# Community Health Needs Assessment:

## Health and Behavioral Health Needs
## Edwards County, Texas

**Prepared by:**

**Community Development Initiatives,**
**Angelo State University**

**Principal Investigators:**

**Kenneth L. Stewart, Ph.D., Director, Community Development Initiatives**
**Susan McLane, Project Coordinator, Concho Valley Community Action Agency**
**Cera Cantu, Research Assistant, AmeriCorps VISTA**

**December 31, 2015**

**This report is part of a comprehensive project to assess the Health and Behavioral Health Needs of vulnerable populations in a twenty-county region of West Texas. The region covers Coke, Concho, Crockett, Edwards, Irion, Kimble, Kinney, Mason, McCulloch, Menard, Mills, Reagan, Runnels, San Saba, Schleicher, Sterling, Sutton, Tom Green, Upton, and Val Verde counties. The set of project documents includes a report for each county and a comprehensive regional-level assessment.**

Edwards County Courthouse - Rocksprings, Texas

**Methodist Healthcare Ministries of South Texas and the San Angelo Health Foundation provided support for this Community Health Needs Assessment for the people of Edwards County.**

## Table of Contents

## PREFACE

Community Development Initiatives at Angelo State University prepared this Community Health Needs Assessment for the people of Edwards County, Texas. The assessment is the product of collaboration among Community Development Initiatives, the Concho Valley Community Action Agency, and many community champions and stakeholders of the twenty-county region covered in the comprehensive study of the Health and Behavioral Health Needs of the Extremely Poor in West Texas.

Community Development Initiatives is based on a belief that flourishing communities thrive on trust between individuals, organizations and institutions. Its mission is to link Angelo State University to West Texas communities through innovative community-based research in support of their development.

The Concho Valley Community Action Agency is a 501(c)3 nonprofit corporation founded in 1966 in response to War on Poverty legislation. Although programs and services have changed over the years, the purpose of fighting the causes of poverty in the Concho Valley has been constant. CVCAA's vision is a community free of barriers to self-sufficiency.

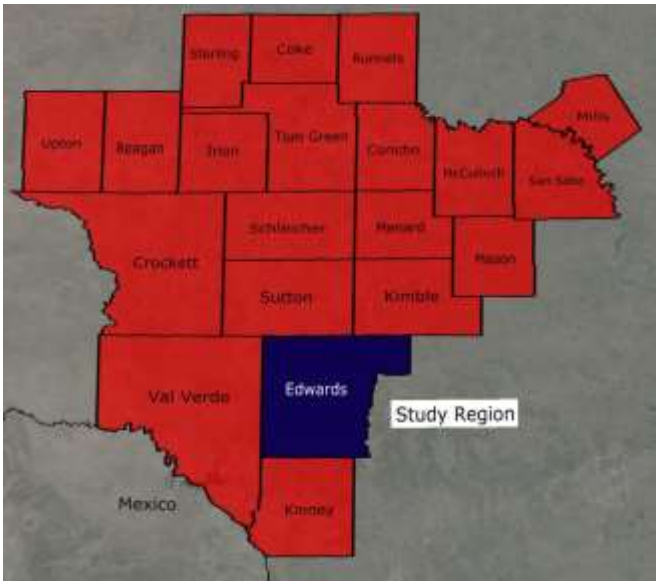
The purpose of the comprehensive study is to identify and prioritize health and behavioral health needs of the approximately 14,743 extremely poor individuals living in a twenty-county region covered by the project. The Edwards County Community Health Needs Assessment is a vital part of the regional project.

The research to assess the Health and Behavioral Health Needs of the Extremely Poor in West Texas was guided by a six-member advisory group including:

- Mark Bethune, Concho Valley Community Action Agency
- Tim Davenport-Herbst, St. Paul Presbyterian Church of San Angelo
- Dusty McCoy, West Texas Counseling & Guidance
- Susan McLane, Concho Valley Community Action Agency
- Sue Mims, West Texas Opportunities & Solutions
- Kenneth L. Stewart, Community Development Initiatives

The generous support of Methodist Healthcare Ministries of South Texas and the San Angelo Health Foundation made the comprehensive regional project and this Community Health Needs Assessment for the people of Edwards County possible.

## INTRODUCTION




The project to assess Health and Behavioral Health Needs in West Texas employs a collaborative community-based research approach to evaluate the health status and situation of the vulnerable population groups in the study region. By definition, vulnerable populations are the most underserved by the health care system. They include individuals with the least education, low incomes, and members of racial or ethnic minority groups. People living in rural areas such as Edwards County are an important segment of the vulnerable populations in health care. The assessment includes the following:

1. A demographic profile featuring the vulnerable groups in the population. The profile integrates publicly available secondary demographic data.
2. A health status profile of community health and mental health care resources, utilization patterns, and morbidity and mortality rates.
3. Results of a survey of poor and extremely poor residents of selected counties in the southern part of the study region.
4. Identification and prioritization of health and behavioral health issues in Edwards County based on the prevalence, consequences, and impact of risk factors on health inequities, and the feasibility of communities acting toward solutions.

