2016 Heart Disease and Stroke Fact Sheet — Public Health Region 5
Texas Department of State Health Services

Burden of Disease
Prevalence of Heart Disease, Stroke, and Selected Risk Factors,
Adults, 18 years and older, 2015
Percentage of Adults (95% confidence interval)

<table>
<thead>
<tr>
<th>Region</th>
<th>Heart Disease</th>
<th>Stroke</th>
<th>Hypertension</th>
<th>Current Cigarette Smoking</th>
<th>Obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>6.1 (5.5-6.8)</td>
<td>3.0 (2.5-3.5)</td>
<td>29.5 (28.2-30.8)</td>
<td>15.2 (14.1-16.4)</td>
<td>32.4 (30.9-33.9)</td>
</tr>
<tr>
<td>PHR 5</td>
<td>9.0 (6.4-11.6)</td>
<td>3.7 (2.3-5.2)</td>
<td>36.8 (31.8-41.7)</td>
<td>19.8 (15.3-24.3)</td>
<td>37.6 (32.3-42.9)</td>
</tr>
</tbody>
</table>

Heart Disease & Stroke Age Adjusted Death Rates
by Race/Ethnicity and Sex, All Ages, 2014
Annual Deaths per 100,000 People (95% confidence interval)

<table>
<thead>
<tr>
<th>Region</th>
<th>Heart Disease</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>175.8 (174.1-177.5)</td>
<td>43.3 (42.4-44.1)</td>
</tr>
<tr>
<td>PHR 5</td>
<td>226.8 (217.1-236.6)</td>
<td>59.3 (54.3-64.2)</td>
</tr>
</tbody>
</table>

White
- Heart Disease: 227.4 (216.3-238.5) vs. 188.2 (186.0-190.4)
- Stroke: 271.9 (245.3-298.5) vs. 224.3 (218.2-230.4)
- Hypertension: 123.3 (90.1-156.5) vs. 91.7 (85.6-97.7)
- Current Cigarette Smoking: 118.2 (70.9-165.4) vs. 64.4 (57.6-71.2)
- Obesity: 37.6 (27.3-48.5) vs. 32.4 (27.3-38.0)

Black
- Heart Disease: 271.9 (245.3-298.5) vs. 224.3 (218.2-230.4)
- Stroke: 81.7 (66.7-96.7) vs. 59.2 (56.0-62.5)
- Hypertension: 118.2 (70.9-165.4)
- Current Cigarette Smoking: 118.2 (70.9-165.4) vs. 64.4 (57.6-71.2)
- Obesity: 37.6 (27.3-48.5) vs. 32.4 (27.3-38.0)

Hispanic
- Heart Disease: 123.3 (90.1-156.5)
- Stroke: 31.6 (25.4-37.8)
- Hypertension: 118.2 (70.9-165.4)
- Current Cigarette Smoking: 118.2 (70.9-165.4) vs. 64.4 (57.6-71.2)
- Obesity: 37.6 (27.3-48.5) vs. 32.4 (27.3-38.0)

Other
- Heart Disease: 123.3 (90.1-156.5)
- Stroke: 81.7 (66.7-96.7) vs. 59.2 (56.0-62.5)
- Hypertension: 118.2 (70.9-165.4)
- Current Cigarette Smoking: 118.2 (70.9-165.4) vs. 64.4 (57.6-71.2)
- Obesity: 37.6 (27.3-48.5) vs. 32.4 (27.3-38.0)

Men
- Heart Disease: 273.9 (258.1-289.7) vs. 212.6 (209.8-215.3)
- Stroke: 61.7 (54.2-69.3) vs. 42.0 (40.7-43.3)

Women
- Heart Disease: 184.2 (172.3-196.1) vs. 144.9 (142.9-147.0)
- Stroke: 56.9 (50.3-63.5) vs. 43.7 (42.5-44.8)

Cost to State
Medicaid Spending among Beneficiaries with Cardiovascular Disease, All Ages, FY2015
For Fee-for-Service and Star & StarPlus Programs

