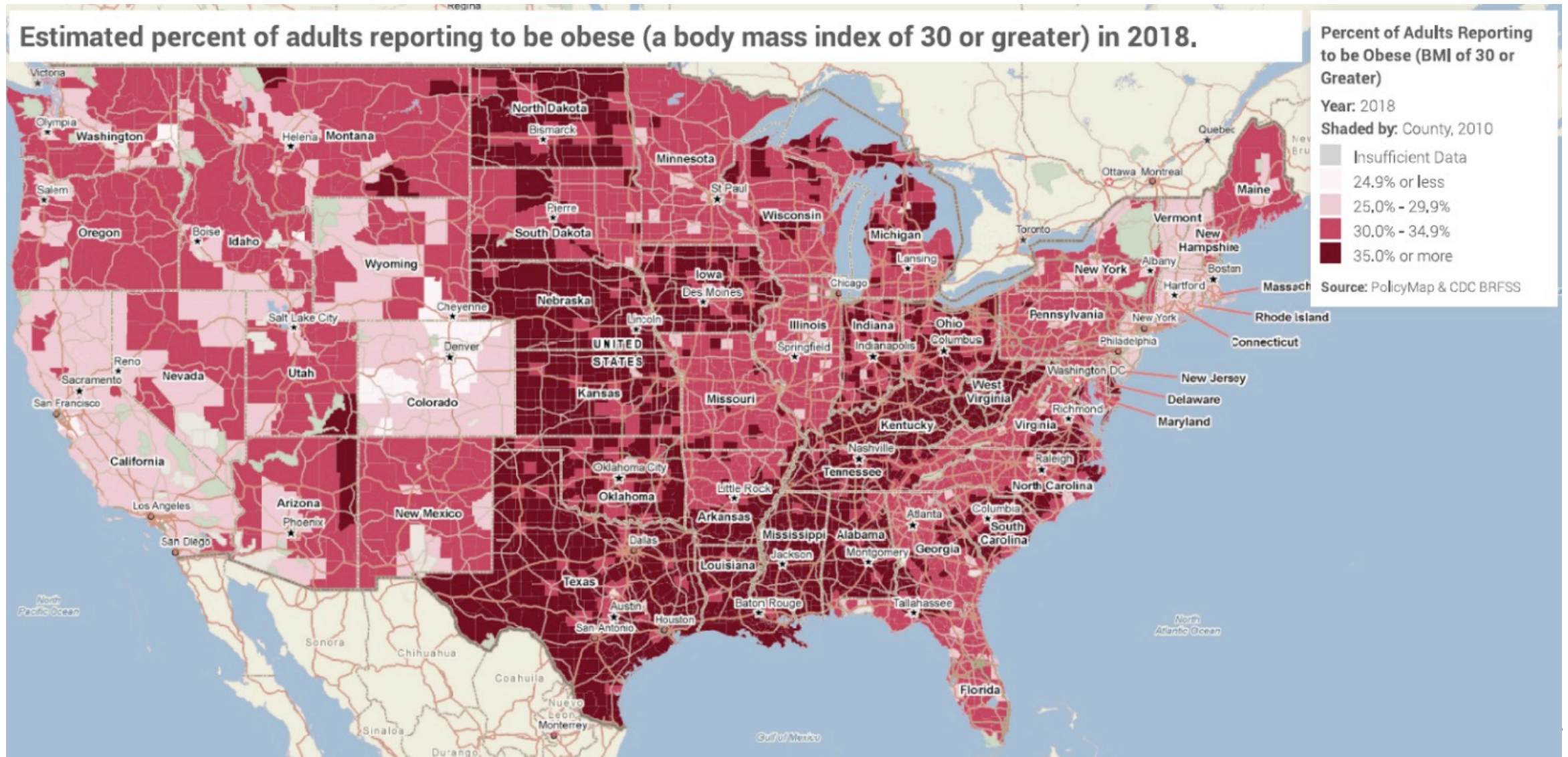


Ensuring Access to Anti-Obesity Medications is Critical to Managing COVID-19 and Future Public Health Emergencies

October 20, 2020

U.S. Obesity Prevalence



Like other conditions, obesity is caused by a range of factors.



