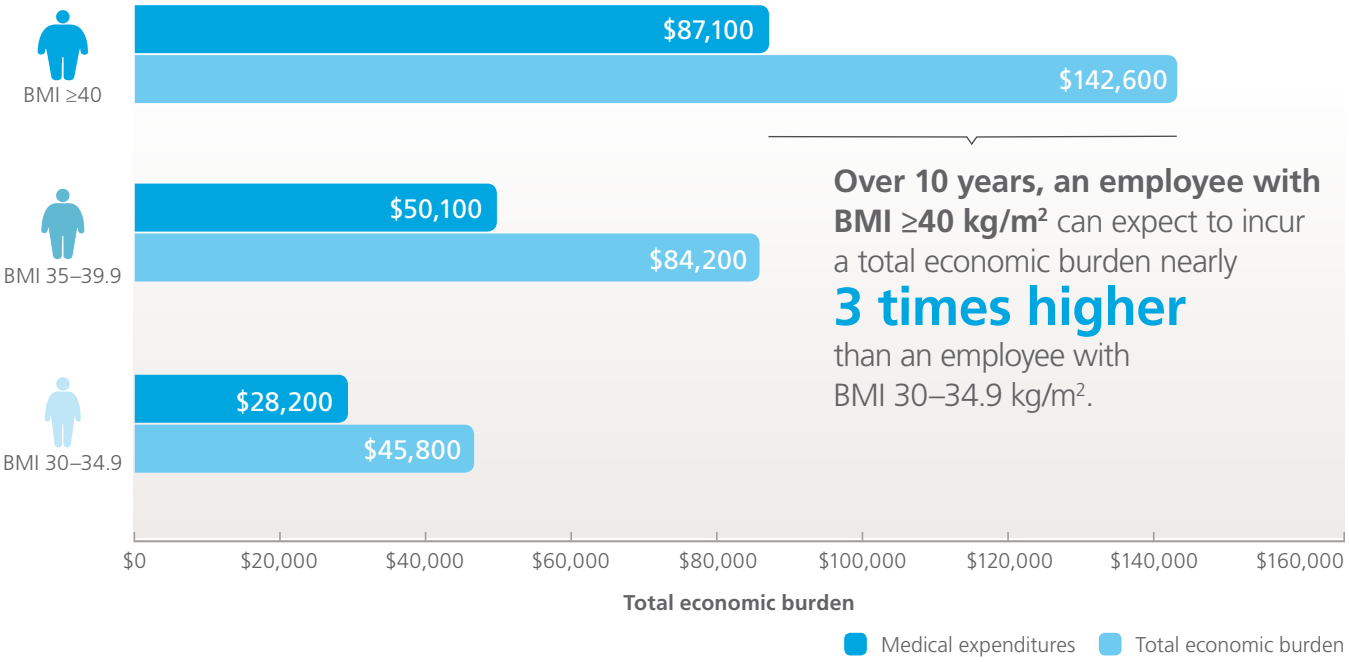
2 million

additional workers per year at

$47,060 each.[6,7,27]

The economic burden of comorbidities increases exponentially over time

10-year simulated economic outcomes[25,a]



Over 10 years, an employee with BMI ≥40 kg/m² can expect to incur a total economic burden nearly

3 times higher

than an employee with BMI 30–34.9 kg/m².

[a]Population included 100,000 adults with obesity and 100,000 demographically matched normal-weight adults. Data taken from 2005-2012 NHANES and shown in the graph as cumulative over 10 years and as medical expenditure and total economic burden.[25]

Obesity may be contributing to many other costs[22]

Obesity-related complications can be costly[b]

- **$111.9 billion** due to type 2 diabetes
- **$42.1 billion** due to osteoarthritis
- **$10.9 billion** due to coronary heart disease

In a health plan of 100,000 members, consider the following direct medical costs[c]:

Type 2 diabetes

5257 affected members
~$35.1 million total direct annual cost
~$29.24 PMPM

Coronary heart disease

844 affected members
~$3.4 million total direct annual cost
~$2.86 PMPM

Osteoarthritis

6772 affected members
~$13.2 million total direct annual cost
~$10.99 PMPM

The impact of obesity-related comorbidities can be seen in your medical and pharmacy costs.[23]

PMPM=per-member per-month.

[b]Costs shown are the direct medical costs associated with treating specific overweight- and obesity-related comorbidities in 2014.[22]

[c]Costs shown are direct medical costs associated with treating specific overweight- and obesity-related comorbidities PMPM in 2014.[22]

Are you aware of the costs of obesity to your organization?

As BMI increases, so do costs associated with short-term disability claims and workers' compensation claims

Short-term disability

According to a retrospective analysis of a large national employer database[5]

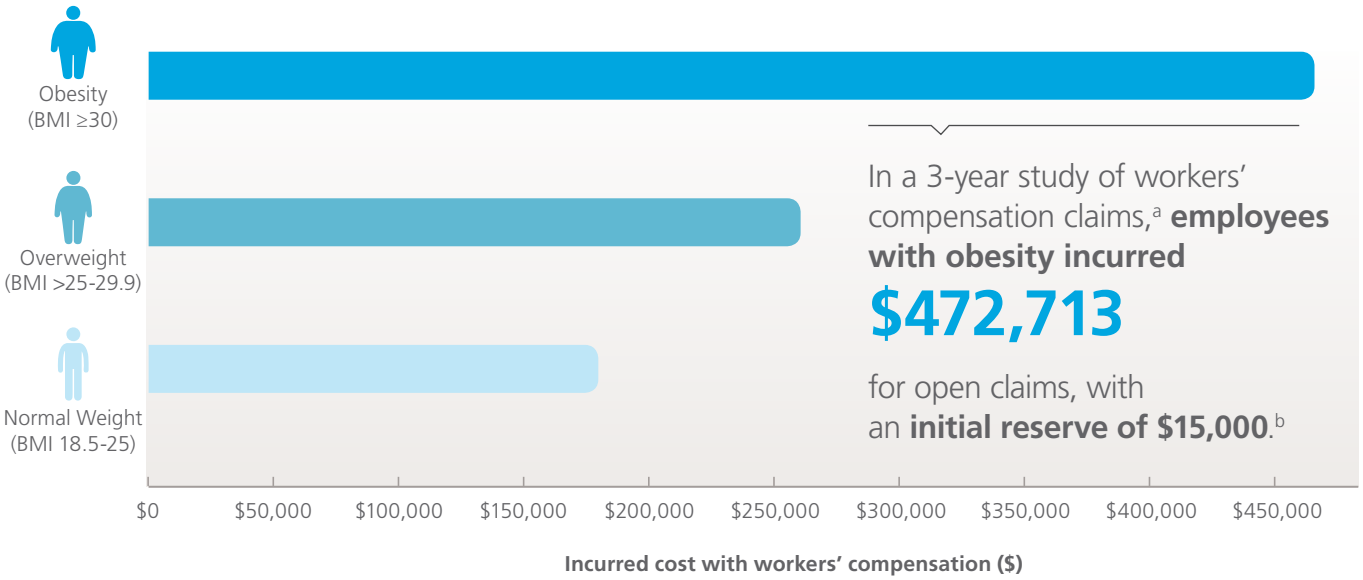
2x

Employees with obesity-related complications are nearly **twice as likely** to file short-term disability claims

The number of claims can increase by **37%** as BMI increases from 30 kg/m^2 to 35 kg/m^2 for those with diabetes, hypertension, or hyperlipidemia

Workers' compensation

In a different study, workers' compensation claims were **160%** higher for employees with obesity (BMI ≥30 kg/m^2) compared with those of normal weight (BMI 18.5-25 kg/m^2).[28]



[a]Study specific to the Louisiana Workers' Compensation Corporation Claims Payment Database for open claims. Study included ~2300 injured employees filing workers' compensation claims.[28]

[b]Initial reserve of at least $15,000 was considered to represent a more severe injury requiring higher medical care expenses resulting in longer lost time from work.[28]

Obesity may cause employees to miss more work days[c]

According to one study using 2006-2008 survey data,[5]

employees with BMI of 40 kg/m^2
will miss 77% more work days[d]
compared with employees
with BMI of 25 kg/m^2

obesity-related absenteeism
can cost employers
$12.8 billion annually

Obesity is associated with increased presenteeism

Presenteeism is the average amount of time between arriving at work and starting work on days when an employee is not feeling well and the average frequency with which an employee engages in 5 specific behaviors[6]:

- Losing concentration
- Doing nothing at work
- Repeating a job
- Working more slowly than usual
- Feeling fatigued at work

Days of presenteeism per year[6]:		Potential cost of obesity-related presenteeism[6]:	
2.3	for men with BMI 30 to 34.9 kg/m^2	**$391**	per male worker with BMI 30 to 34.9 kg/m^2
6.3	for women with BMI 30 to 34.9 kg/m^2	**$843**	per female worker with BMI 30 to 34.9 kg/m^2

Presenteeism in the workplace has been shown to be the single largest cost driver associated with obesity, regardless of BMI.[6]

[c]Cross-sectional analysis of N=29,699 US employees. Sample population based on data taken from 3 large employer databases between 2006 and 2008.[5]

[d]Due to sick days, short-term disability, and workers' compensation days.[5]

Does your health plan include AOMs as a treatment option for obesity?

