

Burden of Disease in Texas

Asthma Prevalence, Adults, 18 years and older

| | Estimated Number | Percentage of Adults (95% confidence interval) |
|----------|------------------|---|
| Total | 1,296,000 | 6.8 (6.1-7.6) |
| White | 747,000 | 8.1 (7.0-9.2) |
| Black | 198,000 | 9.1 (6.8-11.4) |
| Hispanic | 303,000 | 4.6 (3.4-5.8) |
| Other | 61,000 | 5.7 (2.4-9.0) |
| Men | 477,000 | 5.1 (4.2-6.0) |
| Women | 825,000 | 8.5 (7.4-9.7) |

An estimated 6.8% of adults in Texas have current asthma.

Asthma is more common among women than men.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

| | Number | Annual Hospital Discharges per 10,000 Adults (95% confidence interval) |
|-------------|--------|---|
| Total | 15,083 | 8.1 (8.0-8.2) |
| White | 7,078 | 7.2 (7.1-7.4) |
| Black | 3,157 | 15.4 (14.8-16.0) |
| Hispanic | 3,204 | 6.3 (6.1-6.6) |
| Other | 1,374 | 15.0 (14.2-15.8) |
| Men | 3,900 | 4.4 (4.3-4.5) |
| Women | 11,178 | 11.6 (11.4-11.8) |
| 18-24 years | 624 | 2.3 (2.1-2.5) |
| 25-34 years | 1,278 | 3.1 (3.0-3.3) |
| 35-44 years | 1,854 | 4.8 (4.6-5.0) |
| 45-64 years | 6,156 | 9.8 (9.5-10.0) |
| 65+ years | 5,171 | 19.2 (18.7-19.7) |

In 2012, there were 15,083 asthma hospital discharges reported among adult Texans.

For every 10,000 persons, about 8 asthma hospitalizations occur annually; among blacks, more than 15 asthma hospitalizations occur; and among adults 65 years and over, about 19 asthma hospitalizations occur.

Asthma hospitalizations are more common among women than among men.

Age-Adjusted Death Rates, All Ages

| | Number | Annual Deaths per 100,000 Persons (95% confidence interval) |
|----------|--------|--|
| Total | 1,429 | 0.9 (0.9-1.0) |
| White | 807 | 0.9 (0.8-0.9) |
| Black | 346 | 2.0 (1.8-2.2) |
| Hispanic | 214 | 0.6 (0.5-0.6) |
| Other | 62 | 1.1 (0.8-1.4) |

Blacks are more likely to die from asthma than whites.

Hispanics are less likely to die from asthma than whites.

From 2006 to 2012, there were 1,429 persons who died from asthma in Texas.

Burden of Disease Risk Factors in Texas

Unadjusted Prevalence, Adults, 18 years and older
Percentage of Adults (95% confidence interval)

| | Current Cigarette Smoking | Overweight and Obesity |
|----------|---------------------------|------------------------|
| Total | 18.2 (17.0-19.3) | 65.1 (63.6-66.5) |
| White | 19.0 (17.5-20.5) | 61.7 (59.8-63.6) |
| Black | 19.0 (15.3-22.6) | 71.2 (66.8-75.5) |
| Hispanic | 16.7 (14.5-18.8) | 71.1 (68.4-73.8) |
| Other | 16.0 (10.2-21.8) | 43.2 (35.3-51.1) |
| Men | 23.4 (21.5-25.3) | 70.7 (68.7-72.7) |
| Women | 13.1 (11.7-14.5) | 59.1 (57.0-61.2) |

An estimated 18.2% of Texas adults are current cigarette smokers.

An estimated 65.1% of Texas adults are overweight or obese.

Current cigarette smoking is more common among men than women.

Being overweight or obese is more common among blacks and Hispanics than whites; and more common among men than women.

Cost Burden

Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

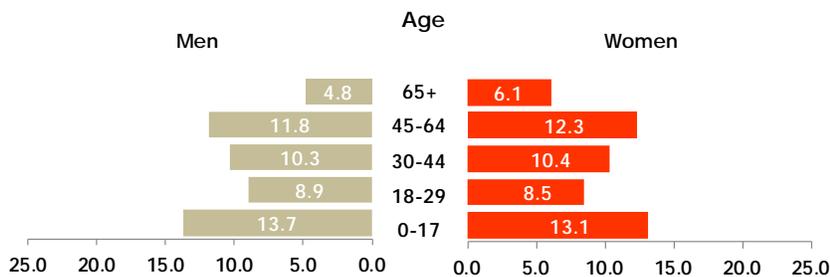
| Type of Care | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
|--------------|----------------------|--------------------------|---------------------------------------|
| Total | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$15,850,562.72 | 47,706 | \$332.26 |

There were 54,128 adult Medicaid beneficiaries receiving asthma care (inpatient hospitalization, outpatient hospitalization, or physician visit) in 2012.

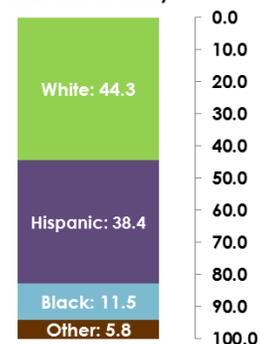
On average, Medicaid spent \$543 per beneficiary with asthma.

Demography

Total Population = 26,059,203
Distribution of Population (% of Total Population)



Race and Ethnicity



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for-service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 10.2 (6.3-14.0) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 22.3 (16.4-28.1) | 18.2 (17.0-19.3) |
| Overweight and Obese | 61.3 (54.3-68.4) | 65.1 (63.6-66.5) |

An estimated 10.2% of adults in Health Service Region 1 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 8.1 (7.4-8.8) | 8.1 (8.0-8.2) |
| White | 7.6 (6.7-8.5) | 7.2 (7.1-7.4) |
| Black | 31.1 (24.5-37.7) | 15.4 (14.8-16.0) |
| Hispanic | 5.1 (3.9-6.2) | 6.3 (6.1-6.6) |
| Other | 13.4 (7.7-19.1) | 15.0 (14.2-15.8) |
| Men | 4.6 (3.8-5.4) | 4.4 (4.3-4.5) |
| Women | 11.5 (10.3-12.7) | 11.6 (11.4-11.8) |
| 18-24 years | 3.5 (2.3-4.6) | 2.3 (2.1-2.5) |
| 25-34 years | 4.8 (3.5-6.0) | 3.1 (3.0-3.3) |
| 35-44 years | 7.2 (5.5-8.8) | 4.8 (4.6-5.0) |
| 45-64 years | 9.8 (8.5-11.2) | 9.8 (9.5-10.0) |
| 65+ years | 13.2 (11.0-15.3) | 19.2 (18.7-19.7) |

For every 10,000 adults, about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 black adults about 16 more asthma hospitalizations occurred in the region than in the state.

For every 10,000 adults 65 years and over about 6 fewer asthma hospitalizations occurred annually in the region than in the state.

Asthma hospitalizations were more common among women than among men in the region and in the state.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 1.1 (0.8-1.4) | 0.9 (0.9-1.0) |
| White | 1.1 (0.7-1.4) | 0.9 (0.8-0.9) |
| Black | - | 2.0 (1.8-2.2) |
| Hispanic | - | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