Biology

Improperly regulated adipokine secretion



Genetics

BMI, adipose distribution, lean body mass

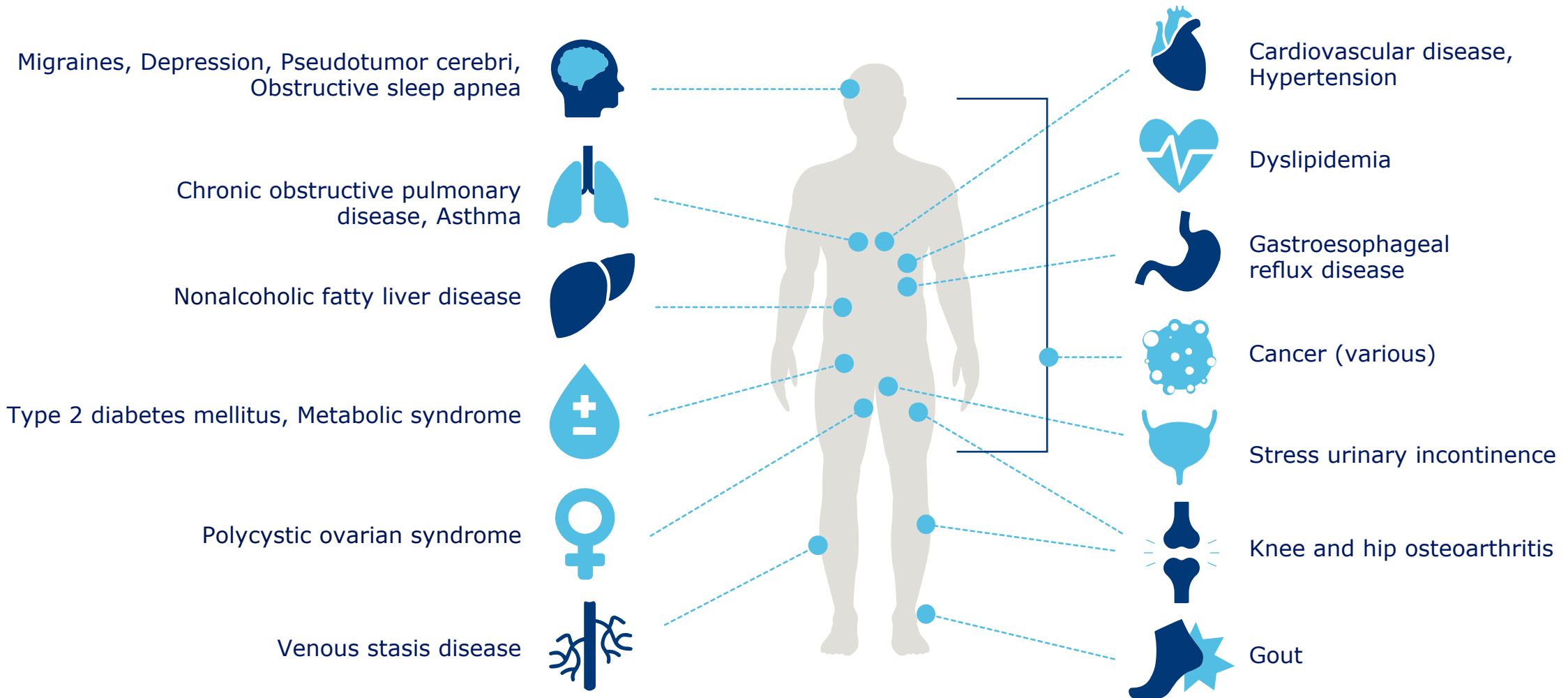


Environment

Nutrition, behavior, certain medications

Appetite regulation and energy metabolism are tightly controlled by signaling between peripheral organs and the brain. In patients with obesity, these signals do not work as they should to convey hunger and satiety.