## GENERAL DESCRIPTION OF THE EDWARDS COUNTY COMMUNITY


Edwards County is a 2,120 square mile land area in the Edwards Plateau region of West Texas. The county was formed from Bexar County in 1858, and it was organized in 1883. The largest community in Edwards County and the county seat is Rocksprings, Texas located at the junction of U.S. Highway 377 and State Highway 55.

Very little growth has taken place in the towns of Edwards County, lacking transportation services such as rail access. Most of the land in Edwards County is not suitable for farming. Instead, ranching has dominated the agricultural industry as well as the county economy. Wool and mohair production constitute a large segment of economic activity, which has declined in demand in recent years. Though oil has been discovered in the region, little has been produced. Tourism has been increasingly important for the Edwards County economy, including hunters and fishermen drawn by the county's large game and wildlife populations.

Table 1 reports private industry and employment for Edwards County in 2013. About 14 private industry establishments employed approximately 90 county residents at an average pay rate of $18,390. Private industry employees comprised approximately 9 percent of the county's 1,035 person labor force in 2013.[1]

**Table 1**
**Edwards County Private Industry & Employment, 2013**

| North American Industry Classification System (NAICS) Sectors | Annual Average Establishment Count | Annual Average Employment | Percent Total Employment | Average Annual Pay |
|---|---|---|---|---|
| All private industries | 14 | 90 | 100 | $18,391 |
| NAICS 44-45: Retail trade | 7 | 73 | 81 | $18,130 |
| NAICS 72: Accommodation and food services | 4 | 14 | 16 | $17,409 |
| NAICS 81: Other services, except public administration | 3 | 3 | 3 | $29,316 |

Source: US Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages, April 1, 2015: http://www.bls.gov/cew/

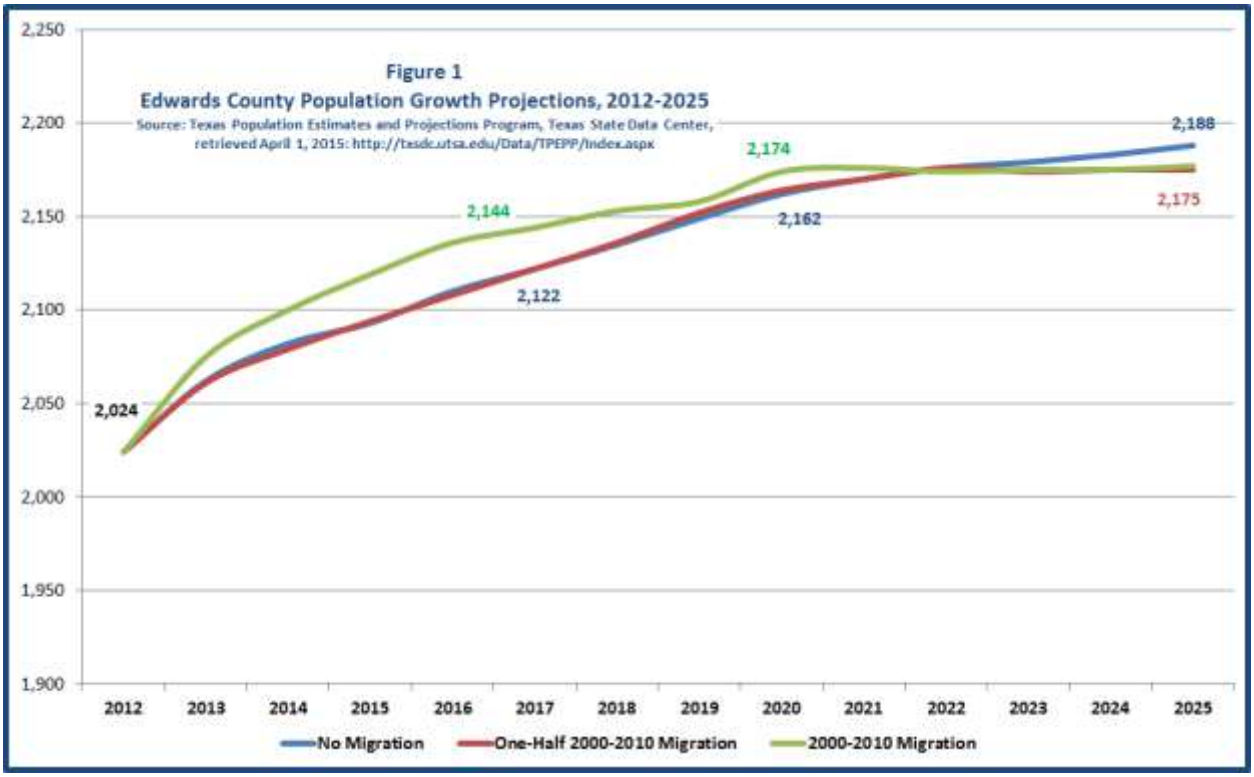
Table 1 indicates that in 2013, the large majority of private employment (81%) in Edwards County is in the North American Industry Classification System (NAICS) sector for retail trade (NAICS codes 44-45). Many of these jobs bring in low wages as evidenced by the average annual pay of $18,130.