Among whites, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

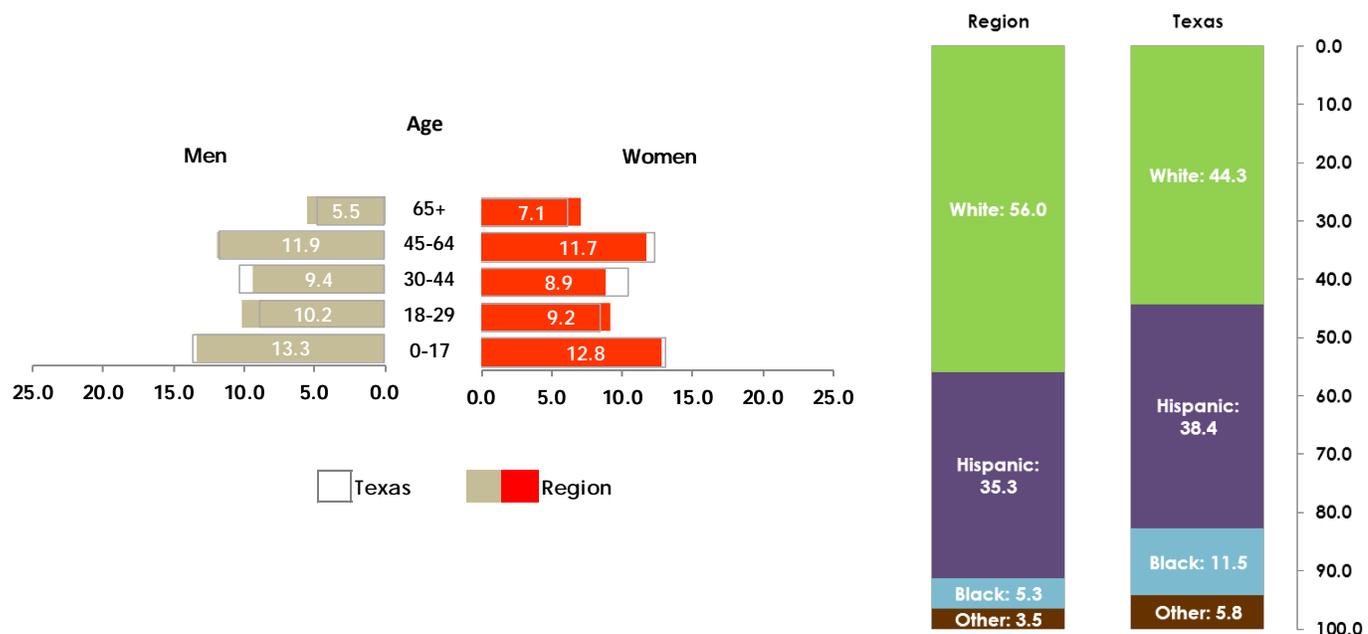
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$672,134.23 | 1,948 | \$345.04 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$311,194.08 | 104 | \$2,992.25 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$147,212.14 | 697 | \$211.21 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$213,728.01 | 1,641 | \$130.24 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$345.04 per beneficiary with asthma in the region, an amount lower than the state average. Medicaid spent more on inpatient hospital care but less on outpatient hospital care and physician care per beneficiary in the region than statewide.

Demography

Total Population = 860,757
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | - | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 22.8 (15.3-30.3) | 18.2 (17.0-19.3) |
| Overweight and Obese | 68.9 (62.2-75.6) | 65.1 (63.6-66.5) |

Current cigarette smoking and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|-----------------|------------------|
| Total | 6.1 (5.3-6.9) | 8.1 (8.0-8.2) |
| White | 4.8 (4.0-5.6) | 7.2 (7.1-7.4) |
| Black | 7.2 (3.7-10.6) | 15.4 (14.8-16.0) |
| Hispanic | 2.7 (1.5-4.0) | 6.3 (6.1-6.6) |
| Other | - | 15.0 (14.2-15.8) |
| Men | 3.2 (2.4-4.0) | 4.4 (4.3-4.5) |
| Women | 9.0 (7.7-10.3) | 11.6 (11.4-11.8) |
| 18-24 years | - | 2.3 (2.1-2.5) |
| 25-34 years | 5.5 (3.8-7.2) | 3.1 (3.0-3.3) |
| 35-44 years | 6.1 (4.2-8.0) | 4.8 (4.6-5.0) |
| 45-64 years | 5.9 (4.7-7.2) | 9.8 (9.5-10.0) |
| 65+ years | 10.3 (8.2-12.4) | 19.2 (18.7-19.7) |

For every 10,000 adults, about 2 fewer asthma hospitalizations occurred annually in the region than in the state.

For every 10,000 black adults about 8 fewer asthma hospitalizations occurred annually in the region than in the state.

For every 10,000 adults 65 years and over about 9 fewer asthma hospitalizations occurred annually in the region than in the state.

Asthma hospitalizations were more common among women than among men in the region and in the state.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 1.2 (0.9-1.5) | 0.9 (0.9-1.0) |
| White | 1.0 (0.7-1.4) | 0.9 (0.8-0.9) |
| Black | - | 2.0 (1.8-2.2) |
| Hispanic | - | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

Among whites, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

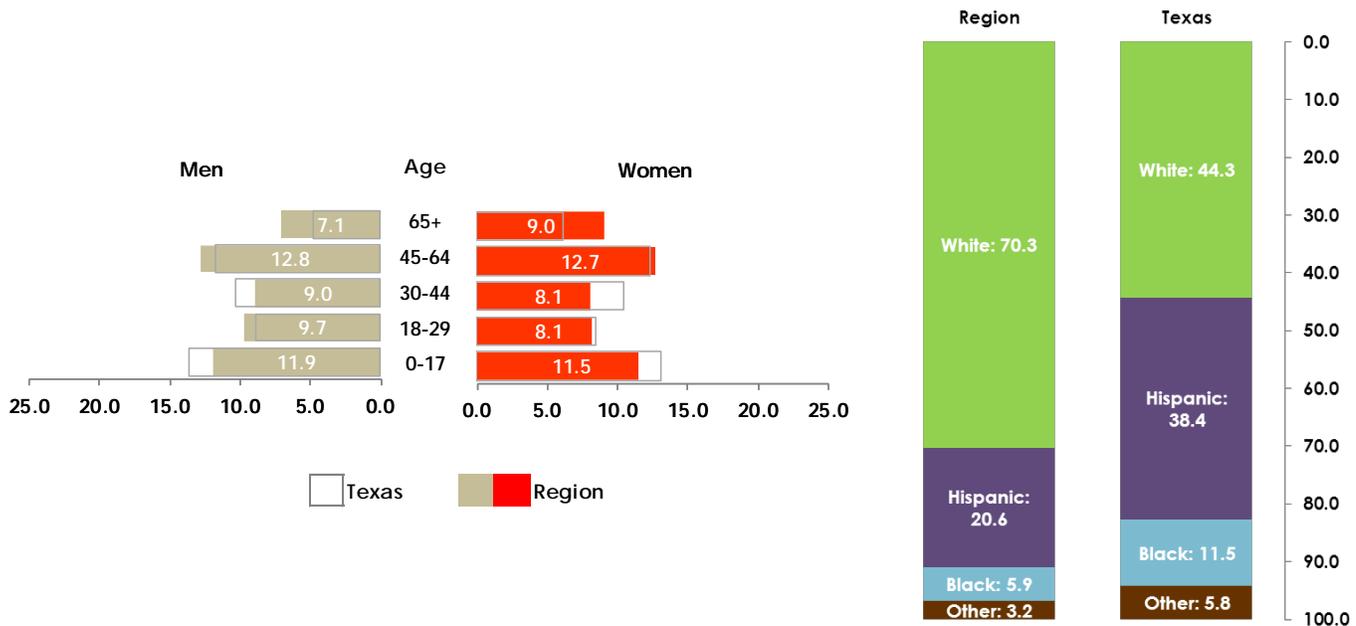
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$393,065.27 | 1,434 | \$274.10 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$152,665.20 | 68 | \$2,245.08 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$92,249.83 | 531 | \$173.73 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$148,150.24 | 1,198 | \$123.66 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$274.10 per beneficiary with asthma in the region, an amount that was half of the state average. Medicaid spent less on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 556,835
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 7.9 (5.9-9.8) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 17.3 (14.8-19.8) | 18.2 (17.0-19.3) |
| Overweight and Obese | 64.3 (61.2-67.5) | 65.1 (63.6-66.5) |

An estimated 7.9% of adults in Health Service Region 3 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 8.9 (8.6-9.1) | 8.1 (8.0-8.2) |
| White | 7.6 (7.2-7.9) | 7.2 (7.1-7.4) |
| Black | 13.9 (13.0-14.8) | 15.4 (14.8-16.0) |
| Hispanic | 4.4 (3.9-5.0) | 6.3 (6.1-6.6) |
| Other | 24.3 (22.5-26.2) | 15.0 (14.2-15.8) |
| Men | 5.0 (4.8-5.3) | 4.4 (4.3-4.5) |
| Women | 12.3 (11.9-12.7) | 11.6 (11.4-11.8) |
| 18-24 years | 3.2 (2.8-3.6) | 2.3 (2.1-2.5) |
| 25-34 years | 3.7 (3.4-4.1) | 3.1 (3.0-3.3) |
| 35-44 years | 5.5 (5.0-5.9) | 4.8 (4.6-5.0) |
| 45-64 years | 10.3 (9.8-10.8) | 9.8 (9.5-10.0) |
| 65+ years | 20.5 (19.4-21.5) | 19.2 (18.7-19.7) |

For every 10,000 adults about 1 more asthma hospitalization occurred annually in the region than in the state.