Patients with obesity often experience many weight-related comorbidities

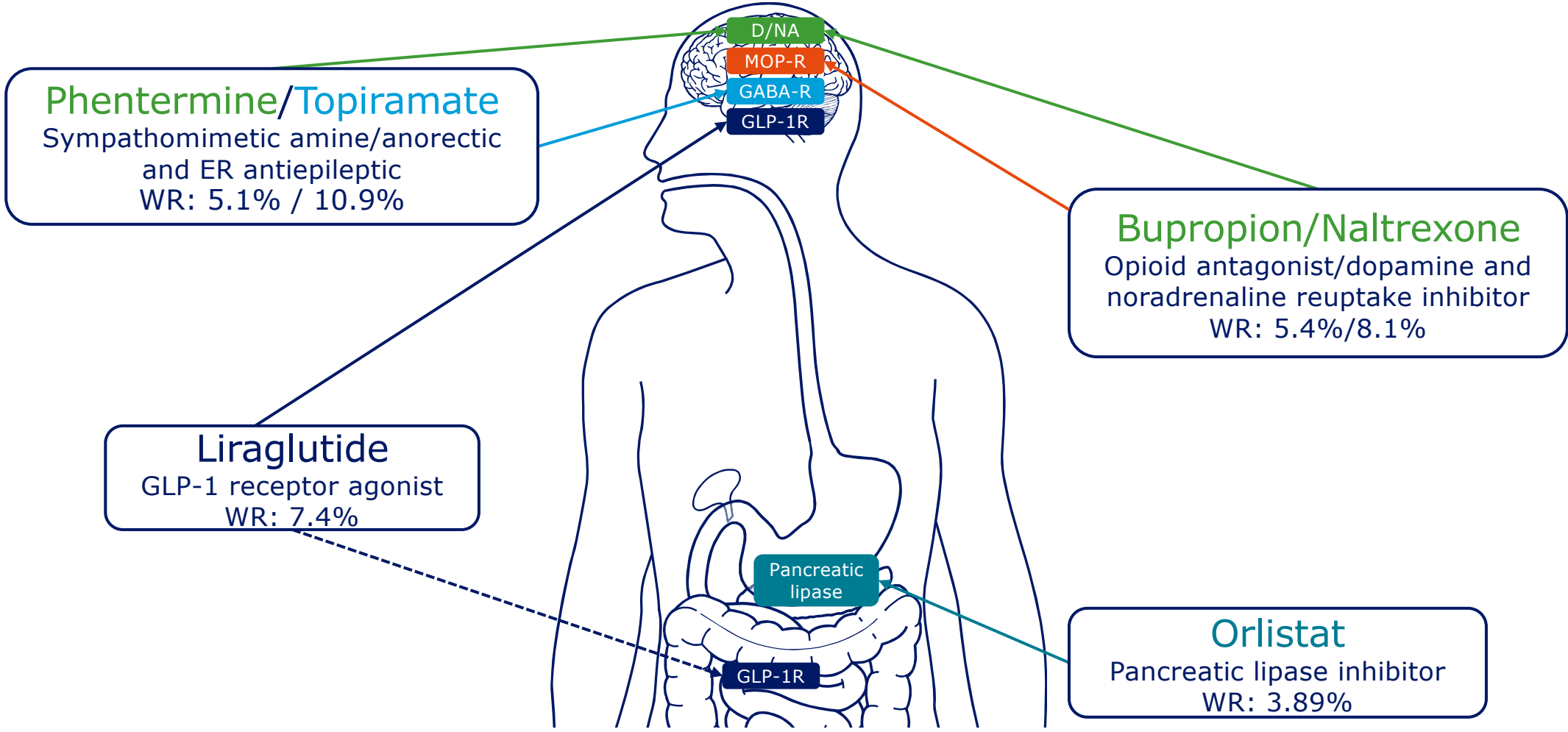


The above list is not exhaustive and is intended to illustrate only a range of key complications.