Obesity management warrants a stepwise approach: AHA/ACC/TOS guidelines[9,a]

Treatment	BMI category (kg/m²)				
	25-26.9	27-29.9	30-34.9	35-39.9	≥40
Diet, physical activity, and behavior therapy	Yes, with comorbidities	Yes	Yes	Yes	Yes
Pharmacotherapy		Yes, with comorbidities	Yes	Yes	Yes
Surgery				Yes, with comorbidities	Yes

Lifestyle modifications must be part of any weight-loss intervention, but they are not always sufficient for maintaining weight loss.[9]

ACC=American College of Cardiology; AHA=American Heart Association; TOS=The Obesity Society.

[a]Yes alone means that the treatment is indicated regardless of presence or absence of comorbidities. The solid arrow signifies the point at which treatment may be initiated.[9]

The current gap in covered care leaves appropriate patients without a sufficient option for weight management[29,b]

	BMI ≥27 to <30 kg/m^2	BMI ≥30 to <35 kg/m^2	(BMI ≥35 to <40 kg/m^2)	(BMI ≥40 kg/m^2)
Overall	368,653	1,001,261	267,747	197,880
Treated with pharmacotherapy	752 (0.2%)	**6099 (0.6%)**	**2364 (0.9%)**	2647 (1.3%)
Untreated with pharmacotherapy	367,901	995,162	265,383	195,233

Less than 1% of patients were treated with pharmacotherapy out of 1.8 million potentially eligible patients.[29]

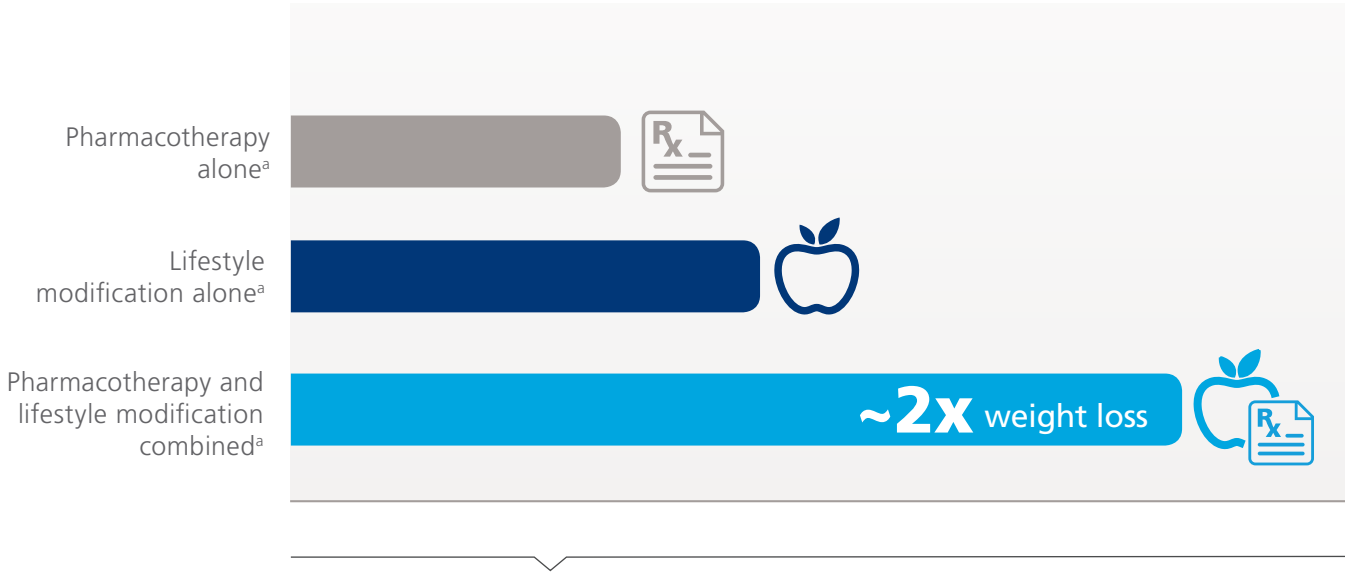
You can address the care gap in obesity by ensuring coverage for AOMs as a treatment option.

[b]Retrospective analysis conducted using data from the GE Centricity® database, a de-identified longitudinal ambulatory care EMR (electronic medical record) database with approximately 38 million patient records from primary care providers in 49 states and Washington, DC. Patients aged ≥18 years at the index date who had a BMI ≥30 kg/m^2 or BMI ≥27 to <30 kg/m^2 with ≥1 obesity-associated comorbidity (hypertension, dyslipidemia, or type 2 diabetes).[29]

Does your health plan include AOMs as a treatment option for obesity? (cont'd)

Adding AOMs to a comprehensive weight management program may help patients with obesity lose weight[30]

It is critical to offer various options to your employees with obesity, as one specific strategy will not address the needs of everyone with obesity in your organization.



In a clinical study, weight cycling and regain were commonly observed. Subjects losing the most weight during the initial period were more likely to continue losing weight.[31,b]

[a]According to a study of 224 men and women aged 18 to 65 years, with BMI of 30 to 45 kg/m^2, randomly assigned to receive pharmacotherapy (sibutramine) alone, lifestyle-modification counseling, or pharmacotherapy with lifestyle-modification counseling (combined therapy).[30]

[b]Retrospective, observational, longitudinal study using the GE Centricity® EMR database. Subjects aged ≥18 years with BMI ≥30 kg/m^2, had no medical conditions associated with unintentional weight changes, and had ≥4 BMI measurements/year for ≥2.5 years were included and categorized into groups (stable weight: within <5% of index BMI; modest weight loss: ≥5 to <10% of index BMI lost; moderate weight loss: ≥10 to <15% of index BMI lost; and high weight loss: ≥15% of index BMI lost) based on weight change during 6 months following index. No interventions were considered. Patterns of weight change were assessed for 2 years.[31]

Weight loss of 5% to 10% can lead to clinically meaningful results[4]

Reductions in

- Type 2 diabetes[4]
- Blood pressure[4]
- Blood lipid profile[4]

Improvements in

- Sleep apnea[4]
- Fatty liver[4]
- Joint pain and osteoarthritis[4]

In another study, patients with obesity who were treated with AOMs demonstrated sustained weight loss associated with **decreased rates of incident diabetes of 54% to 76%** when compared with placebo.[32,c]

[c]Placebo-controlled, double-blind, 52-week extension study evaluating the long-term efficacy and safety of an AOM, phentermine/topiramate, in patients with overweight and obesity with cardiometabolic disease and risk factors. The decrease in diabetes incidence was a secondary endpoint of the study. Annualized incidence rates for progression to type 2 diabetes were 0.9%, 1.7%, and 3.7% for 15 mg phentermine/92 mg controlled-release topiramate, 7.5 mg phentermine/46 mg controlled-release topiramate, and placebo, respectively. Data represent subjects without type 2 diabetes at baseline for up to 108 weeks.[32]

Healthcare costs were lower for individuals with obesity who had a larger magnitude of weight loss

In a real-world study, adjusted mean PMPM total healthcare cost was significantly reduced in all sustained weight loss groups compared with no weight change.[33,a]

[a]Data derived from Truven MarketScan EMR Database. Patients had BMI ≥30 kg/m^2 on the first instance ("index date") of BMI between January 1, 2012, and June 30, 2014. Adjusted PMPM healthcare cost difference was assessed between baseline and Year 2 of follow-up.[33]

[b]$P<0.05$.[33]

How can managing obesity help your organization?