For every 10,000 adults of other races and ethnicities about 9 more asthma hospitalizations occurred annually in the region than in the state.

In the region and in the state, asthma hospitalizations are more common among women than among men and among adults age 65 years and older than among each younger age group.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 1.0 (0.9-1.1) | 0.9 (0.9-1.0) |
| White | 0.9 (0.8-1.0) | 0.9 (0.8-0.9) |
| Black | 1.8 (1.5-2.2) | 2.0 (1.8-2.2) |
| Hispanic | 0.7 (0.5-0.9) | 0.6 (0.5-0.6) |
| Other | 1.3 (0.7-1.9) | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

By race and ethnicity, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

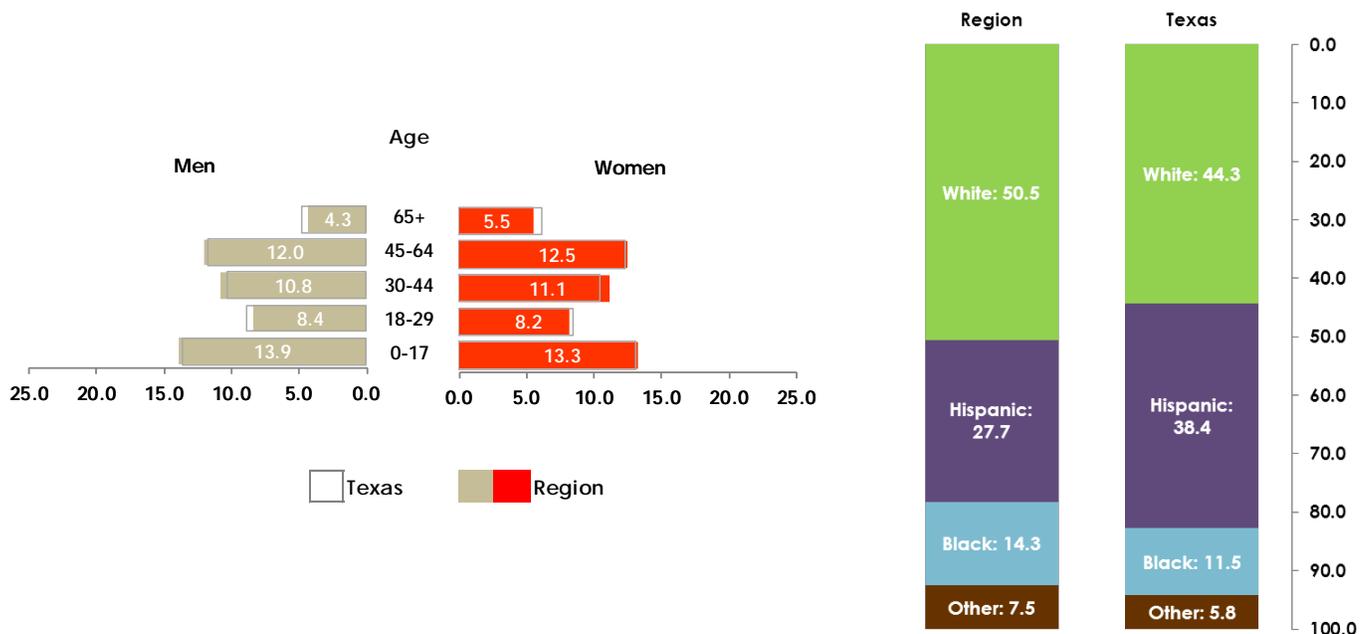
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$6,328,407.78 | 11,774 | \$537.49 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$2,316,034.07 | 740 | \$3,129.78 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$1,579,074.81 | 3,929 | \$401.90 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$2,433,298.90 | 10,268 | \$236.98 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$537.49 per beneficiary with asthma in the region, an amount similar than the state average. Medicaid spent more on inpatient hospital care and outpatient hospital care but less on physician care per beneficiary in the region than statewide.

Demography

Total Population = 6,979,332
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 6.2 (3.5-8.9) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 26.6 (20.4-32.9) | 18.2 (17.0-19.3) |
| Overweight and Obese | 68.2 (61.9-74.4) | 65.1 (63.6-66.5) |

An estimated 6.2% of adults in Health Service Region 4 had current asthma.

Asthma and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 7.5 (6.9-8.1) | 8.1 (8.0-8.2) |
| White | 6.2 (5.6-6.8) | 7.2 (7.1-7.4) |
| Black | 12.8 (10.8-14.8) | 15.4 (14.8-16.0) |
| Hispanic | 12.2 (8.6-15.7) | 6.3 (6.1-6.6) |
| Other | 17.7 (11.5-23.9) | 15.0 (14.2-15.8) |
| Men | 3.2 (2.7-3.8) | 4.4 (4.3-4.5) |
| Women | 11.6 (10.6-12.6) | 11.6 (11.4-11.8) |
| 18-24 years | 2.6 (1.7-3.6) | 2.3 (2.1-2.5) |
| 25-34 years | 4.0 (2.9-5.1) | 3.1 (3.0-3.3) |
| 35-44 years | 6.6 (5.2-8.0) | 4.8 (4.6-5.0) |
| 45-64 years | 9.1 (8.0-10.2) | 9.8 (9.5-10.0) |
| 65+ years | 13.2 (11.5-14.8) | 19.2 (18.7-19.7) |

Current cigarette smoking was more common in the region than statewide.

For every 10,000 adults about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 Hispanics about 6 more asthma hospitalizations occurred annually in the region than in the state.

For every 10,000 adults 65 years and over about 6 fewer asthma hospitalizations occurred annually in the region than in the state.

Asthma hospitalizations were more common among women than among men in the region and in the state.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 0.9 (0.7-1.1) | 0.9 (0.9-1.0) |
| White | 0.8 (0.6-1.0) | 0.9 (0.8-0.9) |
| Black | 1.7 (1.0-2.5) | 2.0 (1.8-2.2) |
| Hispanic | - | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