Approved Anti-Obesity Medications

Sites of Action

WR: Weight reduction 1yr; US label



D/NA, dopamine/noradrenaline; GABA-R, gamma-aminobutyric acid receptor; GLP-1R, glucagon-like peptide-1 receptor; MOP-R, μ -opioid peptide receptor



Medicare Does Not Cover All Guideline Recommended Treatments for Obesity.

Leading Clinical Practice Guidelines recommend pharmacotherapy for treatment of obesity.



American Heart Association®

Medicare Coverage for Obesity Treatment



Intensive Behavioral Therapy



Bariatric Surgery



Pharmacotherapy



After age, obesity and obesity-related diseases are leading risk factors for severe COVID-19 illness

Underlying Medical Conditions of COVID-19 Laboratory Confirmed Adult Hospitalizations (as of October 3, 2020)¹



Hypertension

59.4%



Obesity

46.9%



Metabolic Disease (e.g., Diabetes)

43.2%



Cardiovascular Disease

34.0%

1. US CDC. COVID-19 laboratory-confirmed hospitalizations [Internet]. 2020 May 9 [cited 2020 August 5]. Available from: https://gis.cdc.gov/grasp/COVIDNet/COVID19_5.html

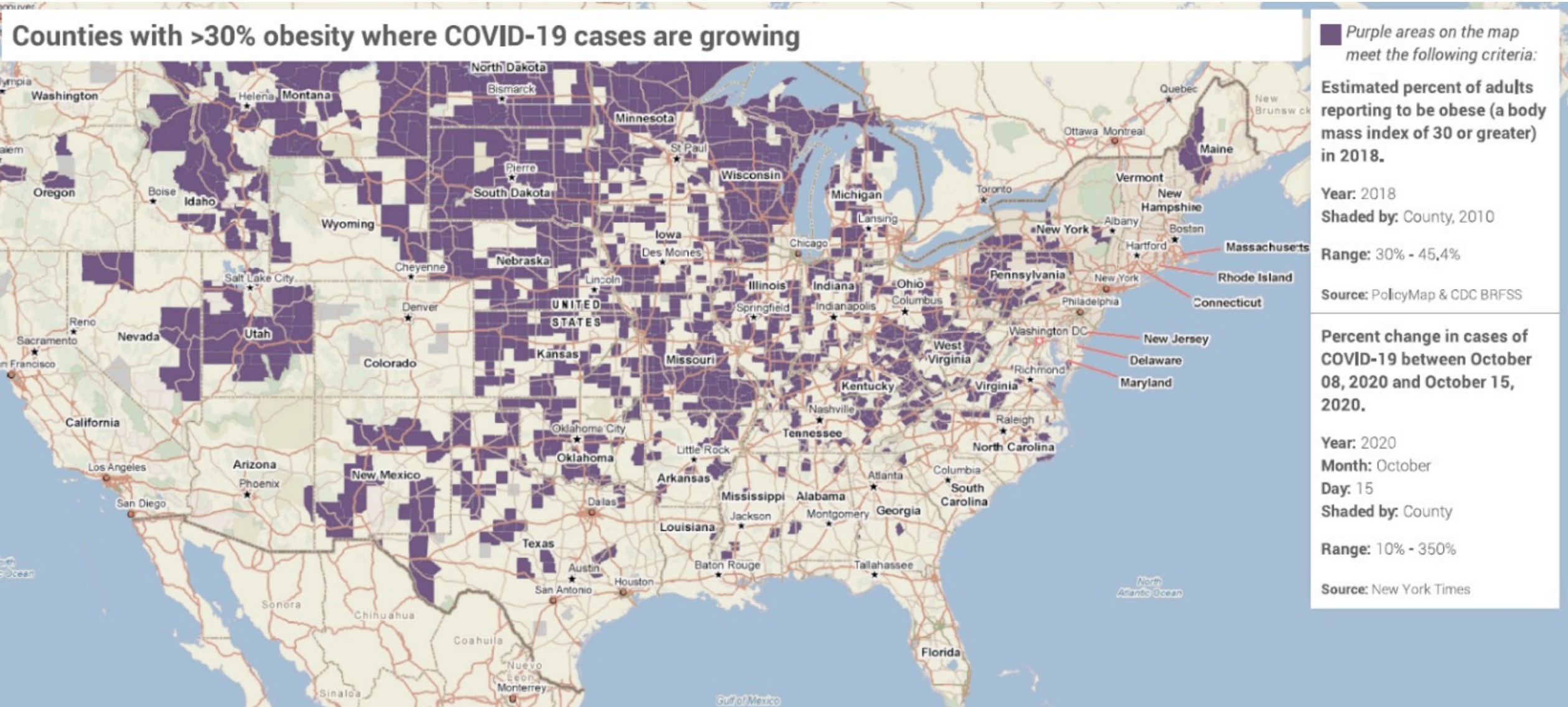
There is a Linear Relationship Between Obesity & ICU Admission