Sustaining a 5% to 10% weight loss can help curb the economic impact of costly comorbidities[4]

The economic benefits of sustained weight loss are contingent upon the appropriate weight management approach being available for all obesity classifications. Below is the estimated impact per each case avoided in the United States over 10 years[33,34]:

Coronary heart disease and stroke

3.3 million cases avoided
~$2.97 PMPM associated savings

Diabetes

4.1 million cases avoided
~$2.08 PMPM associated savings

Hypertension

3.6 million cases avoided
~$0.41 PMPM associated savings

Arthritis

1.9 million cases avoided
~$0.55 PMPM associated savings

A study found that, with a given percent reduction in BMI, savings are[8,c]

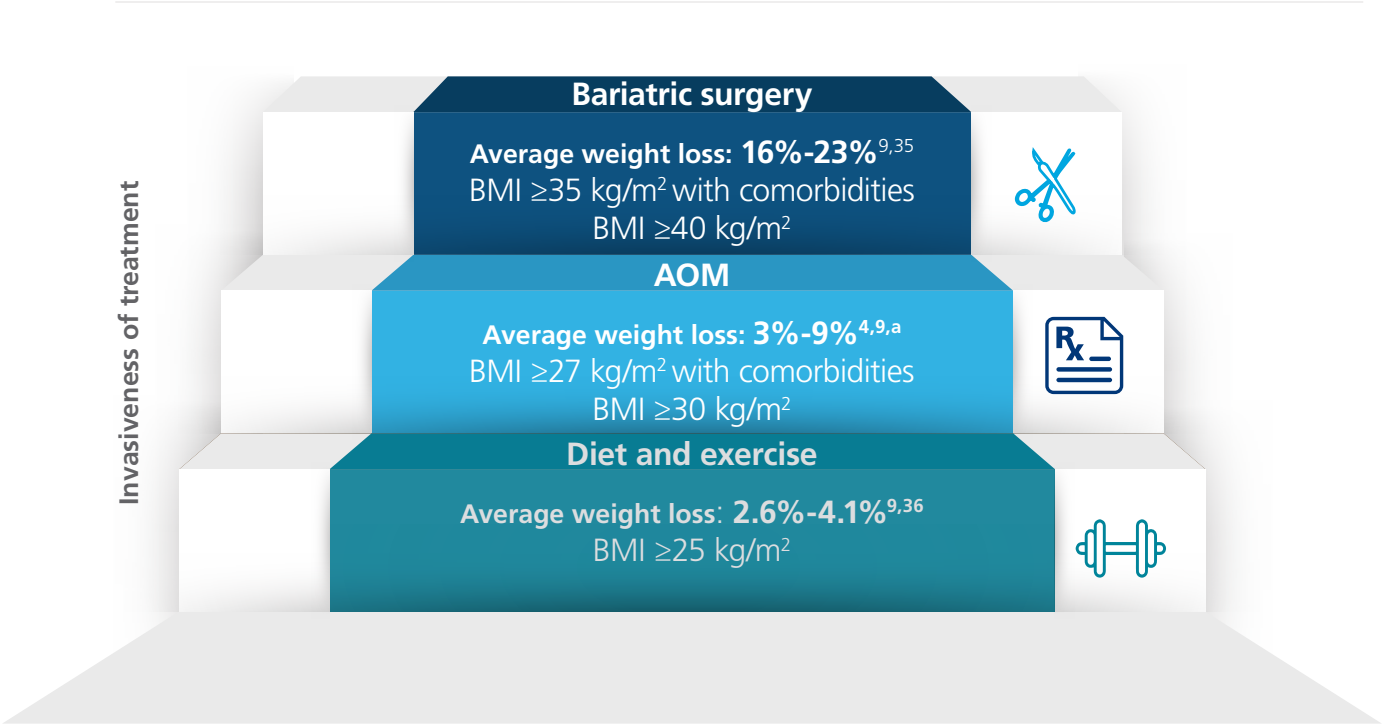
- Greater for individuals with higher BMI
- Greater for those with diabetes than for those without diabetes

[c]Using data from the Medical Expenditure Panel Survey for 2000–2010, 2-part models of instrumental variables were estimated. Models were estimated for all adults as well as separately for those with and without diabetes. Study investigators calculated the causal impact of changes in BMI on medical care expenditures, cost savings for specific changes in BMI, and total excess medical care expenditures caused by obesity.[8]

How can managing obesity help your organization? (cont'd)

Adding AOMs to your benefits offering may support your employees with obesity

AOMs are noninvasive and FDA-approved therapies that may be beneficial for those with a BMI ≥27 kg/m^2 with weight-related comorbidities or with a BMI ≥30 kg/m^2 as an adjunct to lifestyle modification.[4,9]



- According to AACE/ACE guidelines, a 5% to 15% weight loss may be necessary to achieve targeted improvements in A1C, blood pressure, and other comorbid conditions[4]
  - Although lifestyle therapy must be a part of obesity management, it may not be adequate to achieve this level of weight loss[9]

Talk to your employee benefits consultant about AOMs for your weight management program.

FDA=US Food and Drug Administration.

[a]Patients receiving AOMs should incorporate comprehensive lifestyle interventions, including dietary changes and added physical activity, in conjunction with medication.[9]

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The COVID-19 Crisis Is Making the Management of Obesity More Important Than Ever

Many of your employees may have obesity, a costly chronic disease

~30% **of full-time employees have obesity**

(body mass index [BMI] ≥30 kg/m^2)[1,a]

- 23,076,851 full-time employees in the United States have obesity[1,2,a]

Obesity is associated with significant

Direct healthcare costs

- There are approximately **57 comorbidities** associated with obesity, including type 2 diabetes, cardiovascular disease, and hypertension[3,b]

Indirect costs[4]

- Absenteeism/presenteeism
- Disability
- Workers' compensation

Did you know? People with obesity are at risk for severe symptoms of COVID-19

- People with obesity, as with any other chronic disease, are at a **higher risk of complications and adverse outcomes** from COVID-19[5]
- Based on what is currently known, the Centers for Disease Control and Prevention has stated that people of all ages with underlying medical conditions such as diabetes, renal failure, or severe obesity (BMI ≥40 kg/m^2)—particularly if not well controlled—are at **high risk for severe illness** from COVID-19[6]
- Much is still unknown about the relationship between obesity and the severity of outcomes with COVID-19. More studies are needed to define the relationship

Obesity is common in people hospitalized with COVID-19

- A cross-sectional analysis of 4103 patients with COVID-19 treated at a health system in New York City (NYC) showed that BMI >40 kg/m^2 was the second strongest independent **predictor of hospitalization**, after advanced age[7]
- In a study of 5700 patients with COVID-19 admitted to 12 hospitals in the NYC area, the **most common underlying conditions** were hypertension, obesity (41.7%), and diabetes[8]
- A US survey of 178 patients hospitalized with COVID-19 across 14 states found that[9]
  - **~90% of patients** had one or more underlying conditions, the most common being **obesity**, hypertension, chronic lung disease, diabetes mellitus, and cardiovascular disease
  - Obesity was the **most prevalent condition** among patients aged <65 years with COVID-19

Obesity is a chronic disease that presents a **significant cost burden**

The added risks of COVID-19 make weight management **even more important**

Do you cover appropriate weight-management treatments for employees?

To learn more about obesity in the workplace, go to https://www.novonordiskworks.com/.

[a]Adults aged ≥18 years.
[b]According to the Obesity Medicine Association.