By race and ethnicity, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

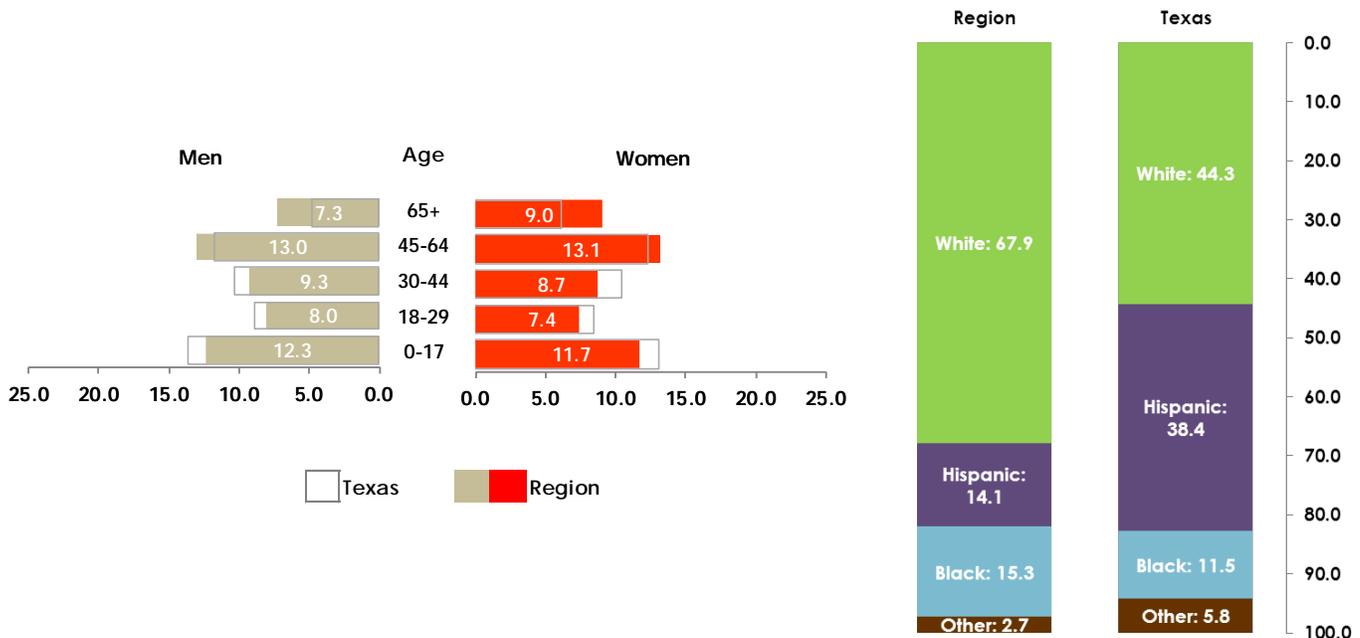
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$914,071.28 | 3,259 | \$280.48 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$309,578.22 | 161 | \$1,922.85 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$273,839.33 | 1,323 | \$206.98 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$330,653.73 | 2,779 | \$118.98 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$280.48 per beneficiary with asthma in the region, an amount that was half of the state average. Medicaid spent less on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 1,132,414
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 5.4 (2.5-8.2) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 24.0 (17.2-30.8) | 18.2 (17.0-19.3) |
| Overweight and Obese | 62.7 (54.1-71.3) | 65.1 (63.6-66.5) |

An estimated 5.4% of adults in Health Service Region 5 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 8.7 (7.9-9.4) | 8.1 (8.0-8.2) |
| White | 6.5 (5.7-7.3) | 7.2 (7.1-7.4) |
| Black | 14.7 (12.4-17.0) | 15.4 (14.8-16.0) |
| Hispanic | 2.8 (1.4-4.2) | 6.3 (6.1-6.6) |
| Other | 45.0 (34.3-55.8) | 15.0 (14.2-15.8) |
| Men | 4.5 (3.7-5.3) | 4.4 (4.3-4.5) |
| Women | 12.7 (11.4-13.9) | 11.6 (11.4-11.8) |
| 18-24 years | 2.0 (1.0-3.0) | 2.3 (2.1-2.5) |
| 25-34 years | 3.1 (2.0-4.2) | 3.1 (3.0-3.3) |
| 35-44 years | 8.0 (6.2-9.9) | 4.8 (4.6-5.0) |
| 45-64 years | 10.6 (9.2-12.0) | 9.8 (9.5-10.0) |
| 65+ years | 17.2 (14.8-19.5) | 19.2 (18.7-19.7) |

For every 10,000 adults about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 Hispanic adults about 5.5 more asthma hospitalizations occurred in the region than in the state.

For every 10,000 adults of other races or ethnicities 30 more asthma hospitalizations occurred annually in the region than in the state.

Asthma hospitalizations were more common among women than among men in the region and in the state.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 0.9 (0.7-1.1) | 0.9 (0.9-1.0) |
| White | 0.8 (0.5-1.0) | 0.9 (0.8-0.9) |
| Black | - | 2.0 (1.8-2.2) |
| Hispanic | - | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

Among whites, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

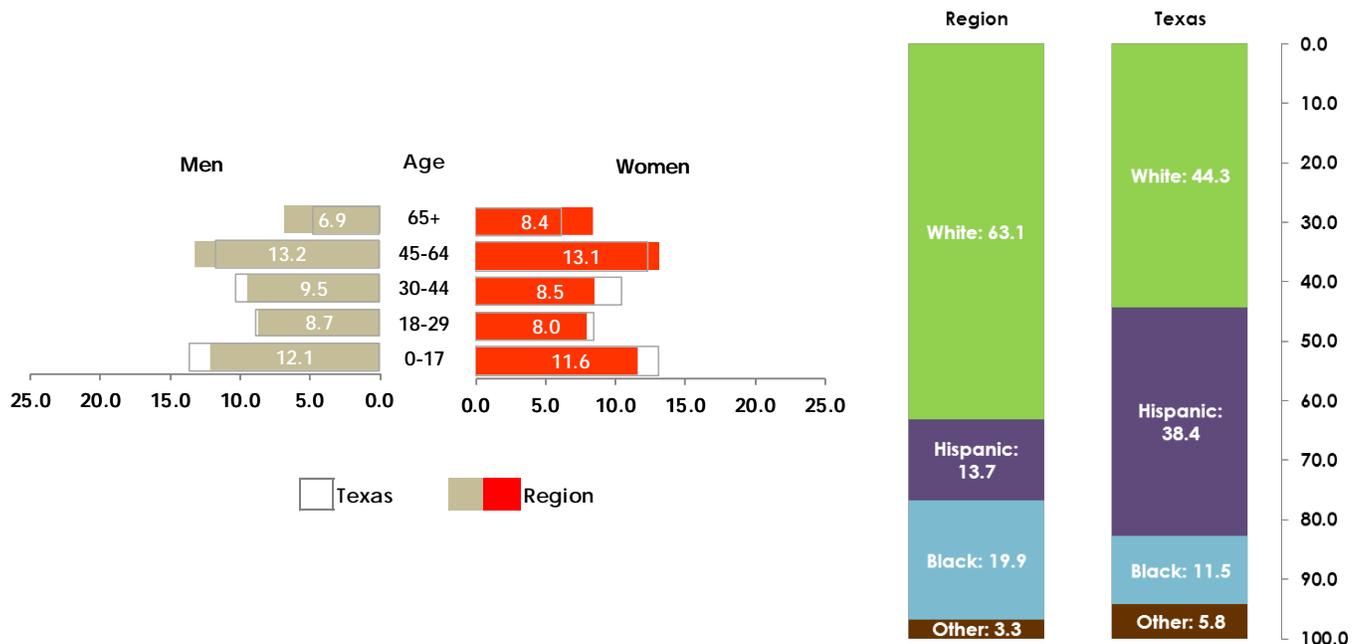
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$747,190.43 | 2,325 | \$321.37 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$268,364.75 | 115 | \$2,333.61 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$135,847.11 | 645 | \$210.62 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$342,978 | 2,098 | \$163.48 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$321.37 per beneficiary with asthma in the region, an amount lower than the state average. Medicaid spent less on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 777,700
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 4.9 (3.3-6.5) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 16.7 (13.8-19.6) | 18.2 (17.0-19.3) |
| Overweight and Obese | 63.0 (59.1-67.0) | 65.1 (63.6-66.5) |

An estimated 4.9% of adults in Health Service Region 6 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 7.5 (7.2-7.7) | 8.1 (8.0-8.2) |
| White | 7.1 (6.7-7.5) | 7.2 (7.1-7.4) |
| Black | 14.9 (13.9-15.8) | 15.4 (14.8-16.0) |
| Hispanic | 4.0 (3.6-4.4) | 6.3 (6.1-6.6) |
| Other | 7.4 (6.5-8.4) | 15.0 (14.2-15.8) |
| Men | 3.9 (3.7-4.2) | 4.4 (4.3-4.5) |
| Women | 10.7 (10.3-11.1) | 11.6 (11.4-11.8) |
| 18-24 years | 1.8 (1.4-2.1) | 2.3 (2.1-2.5) |
| 25-34 years | 3.0 (2.7-3.4) | 3.1 (3.0-3.3) |
| 35-44 years | 4.3 (3.9-4.8) | 4.8 (4.6-5.0) |
| 45-64 years | 9.1 (8.6-9.6) | 9.8 (9.5-10.0) |
| 65+ years | 17.8 (16.7-18.9) | 19.2 (18.7-19.7) |

For every 10,000 adults about 0.5 fewer asthma hospitalizations occurred annually in the region than in the state.

For every 10,000 Hispanic adults about 2 fewer asthma hospitalizations occurred annually in the region than in the state.

