JAMA Infographic

Medical Care Use and Expenditures Associated With Adult Obesity in the United States

Adult Obesity Is Associated With Higher Prevalence of Chronic Conditions
Prevalence of selected chronic conditions by weight class, 2010-2015

- Normal weight (BMI 18.5 to 24.9)
- Obese (BMI ≥30)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Normal weight</th>
<th>Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Blood Pressure</td>
<td>20.4%</td>
<td>48.8%</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>21.5%</td>
<td>41.2%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>11.9%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Type 1 and 2 Diabetes</td>
<td>3.8%</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

Growth in Total Medical Expenditures Among Obese Adults Is Outpacing That of Normal Weight Adults
Total medical expenditures by weight class and year

Most Medical Expenditures Rise as Body Mass Index Increases to Higher Than Normal Levels
Mean annual medical expenditures per person by weight class and expenditure type, 2010-2015

<table>
<thead>
<tr>
<th>Body Mass Index</th>
<th>Underweight &lt;18.5</th>
<th>Normal weight 18.5 to 24.9</th>
<th>Overweight 25.0 to 29.9</th>
<th>Class 1 obese 30.0 to 34.9</th>
<th>Class 2 obese 35.0 to 39.9</th>
<th>Class 3 obese ≥40.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousands of Dollars</td>
<td>6.4</td>
<td>4.4</td>
<td>5.0</td>
<td>5.8</td>
<td>6.9</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Prescription Drug Use Is Higher Among Obese Adults
Percent of adults with a prescription filled by weight class and therapeutic class, 2010-2015

- Cardiovascular
  - Normal weight: 38.3%
  - Obese: 41.4%
- Gastrointestinal
  - Normal weight: 9.3%
  - Obese: 16.7%
- Psychotherapeutic
  - Normal weight: 10.4%
  - Obese: 17.4%
- Antidiabetic
  - Normal weight: 3.7%
  - Obese: 16.7%

Obese Adults Have Higher Rates of Hospitalization and More Hospital and Physician Visits
Percent having 3 or more physician visits annually, 2010-2015

- Normal weight: 35.1%
- Obese: 46.3%

Percent with an inpatient stay annually, 2010-2015

- Normal weight: 6.0%
- Obese: 9.3%

Mean number of inpatient stays per 1000 persons per year, 2010-2015

- Normal weight: 77.9
- Obese: 125.9

Note: BMI stands for body mass index. Adults aged 18 years and older. Adults with missing BMI or who are pregnant were omitted. Total expenditure is the sum of payments from all sources to hospitals, physicians, and other health care providers by the civilian noninstitutionalized population. All expenditures in 2013 U.S. dollars. The views expressed are those of the authors, and not necessarily those of the Agency for Healthcare Research and Quality or the US Department of Health and Human Services.

Authors: Adam I. Biener, PhD; Sandra L. Decker, PhD; for the Agency for Healthcare Research and Quality

Source: Agency for Healthcare Research and Quality Analysis of the Medical Expenditure Panel Survey. Original data available at: https://meps.ahrq.gov

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