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Stereotypical images and implicit weight bias in overweight/ obese people

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Implicit weight bias and stereotype incongruent images

Body weight is a highly salient social category that is associated with weight bias (i.e., prejudiced attitudes, stereotypes, and discrimination). Weight bias is widespread and results in obese individuals being subjected to unfair and harmful treatment in nearly all domains of life [1]. Overweight and obese individuals also evidence weight bias and very little in-group favoritism [1]. Internalized weight bias among obese individuals contributes to psychological distress and poor weight loss outcomes [2, 3]. Some of the most common stereotypes of obese individuals include the belief that obese individuals are lazy, sedentary, and that they overeat [1]. Conversely, relative to their obese counterparts, thin people are viewed as more active, healthy, and hardworking [4]. Categorizing others, often unconsciously and rapidly, makes use of prevailing stereotypes to guide subsequent

stereotypes of obese individuals include the belief that obese individuals are lazy, sedentary, and that they overeat [1]. Conversely, relative to their obese counterparts, thin people are viewed as more active, healthy, and hardworking [4]. Categorizing others, often unconsciously and rapidly, makes use of prevailing stereotypes to guide subsequent

Correspondence to: Robert A. Carels, rcarels@bgsu.edu.

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Prior Authorization Criteria

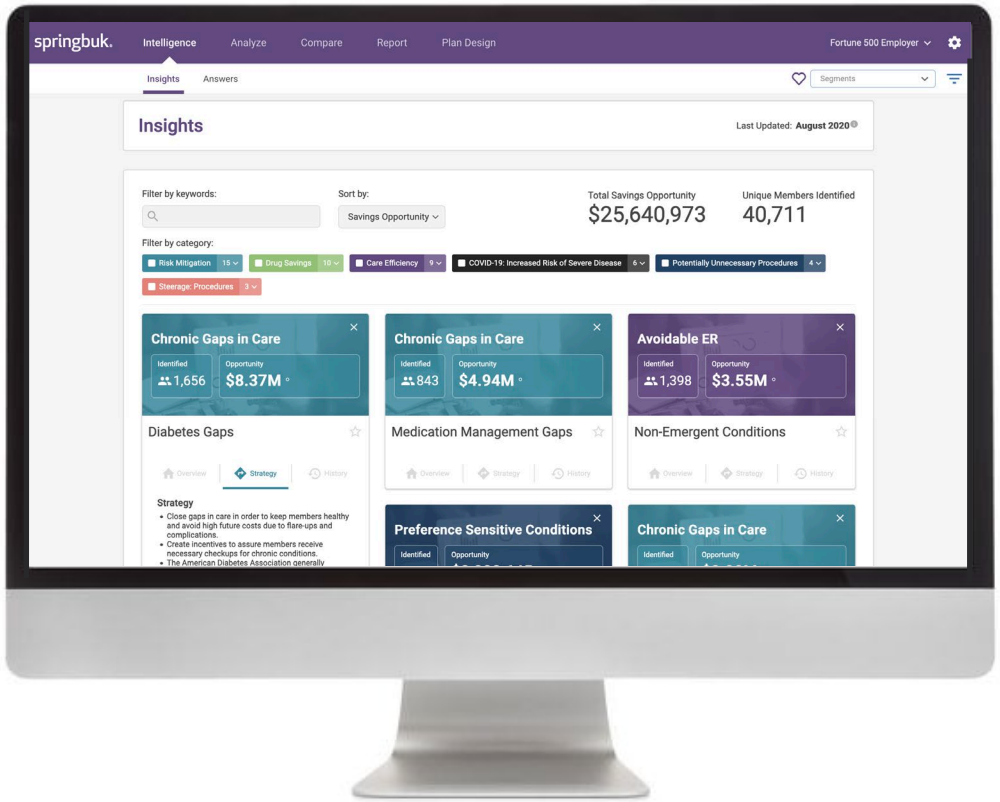
Initial approval criteria for covered drugs with prior authorization:

- Patient must meet the age limit indicated in the FDA-approved label of the requested drug AND
- Documented failure of at least a three-month trial on a low-calorie diet AND
- A regimen of increased physical activity unless medically contraindicated by co-morbidity AND
- Baseline body mass index (BMI) must be:
    - Greater than or equal to 30 kg/m2 with no risk factors OR
    - Greater than or equal to 27 kg/m2 with at least one very high-risk factor OR
- At least two other risk factors (see Table 1) OR
- Waist circumference must be greater than 102 cm for men and greater than 88 cm for women with at least one very high-risk factor AND
- No contraindications (disease state or current therapy) should exist unless the prescriber documents that benefits outweigh risks (see Table 2) AND
- No concurrent use of any other weight loss drug(s) AND
- Patient's weight at baseline (in pounds) must be submitted at time of request
- Initial approval is for 3 months

Prior Authorization Renewal Criteria

Renewal criteria for covered drugs with prior authorization:

- Ongoing prescriber documentation of adherence to a low-calorie diet AND
- A regimen of increased physical activity (unless medically contraindicated by co-morbidity) during anti-obesity therapy AND
- No contraindications (disease state or current therapy) should exist, unless prescriber documents that benefits outweigh risks (see Table 2) AND
- Patient must have lost at least 5% during the initial approval period AND
- Renewal approval is for 6 months AND
- Patient's most recent weight (in pounds) must be submitted with each prior authorization request AND
- After 6 months of therapy, a 6-month approval may be granted if a 5% weight reduction has been achieved AND
- After one year of therapy, additional 6-month approvals may be granted if a 5% weight reduction has been achieved AND the patient continues to maintain weight loss AND
- After lapses of therapy, additional trials may be approved if criteria requirements are met AND



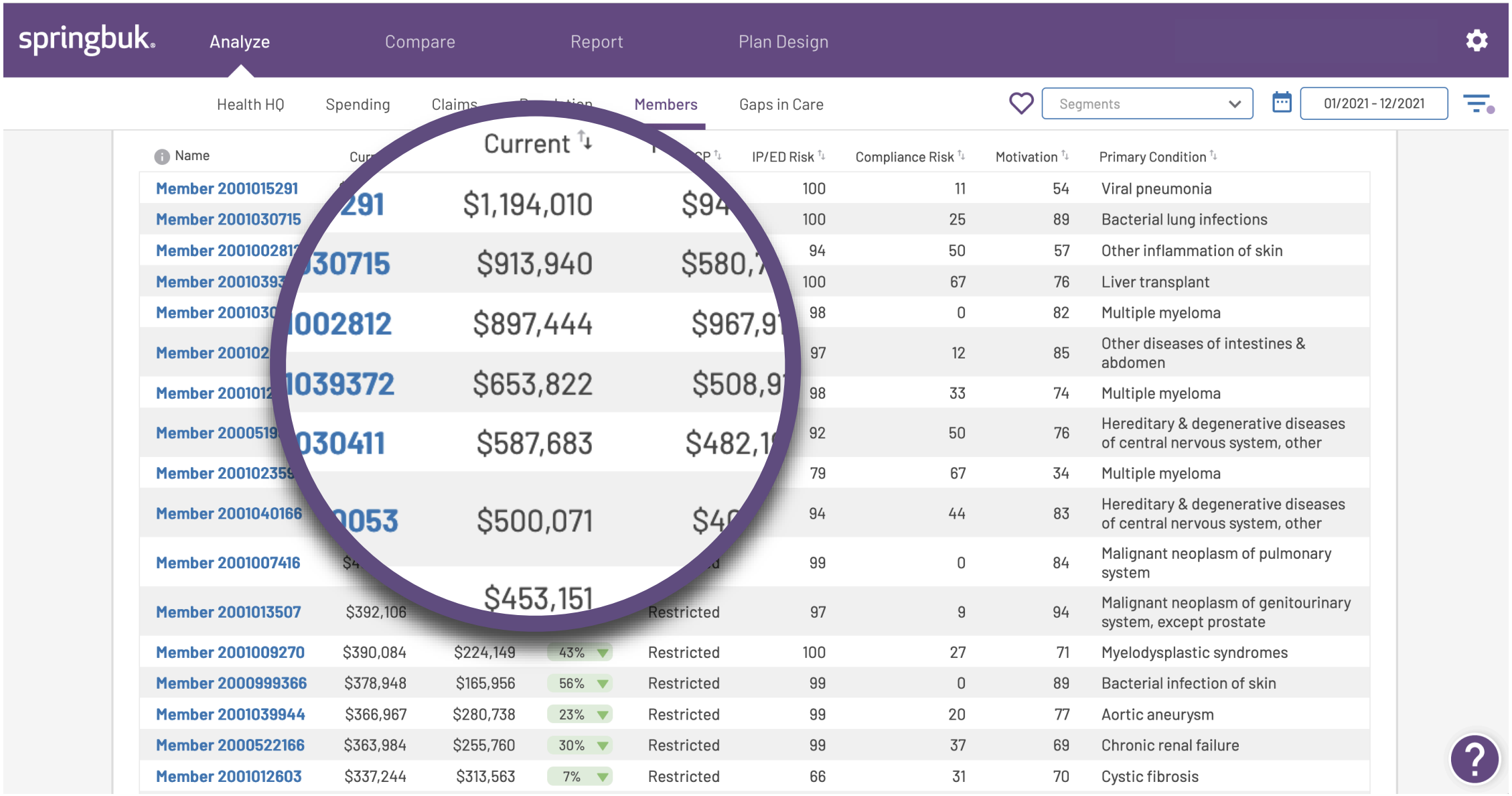
It's impossible to make great data-based benefits decisions without a great healthcare database.