For every 10,000 adults of other races and ethnicities 7 fewer asthma hospitalizations occurred annually in the region than in the state.

Asthma hospitalizations were more common among women than among men in the region and in the state.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 0.9 (0.8-1.0) | 0.9 (0.9-1.0) |
| White | 0.7 (0.6-0.9) | 0.9 (0.8-0.9) |
| Black | 1.9 (1.5-2.2) | 2.0 (1.8-2.2) |
| Hispanic | 0.4 (0.3-0.6) | 0.6 (0.5-0.6) |
| Other | 1.1 (0.7-1.5) | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

By race and ethnicity, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

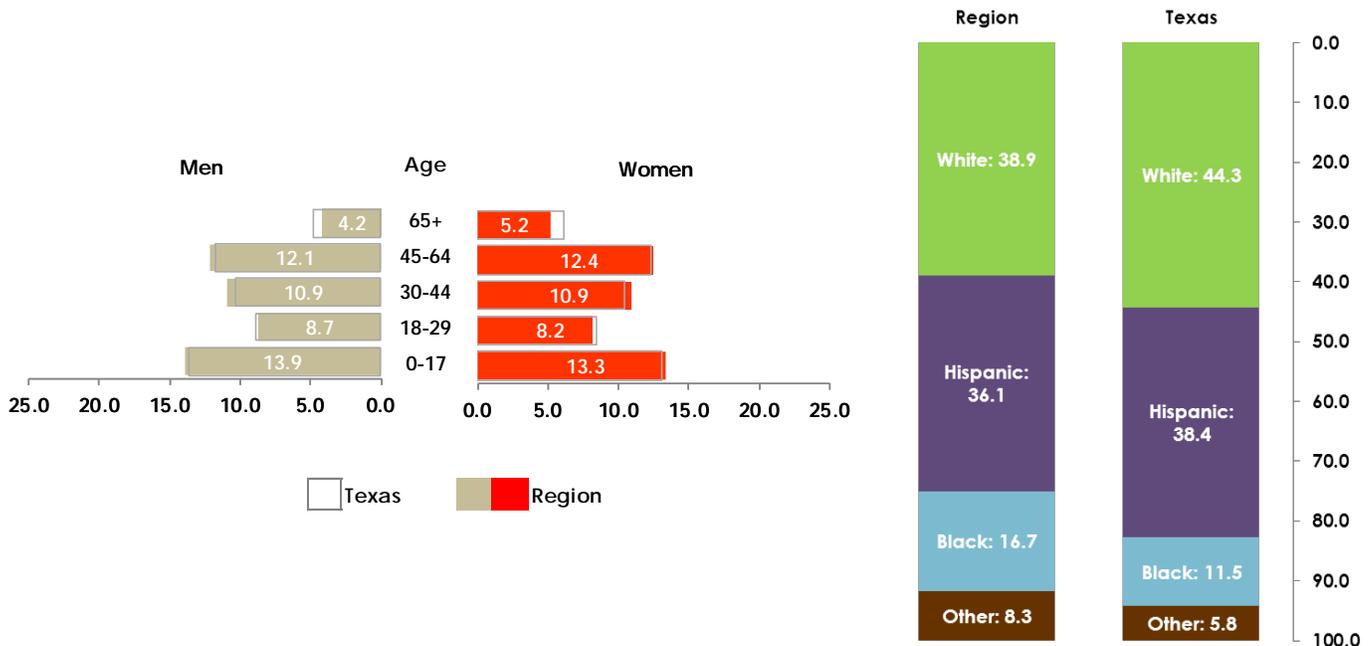
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$7,868,516.97 | 10,280 | \$765.42 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$1,911,721.84 | 588 | \$3,251.23 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$1,060,017.04 | 2,774 | \$382.13 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$4,896,778.09 | 9,161 | \$534.52 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$765.42 per beneficiary with asthma in the region, an amount higher than the state average. Medicaid spent more on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 6,333,796
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 9.1 (6.9-11.3) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 15.2 (12.4-18.0) | 18.2 (17.0-19.3) |
| Overweight and Obese | 67.1 (63.3-70.5) | 65.1 (63.6-66.5) |

An estimated 9.1% of adults in Health Service Region 7 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 7.1 (6.7-7.4) | 8.1 (8.0-8.2) |
| White | 5.9 (5.5-6.3) | 7.2 (7.1-7.4) |
| Black | 18.9 (16.9-20.8) | 15.4 (14.8-16.0) |
| Hispanic | 4.1 (3.4-4.9) | 6.3 (6.1-6.6) |
| Other | 11.1 (8.6-13.5) | 15.0 (14.2-15.8) |
| Men | 3.8 (3.4-4.2) | 4.4 (4.3-4.5) |
| Women | 10.2 (9.6-10.8) | 11.6 (11.4-11.8) |
| 18-24 years | 1.5 (1.1-1.8) | 2.3 (2.1-2.5) |
| 25-34 years | 2.8 (2.3-3.3) | 3.1 (3.0-3.3) |
| 35-44 years | 4.2 (3.6-4.8) | 4.8 (4.6-5.0) |
| 45-64 years | 9.4 (8.7-10.1) | 9.8 (9.5-10.0) |
| 65+ years | 15.5 (14.1-16.9) | 19.2 (18.7-19.7) |

For every 10,000 adults about 1 fewer asthma hospitalization occurred annually in the region than in the state.

For every 10,000 black adults 3.5 more asthma hospitalizations occurred annually in the region than in the state.

In the region and in the state, asthma hospitalizations are more common among women than among men and among adults age 65 years and older than among each younger age group.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 1.0 (0.9-1.2) | 0.9 (0.9-1.0) |
| White | 1.0 (0.8-1.1) | 0.9 (0.8-0.9) |
| Black | 1.8 (1.2-2.4) | 2.0 (1.8-2.2) |
| Hispanic | - | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

Among whites and blacks the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

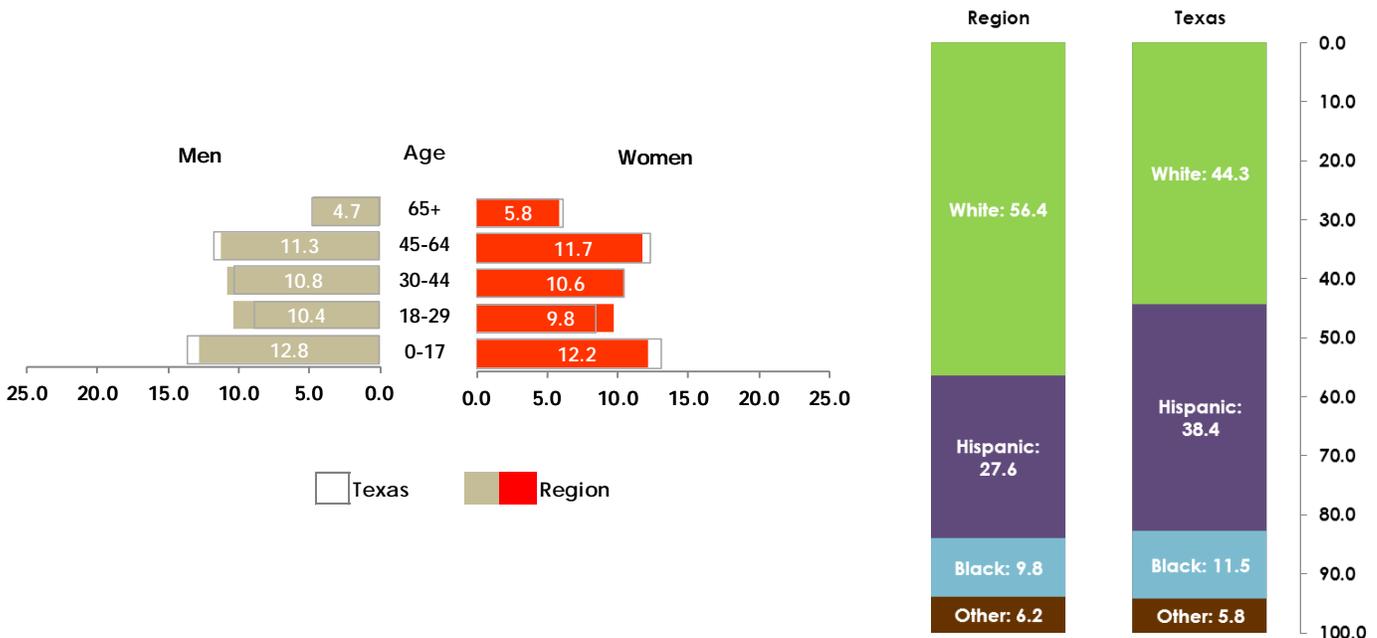
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$2,204,158.87 | 4,602 | \$478.96 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$606,249.99 | 264 | \$2,296.40 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$530,774.85 | 178.47 | \$281.28 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$1,067,134.03 | 3,856 | \$276.75 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$478.96 per beneficiary with asthma in the region, an amount lower than the state average. Medicaid spent less on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 3,075,072
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 6.5 (4.5-8.5) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 18.4 (14.7-22.1) | 18.2 (17.0-19.3) |
| Overweight and Obese | 68.8 (64.3-73.2) | 65.1 (63.6-66.5) |