- Obesity (BMI > 40 kg/m²) was the chronic condition with the **strongest association with critical illness**—even more so than pulmonary disease²
- Patients with BMI between 30-34 kg/m² were **1.8x as likely** and those with BMI > 35 kg/m² were **3.6x as likely** to be admitted to critical care³

2. Petrilli, CM, et al. Factors associated with hospitalization and critical illness among 4,103 patients with COVID-19 disease in New York City. *medRxiv Preprint Server* [Internet]. 2020 Apr [cited 2020 May 15]. Available from: <https://www.medrxiv.org/content/10.1101/2020.04.08.20057794v1.full.pdf>

3. Lighter, J, et al. Obesity in patients younger than 60 years is a risk factor for Covid-19 hospital admission. *Clin Infect Dis* [Internet]. 2020 Apr 9 [cited 2020 May 15]. DOI: <https://doi.org/10.1093/cid/ciaa415>

COVID-19 case data from October 8, 2020 – October 15, 2020



High rates of underlying obesity in diverse populations are contributing to increased vulnerability to COVID-19

Black and Hispanic Americans are more likely than White Americans to experience obesity^{1,2}

1.3x

more likely in Black Americans

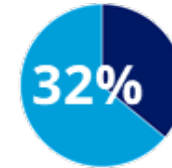
1.2x

more likely in Hispanic Americans



4 out of 5 Black or Hispanic American women are obese or overweight

Black and Hispanic Americans represent a disproportionate share of COVID-19 hospitalizations and deaths

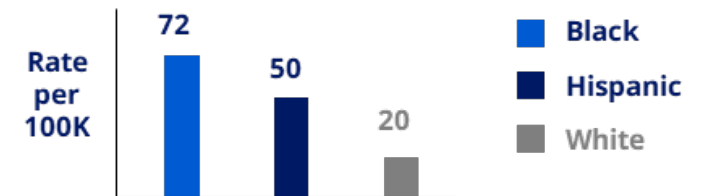


Though only 13% of the population in the US, 32% of those hospitalized with COVID-19 and 31% of ICU admissions are Black³

4x
2x

Recently-released CMS data on Medicare beneficiaries found that Black Americans have been hospitalized 4x and Hispanic Americans have been hospitalized 2x more than White Americans due to COVID-19⁴

Age-adjusted death rates from COVID-19⁵ (account for differences in age distributions by race)