Client Obesity and Related Co-morbidity Costs

Member Count	33,222	
Populations	**Per Member Per Year (PMPY)**	**△ vs Entire Pop**
Entire Group	**$7,401**	-
Hypertension	**$11,950**	61.5%
Obesity	**$12,453**	68.3%
Bone, Joint & Muscle	**$12,900**	74.3%
Asthma	**$13,145**	77.6%
Diabetes	**$15,994**	116.1%
Coronary Artery Disease (CAD)	**$16,489**	122.8%
Congestive Heart Failure (CHF)	**$20,117**	171.8%
Chronic Obstructive Pulmonary Disease COPD)	**$23,298**	214.8%
Cancer (w/ Active Management)	**$51,580**	596.9%

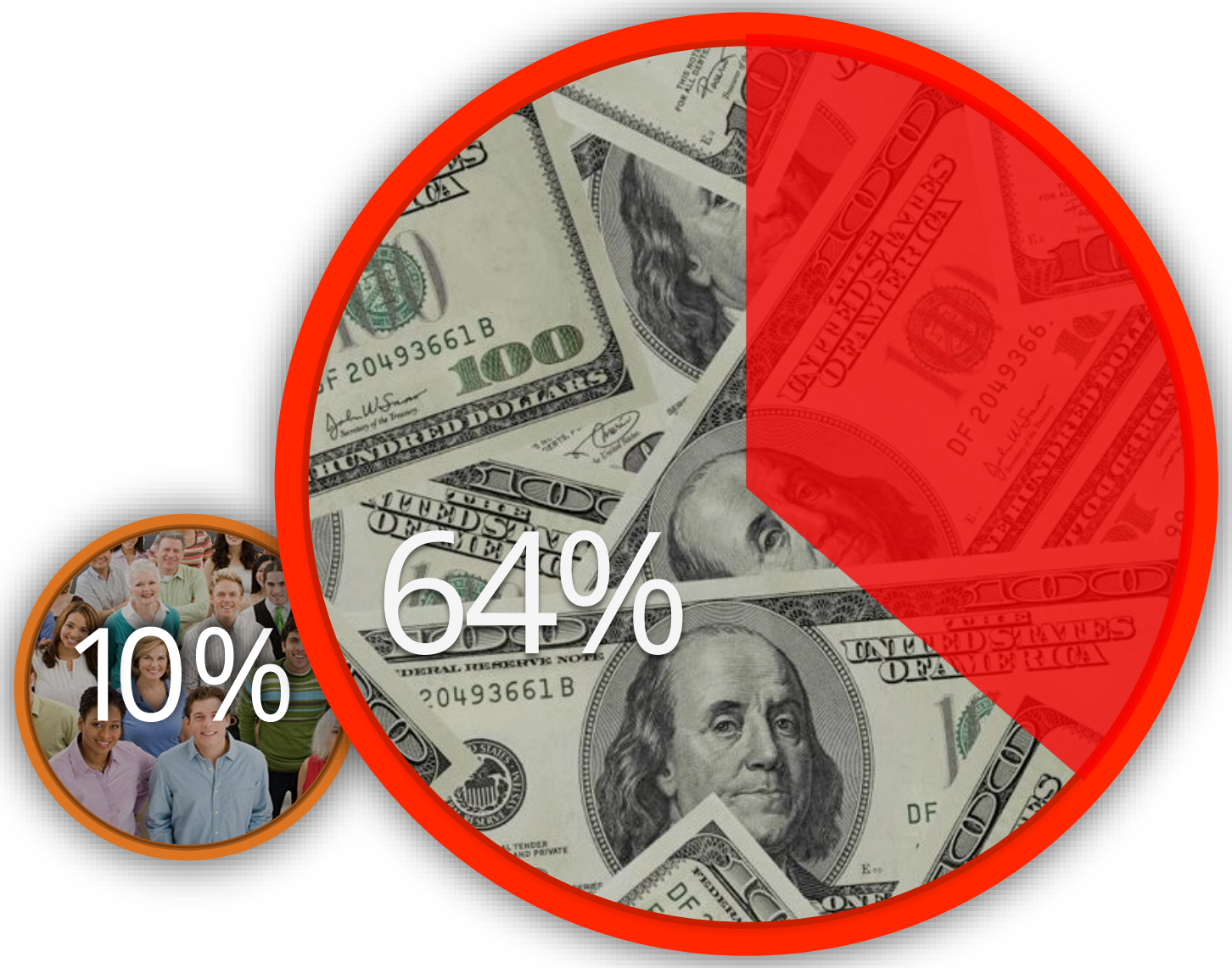
Source: Switchbridge. May, 2022.