An estimated 6.5% of adults in Health Service Region 8 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 7.7 (7.3-8.1) | 8.1 (8.0-8.2) |
| White | 7.1 (6.6-8.0) | 7.2 (7.1-7.4) |
| Black | 15.7 (13.3-18.1) | 15.4 (14.8-16.0) |
| Hispanic | 7.4 (6.9-8.0) | 6.3 (6.1-6.6) |
| Other | 10.4 (7.7-13.2) | 15.0 (14.2-15.8) |
| Men | 4.3 (3.9-4.7) | 4.4 (4.3-4.5) |
| Women | 10.8 (10.1-11.4) | 11.6 (11.4-11.8) |
| 18-24 years | 2.4 (1.9-3.0) | 2.3 (2.1-2.5) |
| 25-34 years | 3.5 (2.9-4.2) | 3.1 (3.0-3.3) |
| 35-44 years | 5.9 (5.1-6.7) | 4.8 (4.6-5.0) |
| 45-64 years | 8.9 (8.2-9.6) | 9.8 (9.5-10.0) |
| 65+ years | 16.5 (15.1-17.8) | 19.2 (18.7-19.7) |

For every 10,000 adults about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 Hispanic adults about 1 more asthma hospitalizations occurred annually in the region than in the state.

In the region and in the state, asthma hospitalizations are more common among women than among men and among adults age 65 years and older than among each younger age group.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 0.9 (0.7-1.0) | 0.9 (0.9-1.0) |
| White | 1.0 (0.8-1.2) | 0.9 (0.8-0.9) |
| Black | 2.8 (1.7-3.9) | 2.0 (1.8-2.2) |
| Hispanic | 0.6 (0.4-0.7) | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

By race and ethnicity, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

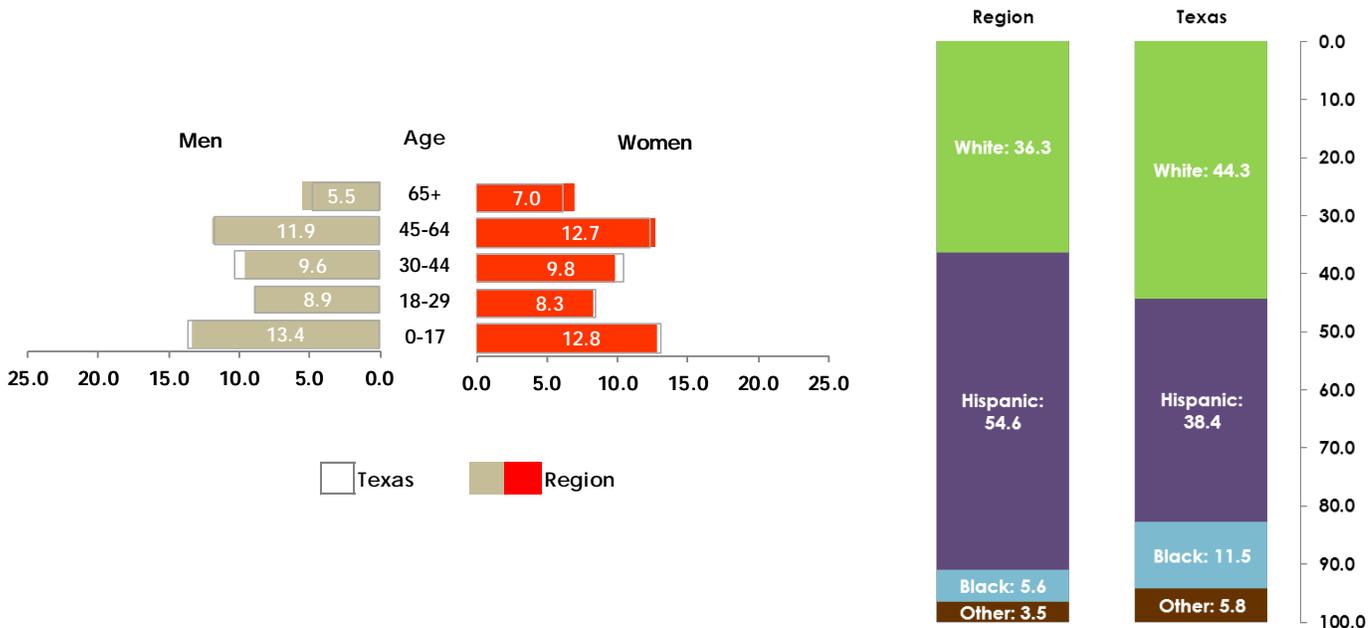
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$4,739,758.99 | 6,552 | \$723.41 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$727,028.43 | 1,964.94 | \$2,431.53 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$1,071,029.30 | 1,784 | \$600.35 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$2,941,701.26 | 5,874 | \$500.80 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$723.41 per beneficiary with asthma in the region, an amount higher than the state average. Medicaid spent less on inpatient hospital care but more on outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 2,709,305
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 8.6 (4.1-13.1) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 28.2 (19.2-37.2) | 18.2 (17.0-19.3) |
| Overweight and Obese | 68.9 (60.4-77.5) | 65.1 (63.6-66.5) |

An estimated 8.6% of adults in Health Service Region 9 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 7.9 (7.0-8.7) | 8.1 (8.0-8.2) |
| White | 5.0 (4.1-5.9) | 7.2 (7.1-7.4) |
| Black | 9.8 (5.3-14.3) | 15.4 (14.8-16.0) |
| Hispanic | 9.5 (7.9-11.2) | 6.3 (6.1-6.6) |
| Other | 39.4 (25.8-53.0) | 15.0 (14.2-15.8) |
| Men | 4.3 (3.4-5.1) | 4.4 (4.3-4.5) |
| Women | 11.4 (11.0-12.8) | 11.6 (11.4-11.8) |
| 18-24 years | 3.4 (1.9-4.8) | 2.3 (2.1-2.5) |
| 25-34 years | 3.3 (2.0-4.5) | 3.1 (3.0-3.3) |
| 35-44 years | 4.9 (3.3-6.6) | 4.8 (4.6-5.0) |
| 45-64 years | 9.5 (8.0-11.1) | 9.8 (9.5-10.0) |
| 65+ years | 17.0 (14.1-20.0) | 19.2 (18.7-19.7) |

For every 10,000 adults about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 black adults about 5.5 fewer asthma hospitalizations occurred in the region than in the state.

For every 10,000 adults of other races or ethnicities about 24 more asthma hospitalizations occurred annually in the region than in the state.