1. Office of Minority Health, HHS. *Obesity and African Americans* [Internet]. 26 Mar 2020 [cited 24 Apr 2020]. Available from: <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=25>
 2. Office of Minority Health, HHS. *Obesity and Hispanic Americans* [Internet]. 26 Mar 2020 [cited 24 Apr 2020]. Available from: <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=70>

3. US CDC. COVID-19 laboratory-confirmed hospitalizations [Internet]. 2020 Jun 13 [cited 2020 Jun 23]. Available from: https://gis.cdc.gov/grasp/COVIDNet/COVID19_5.html
 4. CMS. Preliminary Medicare COVID-19 Data Snapshot [Internet]. 2020 Jun 11 [cited 2020 Jun 23]. Available from: <https://www.cms.gov/files/document/medicare-covid-19-data-snapshot-fact-sheet.pdf>
 5. Ford, T, Reber, S, and Reeves, RV. Race gaps in COVID-19 deaths are even bigger than they appear. *Brookings Blog* [Internet]. 2020 Jun 16 [cited 2020 Jun 23]. Available from: <https://www.brookings.edu/blog/up-front/2020/06/16/race-gaps-in-covid-19-deaths-are-even-bigger-than-they-appear/>

Obesity presents challenges for hospitals already stretched by the COVID-19 response

Unique Care Needs¹



Bariatric hospital beds

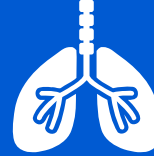


Difficult intubations



Weight limits on imaging machines

More Severe Outcomes^{2,3}



- Increased compression of the chest & lungs
- Pre-existing compromised respiratory function due to comorbidities such as asthma, COPD, sleep apnea, obesity hypoventilation syndrome,
- Greater risk of PE & aspiration pneumonia



- Obesity is a state of chronic low-grade inflammation with altered immune response
- Characterized by chronically higher leptin, lower adiponectin, & higher concentration of several pro-inflammatory cytokines which affect lungs & airways



- Associated with more than 200 different complications & other comorbid conditions such as diabetes, hypertension, chronic lung disease, cancer etc., which put people with obesity at greater risk for severe COVID-19

1. Ryan, DH, Ravussin, E, Heymsfield, S. COVID 19 and the patient with obesity – The editors speak out. *Obesity* [Internet]. 2020 Apr 1 [cited 2020 Apr 23]. DOI: <https://doi.org/10.1002/oby.22808>