High-cost Claimants (HCCs) with Obesity-related Conditions

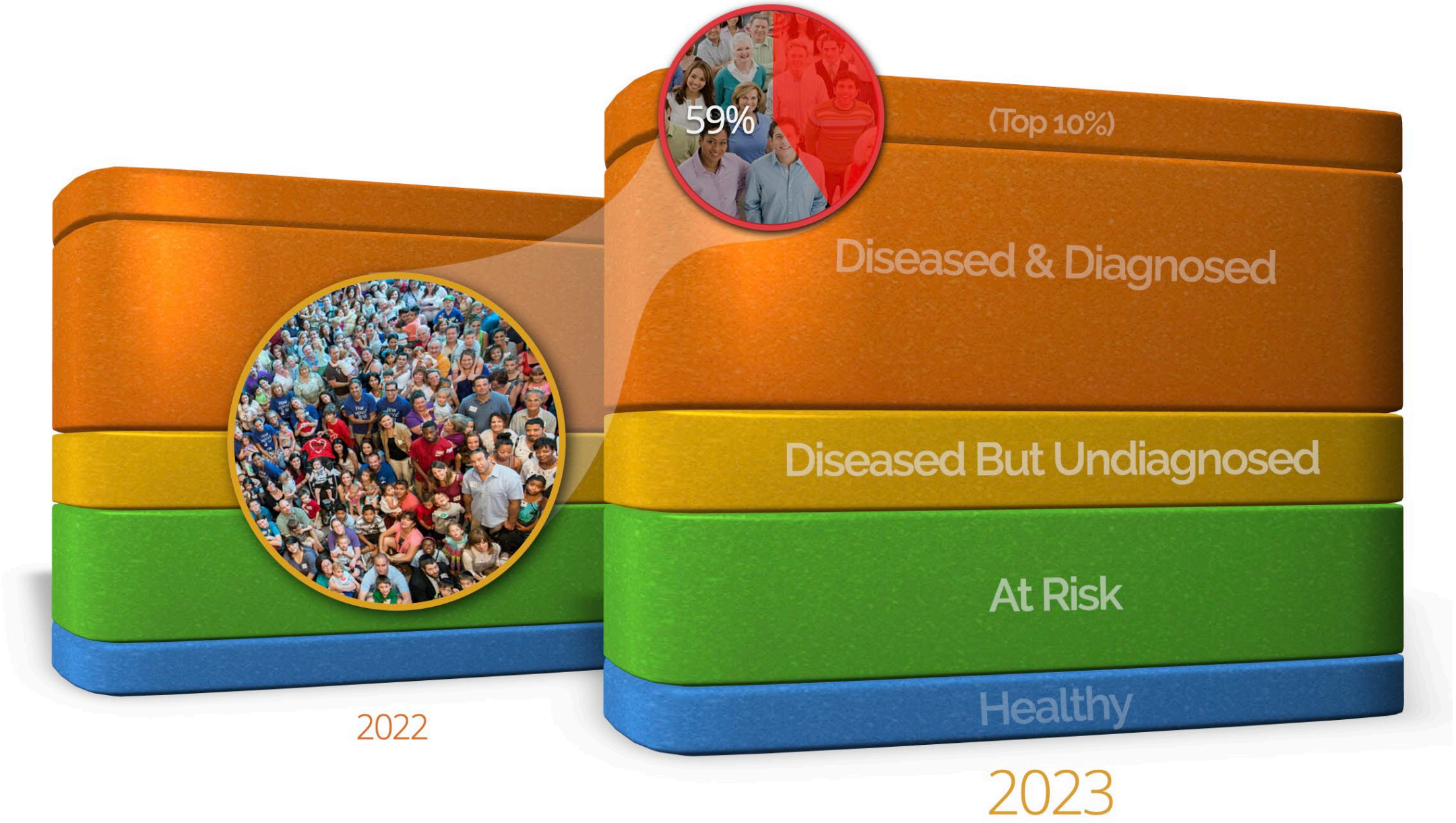


Name	Current			IP/ED Risk	Compliance Risk	Motivation	Primary Condition
Member 2001015291	$1,194,010	$94		100	11	54	Viral pneumonia
Member 2001030715	$913,940	$580,7		100	25	89	Bacterial lung infections
Member 2001002812	$897,444	$967,9		94	50	57	Other inflammation of skin
Member 2001039372	$653,822	$508,9		100	67	76	Liver transplant
Member 2001030411	$587,683	$482,1		98	0	82	Multiple myeloma
Member 2001040166	$500,071	$4		97	12	85	Other diseases of intestines & abdomen
Member 2001007416	$453,151			98	33	74	Multiple myeloma
Member 2001013507	$392,106		Restricted	92	50	76	Hereditary & degenerative diseases of central nervous system, other
Member 2001009270	$390,084	$224,149	43% Restricted	79	67	34	Multiple myeloma
Member 2000999366	$378,948	$165,956	56% Restricted	94	44	83	Hereditary & degenerative diseases of central nervous system, other
Member 2001039944	$366,967	$280,738	23% Restricted	99	0	84	Malignant neoplasm of pulmonary system
Member 2000522166	$363,984	$255,760	30% Restricted	97	9	94	Malignant neoplasm of genitourinary system, except prostate
Member 2001012603	$337,244	$313,563	7% Restricted	99	27	71	Myelodysplastic syndromes
				99	0	89	Bacterial infection of skin
				99	20	77	Aortic aneurysm
				99	37	69	Chronic renal failure
				66	31	70	Cystic fibrosis

64% of Costs are Incurred by Just 10% of Members

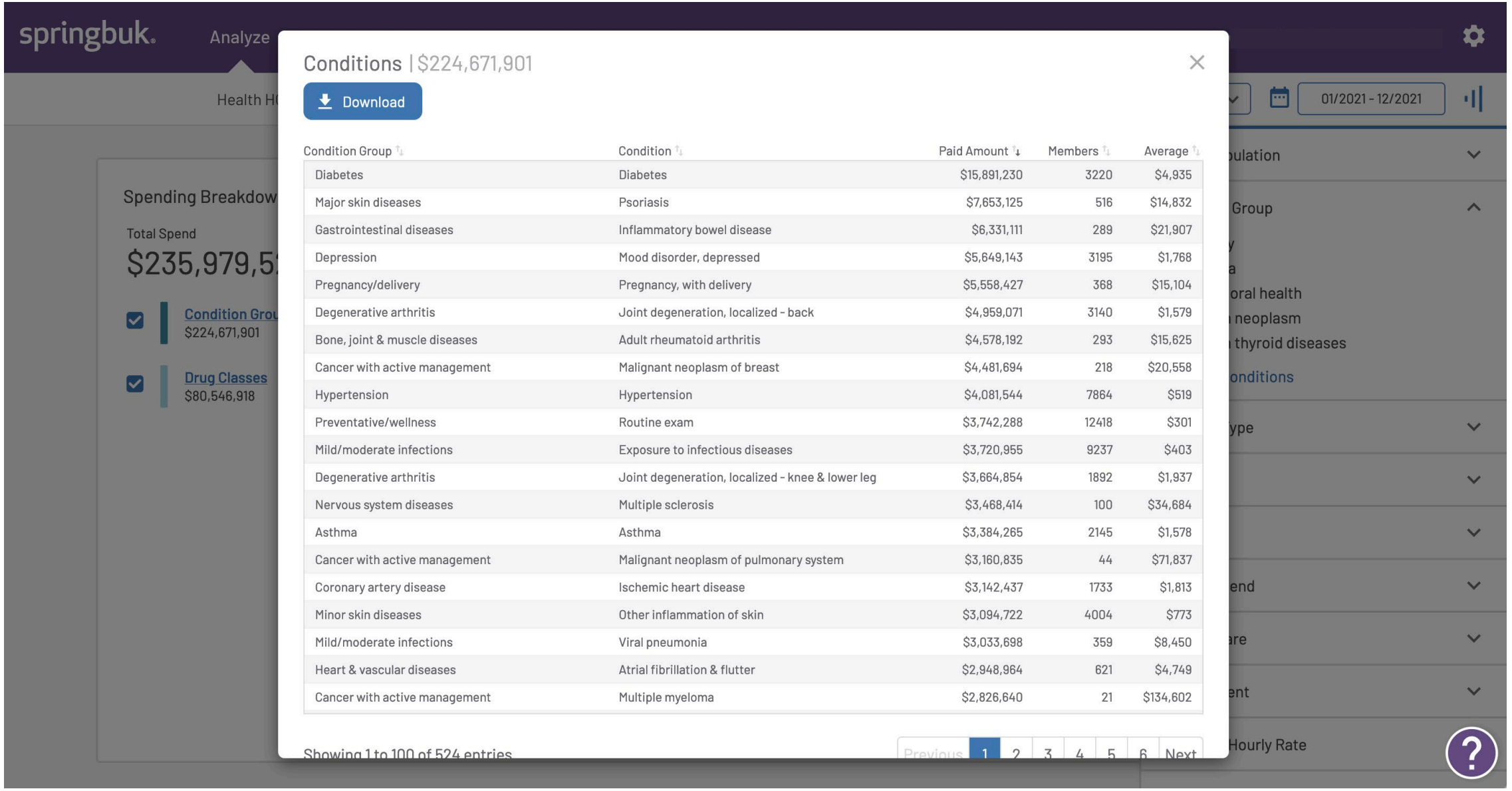


But 59% of Next Year's Top 10% are Low Cost Today



Progression of Disease

Most Expensive Conditions (by Paid Amount)