Asthma hospitalizations were more common among women than among men in the region and in the state.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 1.3 (0.9-1.6) | 0.9 (0.9-1.0) |
| White | 1.3 (0.9-1.8) | 0.9 (0.8-0.9) |
| Black | - | 2.0 (1.8-2.2) |
| Hispanic | - | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

Among whites, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

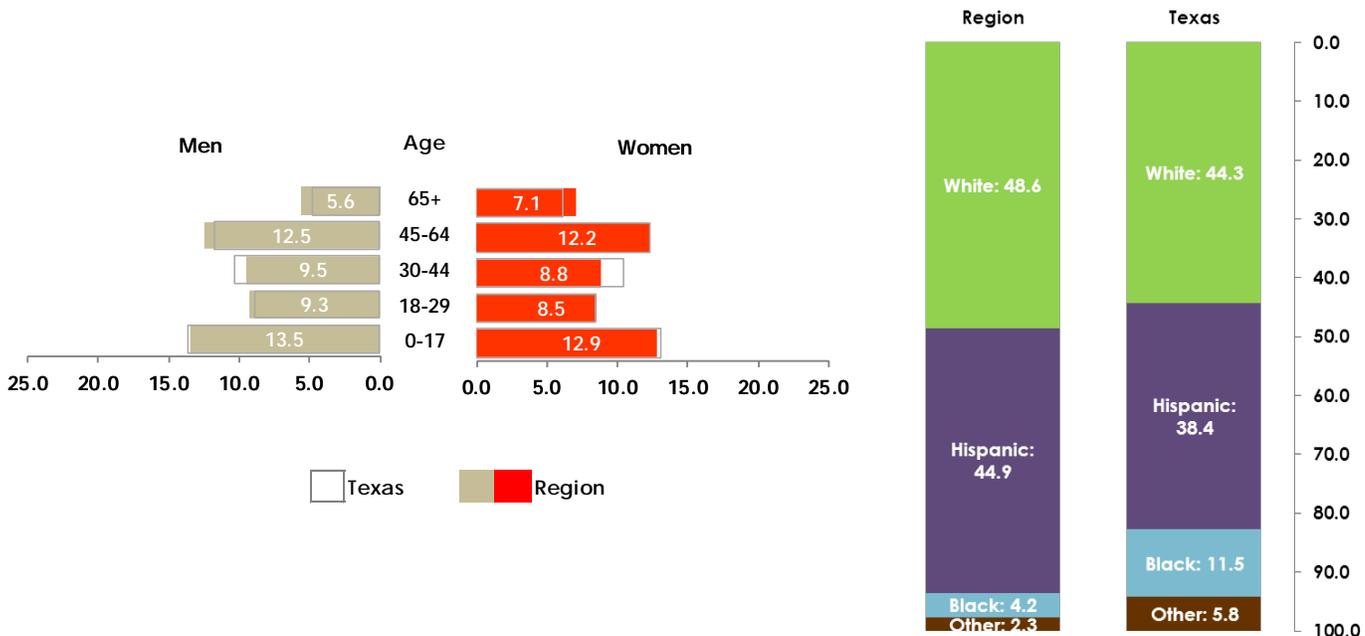
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$568,389.82 | 1,801 | \$315.60 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$232,634.53 | 97 | \$2,398.29 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$117,090.82 | 599 | \$195.48 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$218,664.47 | 1,534 | \$142.55 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$315.60 per beneficiary with asthma in the region, an amount lower than the state average. Medicaid spent less on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population =
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 8.4 (5.0-11.8) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 15.0 (10.2-19.7) | 18.2 (17.0-19.3) |
| Overweight and Obese | 70.8 (64.9-76.6) | 65.1 (63.6-66.5) |

An estimated 8.4% of adults in Health Service Region 10 had current asthma.

Asthma, current cigarette smoking, and overweight/obesity were as common in the region as they were statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 8.2 (7.4-8.9) | 8.1 (8.0-8.2) |
| White | 8.5 (6.7-10.3) | 7.2 (7.1-7.4) |
| Black | 12.3 (6.5-18.2) | 15.4 (14.8-16.0) |
| Hispanic | 7.7 (6.9-8.5) | 6.3 (6.1-6.6) |
| Other | 14.0 (7.0-20.9) | 15.0 (14.2-15.8) |
| Men | 4.7 (3.8-5.5) | 4.4 (4.3-4.5) |
| Women | 11.0 (9.9-12.2) | 11.6 (11.4-11.8) |
| 18-24 years | 1.3 (0.6-2.0) | 2.3 (2.1-2.5) |
| 25-34 years | 3.2 (2.2-4.3) | 3.1 (3.0-3.3) |
| 35-44 years | 3.6 (2.4-4.7) | 4.8 (4.6-5.0) |
| 45-64 years | 10.6 (9.2-12.1) | 9.8 (9.5-10.0) |
| 65+ years | 20.2 (17.3-23.1) | 19.2 (18.7-19.7) |

For every 10,000 adults about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 black adults about 3 fewer asthma hospitalizations occurred in the region than in the state.

In the region and in the state, asthma hospitalizations are more common among women than among men and among adults age 65 years and older than among each younger age group.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 0.9 (0.7-1.2) | 0.9 (0.9-1.0) |
| White | - | 0.9 (0.8-0.9) |
| Black | - | 2.0 (1.8-2.2) |
| Hispanic | 0.8 (0.5-1.1) | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was not different in the region than in Texas overall.

Among Hispanics, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

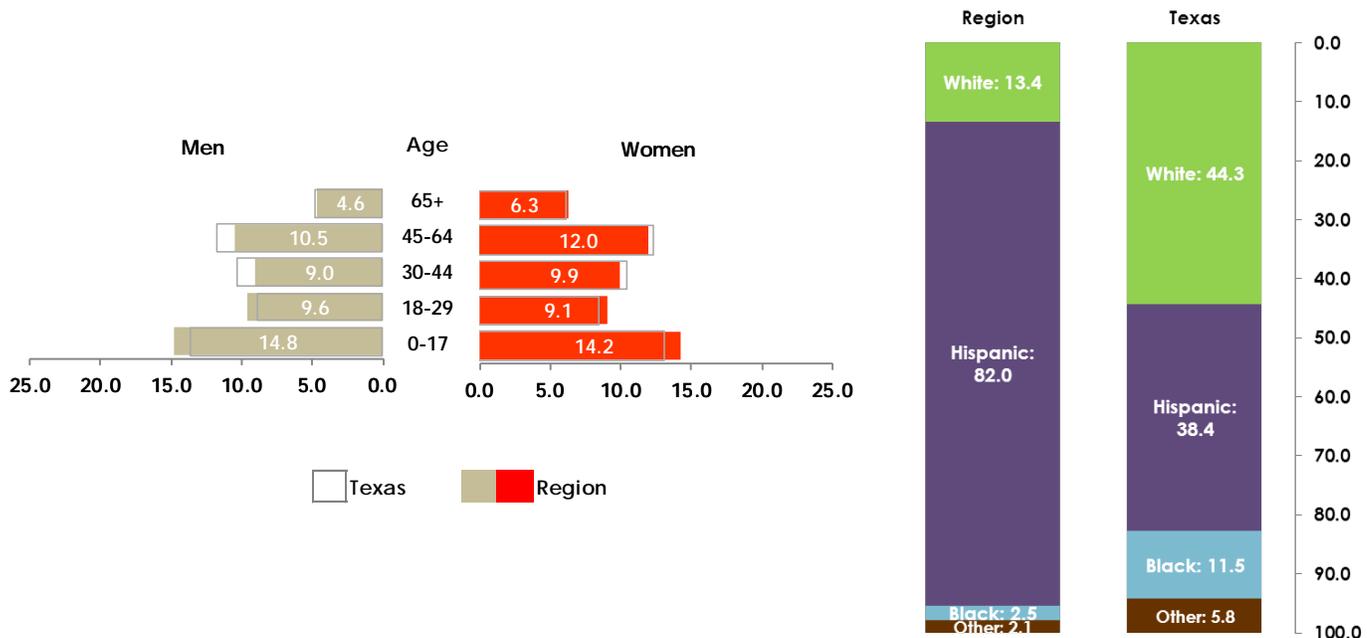
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$607,798.00 | 2,048 | \$296.78 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$160,020.25 | 100 | \$1,600.20 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | \$106,680.43 | 407 | \$262.11 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$341,097.32 | 1,919 | \$177.75 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$296.78 per beneficiary with asthma in the region, an amount lower than the state average. Medicaid spent less on inpatient hospital care, outpatient hospital care, and physician care per beneficiary in the region than statewide.

Demography

Total Population = 860,544
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.