<table>
<thead>
<tr>
<th>Type of Care</th>
<th>Region Total Expenditure</th>
<th>Region Number of Beneficiaries</th>
<th>Region Average Expenditure per Beneficiary</th>
<th>Texas Total Expenditure</th>
<th>Texas Number of Beneficiaries</th>
<th>Texas Average Expenditure per Beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$22,481,833.53</td>
<td>20,902</td>
<td>$1,075.58</td>
<td>$559,055,789.83</td>
<td>472,258</td>
<td>$1,183.79</td>
</tr>
<tr>
<td>Inpatient</td>
<td>$10,316,081.53</td>
<td>1,615</td>
<td>$6,387.67</td>
<td>$237,781,462.08</td>
<td>37,421</td>
<td>$6,354.23</td>
</tr>
<tr>
<td>Outpatient</td>
<td>$3,115,375.06</td>
<td>7,811</td>
<td>$398.84</td>
<td>$73,598,905.85</td>
<td>172,536</td>
<td>$426.57</td>
</tr>
<tr>
<td>Physician</td>
<td>$9,050,376.94</td>
<td>19,035</td>
<td>$467.65</td>
<td>$247,675,421.90</td>
<td>438,170</td>
<td>$565.25</td>
</tr>
</tbody>
</table>

Interpretation:
The percentage of adults with hypertension was significantly higher in PHR 5 than in Texas overall.
The heart disease and stroke death rates were significantly higher in PHR 5 than in Texas overall.
Deaths due to heart disease in PHR 5 were less common among Hispanic residents than white or black.
Deaths due to stroke in PHR 5 were more common among black than white residents.
Deaths due to heart disease were more common among men than women in PHR 5.
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Interpretations:

20,902 Medicaid beneficiaries in PHR 5 received acute care for cardiovascular disease in fiscal year 2015.

The average Medicaid expenditure for cardiovascular disease care in PHR 5 was about $1,076 per beneficiary, which was lower than in the state overall.

In PHR 5, the average expenditure per beneficiary was highest for inpatient care (about $6,388) compared to outpatient or physician care for cardiovascular disease.

Burden of Disease (continued)

Heart Disease & Stroke Age-Adjusted Hospitalization Rates, All Ages, 2014

Annual Hospitalizations per 10,000 People (95% confidence interval)

<table>
<thead>
<tr>
<th>Region</th>
<th>Heart Disease</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>89.6 (87.6-91.5)</td>
<td>24.4 (23.4-25.4)</td>
</tr>
<tr>
<td>Texas</td>
<td>77.2 (76.8-77.5)</td>
<td>20.3 (20.1-20.4)</td>
</tr>
</tbody>
</table>

Interpretation:

For every 10,000 adults, about 12 more hospitalizations occurred annually for heart disease and 4 more occurred annually for stroke in PHR 5 than in Texas as a whole.

Texas Demography, 2014

Total Population = 777,551

Distribution of Population (% of Total Population)

<table>
<thead>
<tr>
<th>Region</th>
<th>White, 61.7</th>
<th>Hispanic, 14.8</th>
<th>Black, 19.8</th>
<th>Other, 3.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>White, 42.5</td>
<td>Hispanic, 39.6</td>
<td>Black, 11.5</td>
<td>Other, 6.3</td>
</tr>
</tbody>
</table>

Data Sources: (1) 2015 Texas Behavioral Risk Factor Surveillance System; (2) 2014 Texas Vital Statistics, Mortality Data; (3) 2014 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2015 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, October 2016; and (5) 2014 Texas Vital Statistics, Population Data.

Case Definitions: Prevalence based on respondents 18 years and older and self-reported (1) Heart Disease: responded yes to a question asking if they had ever been told by a doctor they had a heart attack/myocardial infarction, and/or yes to a question asking if they had ever been told by a doctor they had angina or coronary heart disease; (2) Stroke: responded yes to a question asking if they had ever been told by a doctor they had a stroke; (3) Hypertension: responded yes to a question asking if they had ever been told by a doctor they had hypertension, not including during pregnancy or borderline/pre-hypertensive; (4) Current Cigarette Smoking: having smoked 100 cigarettes in their lifetime and now smoking every day or some days or chewing tobacco, snuff, or snus every day or some days; and (5) Obesity: body mass index of 30 or greater calculated from height and weight. Mortality based on ICD-10 codes for heart disease (I00-I02, I05-I09, I11, I13, I20-I25, I26-I28, I30-I51) and stroke (I60-I69). Hospitalizations based on ICD-9 codes for heart disease (390-398, 402, 404, 410-429) and stroke (430-434, 436-438). Medicaid reimbursement based on paid and partially paid claims for fee-for-service and primary care case management services selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform (AHQP) Claims Universe of persons with a primary diagnosis of cardiovascular disease (ICD-9: 390-459).

A Medicaid beneficiary may receive more than one type of care; therefore, the sum of beneficiaries receiving each type of care does not equal the total number of beneficiaries.

Note: “--” indicates too few cases occurred, the sample size was too small, or the relative standard error was >30.0% to provide a reliable estimate.

Statistical significance based upon evaluation of overlap among confidence intervals.