Conditions | $224,671,901

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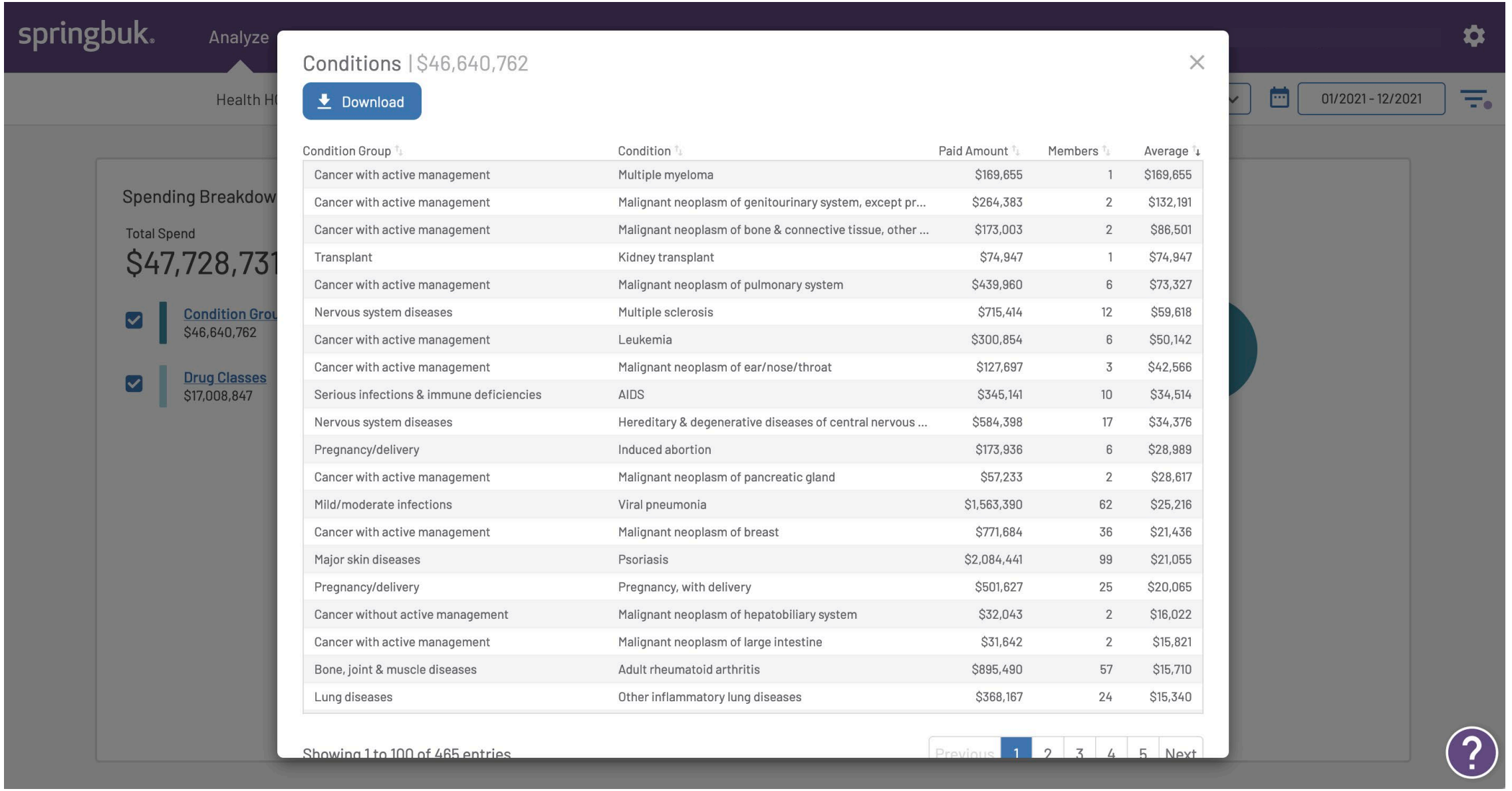
Condition Group	Condition	Paid Amount	Members	Average
Diabetes	Diabetes	$15,891,230	3220	$4,935
Major skin diseases	Psoriasis	$7,653,125	516	$14,832
Gastrointestinal diseases	Inflammatory bowel disease	$6,331,111	289	$21,907
Depression	Mood disorder, depressed	$5,649,143	3195	$1,768
Pregnancy/delivery	Pregnancy, with delivery	$5,558,427	368	$15,104
Degenerative arthritis	Joint degeneration, localized - back	$4,959,071	3140	$1,579
Bone, joint & muscle diseases	Adult rheumatoid arthritis	$4,578,192	293	$15,625
Cancer with active management	Malignant neoplasm of breast	$4,481,694	218	$20,558
Hypertension	Hypertension	$4,081,544	7864	$519
Preventative/wellness	Routine exam	$3,742,288	12418	$301
Mild/moderate infections	Exposure to infectious diseases	$3,720,955	9237	$403
Degenerative arthritis	Joint degeneration, localized - knee & lower leg	$3,664,854	1892	$1,937
Nervous system diseases	Multiple sclerosis	$3,468,414	100	$34,684
Asthma	Asthma	$3,384,265	2145	$1,578
Cancer with active management	Malignant neoplasm of pulmonary system	$3,160,835	44	$71,837
Coronary artery disease	Ischemic heart disease	$3,142,437	1733	$1,813
Minor skin diseases	Other inflammation of skin	$3,094,722	4004	$773
Mild/moderate infections	Viral pneumonia	$3,033,698	359	$8,450
Heart & vascular diseases	Atrial fibrillation & flutter	$2,948,964	621	$4,749
Cancer with active management	Multiple myeloma	$2,826,640	21	$134,602

Showing 1 to 100 of 524 entries

Previous 1 2 3 4 5 6 Next

Co-morbidities with Obesity (by highest average cost)



Condition Group	Condition	Paid Amount	Members	Average
Cancer with active management	Multiple myeloma	$169,655	1	$169,655
Cancer with active management	Malignant neoplasm of genitourinary system, except pr...	$264,383	2	$132,191
Cancer with active management	Malignant neoplasm of bone & connective tissue, other ...	$173,003	2	$86,501
Transplant	Kidney transplant	$74,947	1	$74,947
Cancer with active management	Malignant neoplasm of pulmonary system	$439,960	6	$73,327
Nervous system diseases	Multiple sclerosis	$715,414	12	$59,618
Cancer with active management	Leukemia	$300,854	6	$50,142
Cancer with active management	Malignant neoplasm of ear/nose/throat	$127,697	3	$42,566
Serious infections & immune deficiencies	AIDS	$345,141	10	$34,514
Nervous system diseases	Hereditary & degenerative diseases of central nervous ...	$584,398	17	$34,376
Pregnancy/delivery	Induced abortion	$173,936	6	$28,989
Cancer with active management	Malignant neoplasm of pancreatic gland	$57,233	2	$28,617
Mild/moderate infections	Viral pneumonia	$1,563,390	62	$25,216
Cancer with active management	Malignant neoplasm of breast	$771,684	36	$21,436
Major skin diseases	Psoriasis	$2,084,441	99	$21,055
Pregnancy/delivery	Pregnancy, with delivery	$501,627	25	$20,065
Cancer without active management	Malignant neoplasm of hepatobiliary system	$32,043	2	$16,022
Cancer with active management	Malignant neoplasm of large intestine	$31,642	2	$15,821
Bone, joint & muscle diseases	Adult rheumatoid arthritis	$895,490	57	$15,710
Lung diseases	Other inflammatory lung diseases	$368,167	24	$15,340

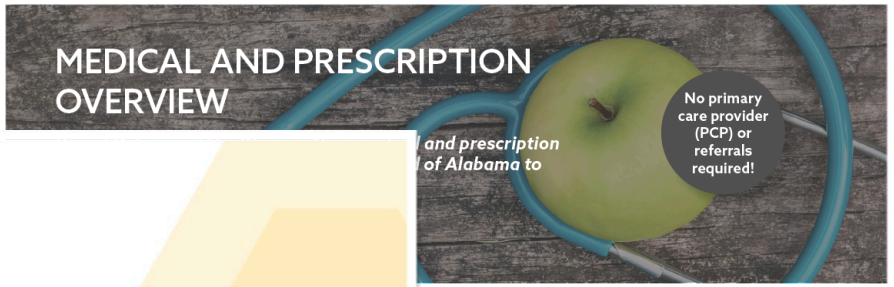
EMPLOYEE BENEFITS GUIDE

2021

April 1, 2021–March 31, 2022

STARK INDUSTRIES

MEDICAL AND PRESCRIPTION OVERVIEW



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Choosing a health coverage option is an important decision. To help you make an informed choice, a **Summary of Benefits and Coverage (SBC)**, which summarizes important benefit information in a standard format, is available for review.

SBCs for each plan option will be provided to you with your enrollment materials.

Don't understand your deductible, coinsurance, or out-of-pocket maximum?

Visit https://bit.ly/MedicalTerms to watch a short video.

For additional terms and definitions, visit https://www.healthcare.gov/SBC-GLOSSARY/

ND PRESCRIPTION ION

Need to locate an in-network provider?

To locate a provider, visit www.alabamablue.com.

Choosing the right type of care

Your Doctor Knows Best

- Your personal physician best understands your health.
- Having a personal physician can result in overall better care.

But what if you get sick or injured when your doctor's office is closed?

Teladoc

- You can use Teladoc to see a doctor from your computer or smart phone for non-emergency health issues.

Urgent Care Centers

- Urgent care centers are usually open after normal business hours, including evenings and weekends.
- Many urgent care centers offer on-site diagnostic tests and x-rays.
- In most situations, you'll find that you save time and money by going to urgent care instead of the Emergency Room.

Emergency Room (ER)

- This is the best place for treating severe and life-threatening conditions.
- Your copay is at the highest level at the ER.

NOTE: The information provided herein regarding various care options is meant to be helpful when you are seeking care and is not intended as medical advice. Only a medical provider can offer medical advice. The choice of provider or place to seek medical treatment belongs entirely to you.