Burden of Disease and Disease Risk Factors

Asthma Prevalence, Adults, 18 years and older

Percentage of Adults (95% confidence interval)

| | Region | Texas |
|---------------------------|------------------|------------------|
| Asthma | 4.2 (4.1-13.1) | 6.8 (6.1-7.6) |
| Current Cigarette Smoking | 14.4 (10.8-18.0) | 18.2 (17.0-19.3) |
| Overweight and Obese | 73.4 (68.8-78.0) | 65.1 (63.6-66.5) |

An estimated 4.2% of adults in Health Service Region 11 had current asthma.

Asthma and current cigarette smoking were as common in the region as they were statewide.

Overweight/obesity was more common in the region than statewide.

Age-Adjusted Hospitalization Rates, Adults, 18 years and older

Annual Hospital Discharges per 10,000 Adults (95% confidence interval)

| | Region | Texas |
|-------------|------------------|------------------|
| Total | 8.6 (8.1-9.1) | 8.1 (8.0-8.2) |
| White | 8.2 (7.2-9.3) | 7.2 (7.1-7.4) |
| Black | 21.5 (14.5-28.5) | 15.4 (14.8-16.0) |
| Hispanic | 8.7 (8.1-9.3) | 6.3 (6.1-6.6) |
| Other | 8.6 (4.6-12.6) | 15.0 (14.2-15.8) |
| Men | 4.7 (4.2-5.2) | 4.4 (4.3-4.5) |
| Women | 12.0 (11.2-12.7) | 11.6 (11.4-11.8) |
| 18-24 years | 1.7 (1.1-2.2) | 2.3 (2.1-2.5) |
| 25-34 years | 2.8 (2.2-3.4) | 3.1 (3.0-3.3) |
| 35-44 years | 5.2 (4.4-6.1) | 4.8 (4.6-5.0) |
| 45-64 years | 10.5 (9.6-11.4) | 9.8 (9.5-10.0) |
| 65+ years | 20.9 (19.1-22.7) | 19.2 (18.7-19.7) |

For every 10,000 adults about 8 asthma hospitalizations occurred annually in the region and in the state.

For every 10,000 black adults about 6 more asthma hospitalizations occurred in the region than in the state.

In the region and in the state, asthma hospitalizations are more common among women than among men and among adults age 65 years and older than among each younger age group.

Age-Adjusted Death Rates, All Ages

Annual Deaths per 100,000 Persons (95% confidence interval)

| | Region | Texas |
|----------|---------------|---------------|
| Total | 0.6 (0.5-0.7) | 0.9 (0.9-1.0) |
| White | - | 0.9 (0.8-0.9) |
| Black | - | 2.0 (1.8-2.2) |
| Hispanic | 0.6 (0.4-0.7) | 0.6 (0.5-0.6) |
| Other | - | 1.1 (0.8-1.4) |

The risk of dying from asthma was lower in the region than in Texas overall.

Among Hispanics, the risk of dying from asthma was not different in the region than in Texas overall.

Cost Burden

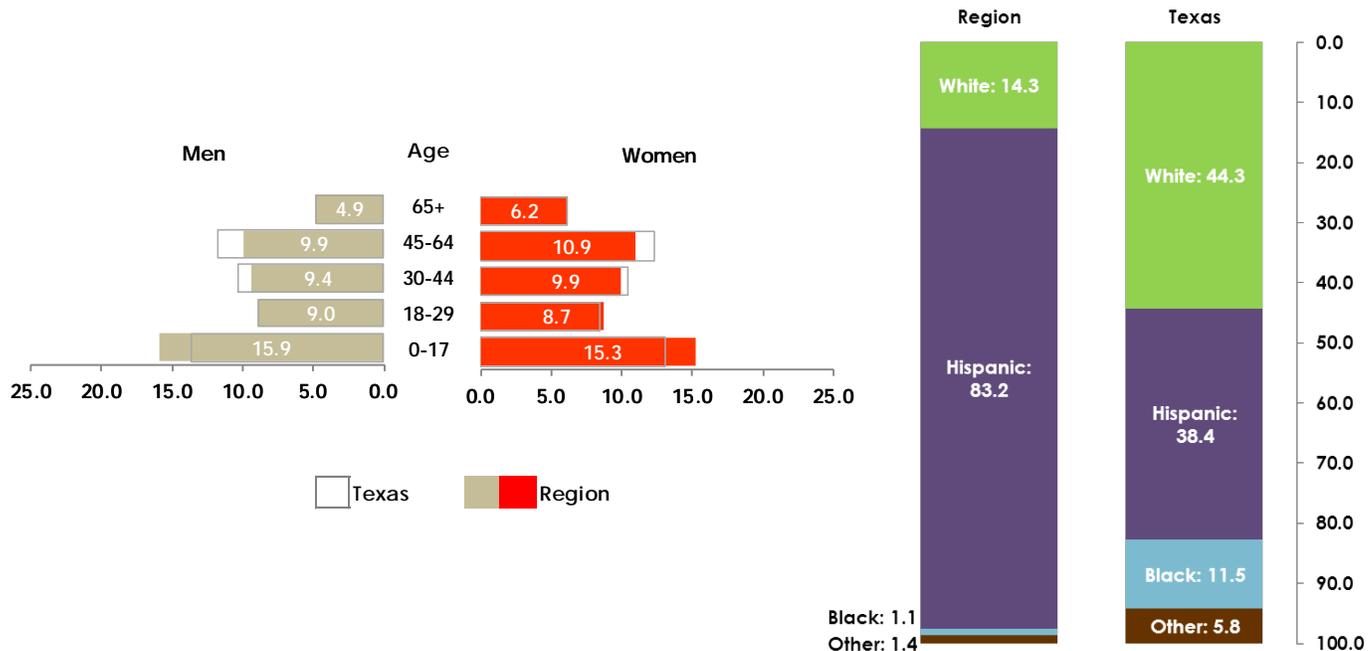
Medicaid Spending among Beneficiaries with Asthma, Adults, 18 years and older
For Fee-for-Service and Star & StarPlus Programs

| Type of Care | Region | | | Texas | | |
|--------------|----------------------|--------------------------|---------------------------------------|----------------------|--------------------------|---------------------------------------|
| | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary | Reimbursement Amount | *Number of Beneficiaries | Average Reimbursement per Beneficiary |
| Total | \$4,115,997.80 | 8,139 | \$505.71 | \$29,364,708.74 | 54,128 | \$542.50 |
| Inpatient | \$774,243.85 | 381 | \$2,032.14 | \$7,836,428.75 | 2,924 | \$2,680.04 |
| Outpatient | 506,178.98 | 1,699 | \$297.93 | \$5,677,717.27 | 16,498 | \$344.15 |
| Physician | \$2,835,574.97 | 7,477 | \$379.24 | \$15,850,562.72 | 47,706 | \$332.26 |

Medicaid spent \$505.71 per beneficiary with asthma in the region, an amount lower than the state average. Medicaid spent less on inpatient hospital care and outpatient hospital care but more on physician care per beneficiary in the region than statewide.

Demography

Total Population = 2,180,675
Distribution of Population (% of Total Population)



Data Sources: (1) 2012 Texas Population Data; (2) 2012 Texas Behavioral Risk Factor Surveillance System; (3) 2012 Texas Hospital Inpatient Discharge Public Use Data File; (4) 2006-2012 Texas Mortality Data; and (5) 2012 Texas Medicaid Reimbursement Data as prepared by Research Team, Strategic Decision Support, Texas Health and Human Services Commission, Sep. 2013.

Case Definitions: Prevalence based on self-reported (1) diagnosis of asthma and affirmative response to question about still having asthma; (2) having smoked 100 cigarettes in their lifetime and now smokes every day or some days for current cigarette smoking; and (3) body mass index of 25 or greater calculated from height and weight. Hospitalizations based on ICD-9 codes for principal diagnosis of asthma (493). Mortality based on ICD-10 codes for asthma (J45 and J46). Medicaid reimbursement based on paid and partially paid claims for fee-for service selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform Claims Universe and paid and partially paid claims for Star and StarPlus were selected from TMHP ENC_Best Picture Universe for persons with a primary diagnosis of asthma (ICD-9: 493) during fiscal year 2012.

*A 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.