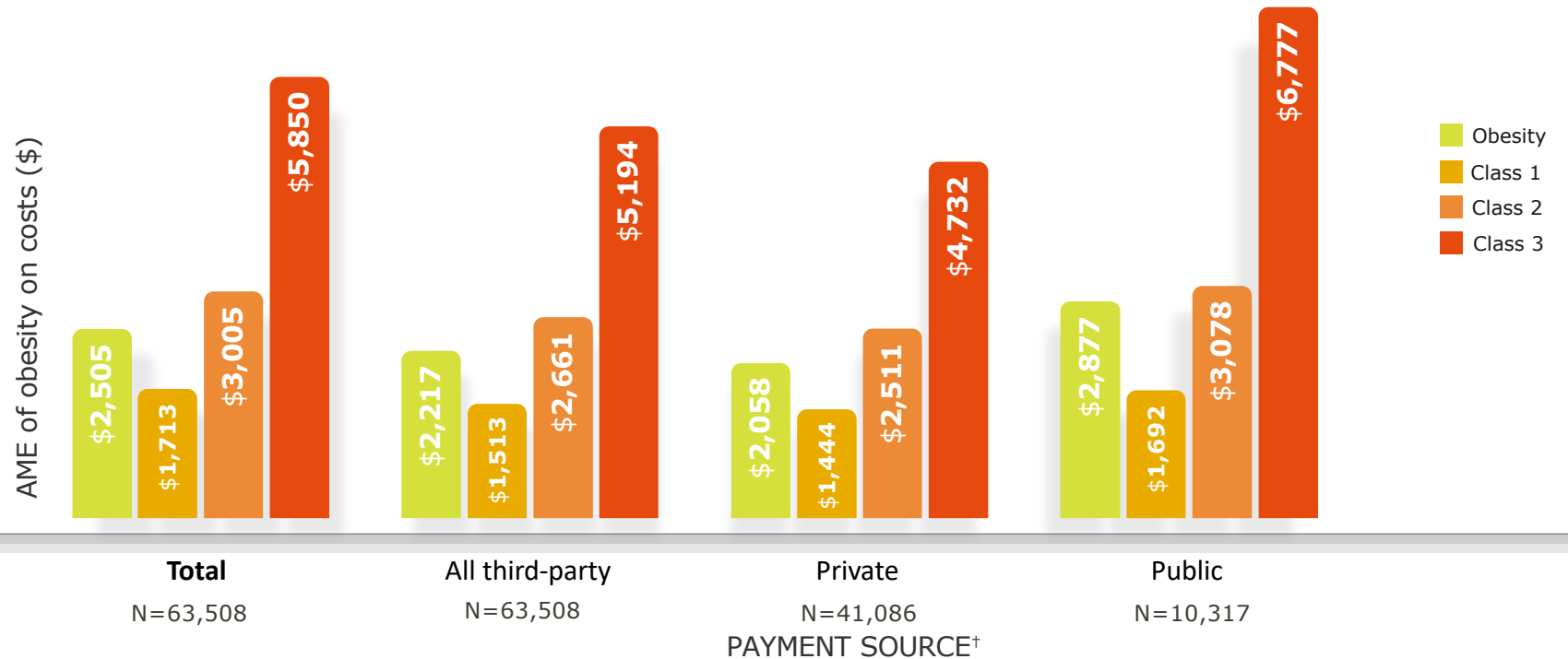
2. Zammit, C, Liddicoat, H, Moonsie, I, Makker, H. Obesity and respiratory diseases. *Int J Gen Med* [Internet]. 2010;3:335-343 [cited 2020 Apr 23]. DOI: <https://dx.doi.org/10.2147%2FIJGM.S11926>

3. Dietz, W, Santos-Burga, C. Obesity and its implications for COVID-19 mortality. *Obesity* [Internet]. 2020 Apr 1 [cited 2020 Apr 23]. DOI: <https://doi.org/10.1002/oby.22818>

Obesity raises annual medical care costs by \$2,877 per person in Medicare and Medicaid

Obesity related medical costs are **38.5%** of all payments by public health insurance programs[†]

Average increase in expenditure due to obesity by class and payment source in 2016



Medicare coverage for the full range of obesity treatments, including AOMs, is estimated to generate federal savings of \$25 million over 10 years.*

[†]All third party costs are those borne by private (all insurance plans covering hospital and medical care [excluding payments from public sources but including Medigap plans and TRICARE]) and public (Medicaid and Medicare) health insurance. AME, average marginal effect.

*Avalere Health. Estimated Federal Budget Impact of H.R.1953 – Treat and Reduce Obesity Act of 2017. Analysis for Novo Nordisk February 2019.

The time is now for Medicare to establish comprehensive obesity coverage in Part D



Treat and Reduce Obesity Act

Bipartisan, bicameral legislation to establish coverage for AOMs in Part D



CMS Guidance

CMS can establish AOM coverage through revised Part D plan guidance

Summary

- Obesity is a serious chronic disease impacting nearly 100 million Americans, including 30% of Medicare beneficiaries.
- Obesity has emerged as a major risk factor for complications associated with COVID-19. Obesity and its associated risks are even more prevalent for diverse populations.
- A majority of commercial insurers cover anti-obesity medications, but Medicare still does not cover these treatments.
- CMS has the ability to ensure comprehensive coverage to treat and reduce obesity by establishing coverage for anti-obesity medications in Part D.