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I’m sick and tired of being sick and tired. I’m ready to make some changes. What should I do?


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The free WeGoTogether™ personalized support program features:
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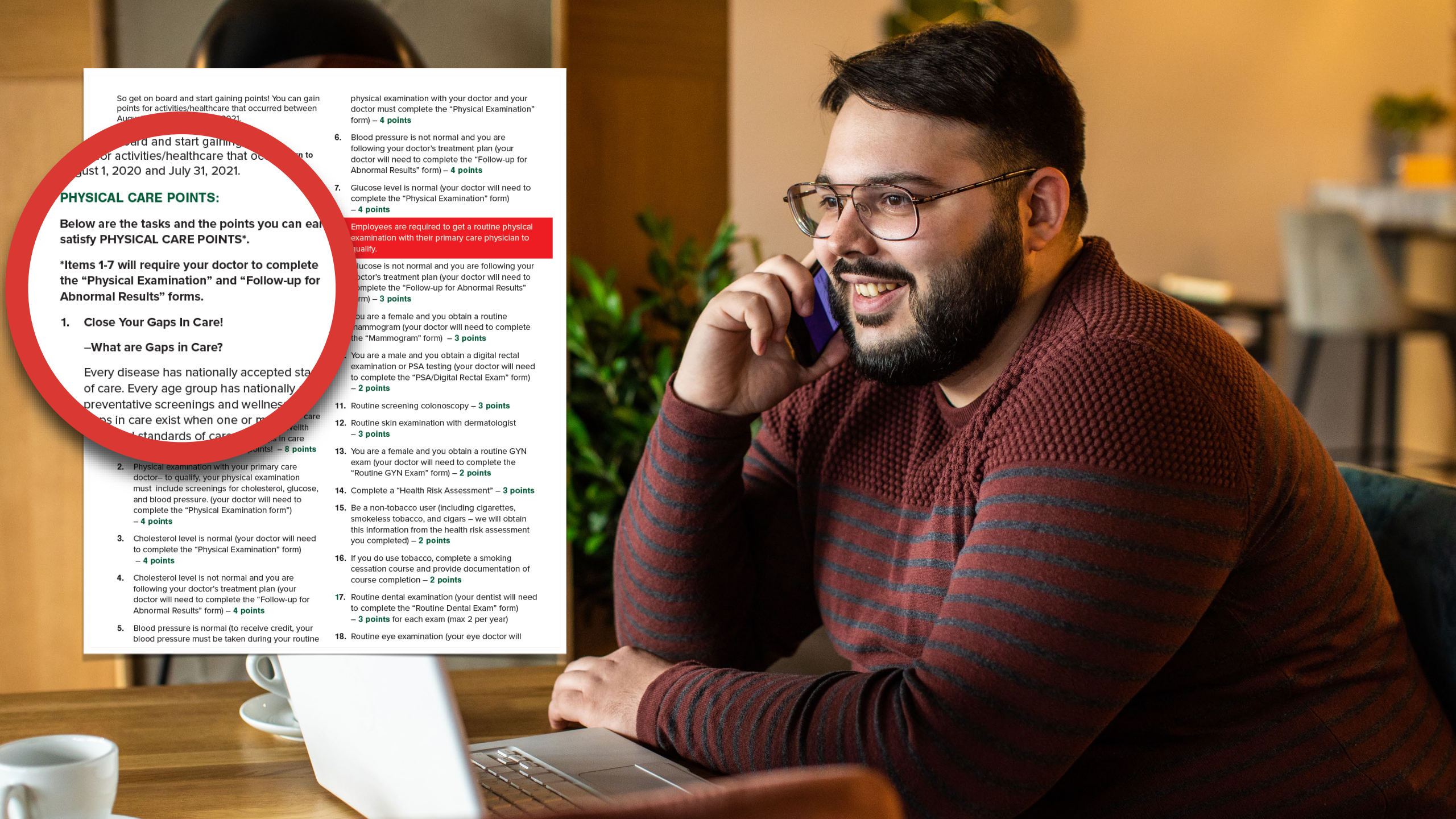
• Inspirational and educational emails and texts from your WeGoTogether™ Coach
• Skill-building activities and an online portal to check your progress
SIGN UP



So get on board and start gaining points! You can gain points for activities/healthcare that occurred between Aug[illegible]2021.

[illegible]ard and start gaining [illegible] or activities/healthcare that oc[illegible]n to [illegible]ust 1, 2020 and July 31, 2021.

PHYSICAL CARE POINTS:

Below are the tasks and the points you can ea[illegible] satisfy PHYSICAL CARE POINTS*.

***Items 1-7 will require your doctor to complete the "Physical Examination" and "Follow-up for Abnormal Results" forms.**

1. **Close Your Gaps In Care!**

   –What are Gaps in Care?

   Every disease has nationally accepted sta[illegible] of care. Every age group has nationally [illegible] preventative screenings and wellnes[illegible] [illegible]s in care exist when one or m[illegible] care [illegible]ealth [illegible] standards of care[illegible]s in care [illegible]oints! – **8 points**

2. Physical examination with your primary care doctor– to qualify, your physical examination must include screenings for cholesterol, glucose, and blood pressure. (your doctor will need to complete the "Physical Examination form") – **4 points**
3. Cholesterol level is normal (your doctor will need to complete the "Physical Examination" form) – **4 points**
4. Cholesterol level is not normal and you are following your doctor's treatment plan (your doctor will need to complete the "Follow-up for Abnormal Results" form) – **4 points**
5. Blood pressure is normal (to receive credit, your blood pressure must be taken during your routine physical examination with your doctor and your doctor must complete the "Physical Examination" form) – **4 points**
6. Blood pressure is not normal and you are following your doctor's treatment plan (your doctor will need to complete the "Follow-up for Abnormal Results" form) – **4 points**
7. Glucose level is normal (your doctor will need to complete the "Physical Examination" form) – **4 points**

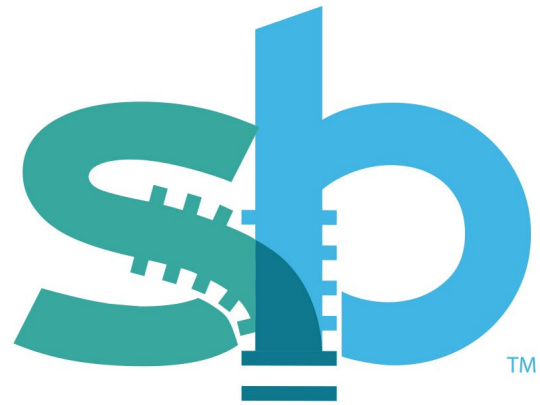
Employees are required to get a routine physical examination with their primary care physician to [illegible]ualify.

[illegible]lucose is not normal and you are following your [illegible]octor's treatment plan (your doctor will need to [illegible]omplete the "Follow-up for Abnormal Results" [illegible]rm) – **3 points**

[illegible]ou are a female and you obtain a routine [illegible]ammogram (your doctor will need to complete the "Mammogram" form) – **3 points**

You are a male and you obtain a digital rectal examination or PSA testing (your doctor will need to complete the "PSA/Digital Rectal Exam" form) – **2 points**

11. Routine screening colonoscopy – **3 points**
12. Routine skin examination with dermatologist – **3 points**
13. You are a female and you obtain a routine GYN exam (your doctor will need to complete the "Routine GYN Exam" form) – **2 points**
14. Complete a "Health Risk Assessment" – **3 points**
15. Be a non-tobacco user (including cigarettes, smokeless tobacco, and cigars – we will obtain this information from the health risk assessment you completed) – **2 points**
16. If you do use tobacco, complete a smoking cessation course and provide documentation of course completion – **2 points**
17. Routine dental examination (your dentist will need to complete the "Routine Dental Exam" form) – **3 points** for each exam (max 2 per year)
18. Routine eye examination (your eye doctor will



switchbridge

Upcoming Events

End-of-Session Policy Conference

- Tuesday, June 7th

Networking Breakfast – Boy Scouts' Akridge Scout Reservation

- Wednesday, June 15th

Webinar: Your Health an Arm's Length Away

- Tuesday, June 21st

Intern Delaware

June 1 – August 5