[1] The estimate of 1,035 labor force participants is from the US Census Bureau's 2009-2013 5-Year American Community Survey, retrieved November 10, 2015: http://factfinder.census.gov.

Health care and social services employment is not a significant area of private industry employment in Edwards County.

## DEMOGRAPHICS

The Census Bureau's 2013 estimate of the Edwards County resident population is 1,884.[2] The most recent official Texas estimate from the State Demographer is 2,024 for 2012. In addition, the State Demographer developed three population projections based on varying assumptions about migration to and from the county in years ahead. Figure 1 depicts the State's official projections for population growth in Edwards County through 2025.




The highest growth projection (blue line) is based on the assumption that migration in and out will lead to no net gain or loss of the population. This projection approximates the county will gradually increase to 2,174 by 2020 and 2,188 for 2025.

### Vulnerable Populations

Edwards County has a "majority-minority" population as described in Table 2 below. The county's 1,047 Hispanic residents comprised the majority (52%) of the population in 2012 according to estimates of the State Demographer. Black citizens and other minorities added another 31 residents, bringing the total minority population to 54 percent.

[2] From US Census Bureau, Population Division, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2013, retrieved November 10, 2015: http://factfinder.census.gov.

| Table 2<br>Race & Ethnicity: 2012 Estimate with Projections to 2025 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Groups | 2012 | | 2017 | | 2020 | | 2025 | |
| White, Non-Hispanic | 946 | 47% | 957 | 45% | 949 | 44% | 905 | 41% |
| Total Minority | 1,078 | 53% | 1,165 | 55% | 1,213 | 56% | 1,283 | 59% |
| Hispanic | 1,047 | 52% | 1,137 | 54% | 1,185 | 55% | 1,255 | 57% |
| Black | 13 | 1% | 10 | 0% | 10 | 0% | 10 | 0% |
| Other | 18 | 1% | 18 | 1% | 18 | 1% | 18 | 1% |
| Total Population | 2,024 | 100% | 2,122 | 100% | 2,162 | 100% | 2,188 | 100% |

Source: Texas Population Estimates and Projections Program, Texas State Data Center, retrieved April 1, 2015: http://txsdc.utsa.edu/Data/TPEPP/Index.aspx. The forward projections for 2017, 2020, and 2025 reflect the State Demographer's high-growth assumption that migration will equal the rates of the 2000-2010 time period.

In addition, the State Demographer's projections indicate that Hispanic residents are likely to account for all of the county's population increase in the near future. The expectation is for the Hispanic segment of the community to steadily grow from 52 to 57 percent between 2012 and 2025 while the Non-Hispanic White population is expected to shrink proportionally.

Children under age 18 (numbering 416) made up 21 percent of the county's population in 2012 according to State estimates. Youngsters of school attendance age (5-17 years) comprised 72 percent of the children, while preschoolers accounted for 28 percent. Projections estimate a small increase in the child population by 2025.

| Table 3<br>Children: 2012 Estimate with Projections to 2025 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Groups | 2012 | | 2017 | | 2020 | | 2025 | |
| All Children (under age 18) | 416 | 100% | 454 | 100% | 467 | 100% | 475 | 100% |
| School-age children (ages 5-17) | 301 | 72% | 315 | 69% | 330 | 71% | 341 | 72% |
| Pre-school-age children (under 5) | 115 | 28% | 139 | 31% | 137 | 29% | 134 | 28% |

Source: Texas Population Estimates and Projections Program, Texas State Data Center, retrieved April 1, 2015: http://txsdc.utsa.edu/Data/TPEPP/Index.aspx. The forward projections for 2017, 2020, and 2025 reflect the State Demographer's high-growth assumption that migration will equal the rates of the 2000-2010 time period.

The county was home to 482 senior citizens in 2012 according to state estimates. They comprised 24 percent of the total population. Hispanics (numbering 150) made up 31 percent of the senior residents in the county.

Official state projections suggest growth of the senior population to 33 percent by 2025. Hispanics, once again, will account for much of the increase. The number of Hispanic seniors is expected to nearly double between 2012 and 2025, increasing their representation within the elder population from 31 to 38 percent.

| Table 4<br>Seniors: 2012 Estimate with Projections to 2025 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Groups | 2012 | | 2017 | | 2020 | | 2025 | |
| Total Population | 2,024 | 100% | 2,122 | 100% | 2,162 | 100% | 2,188 | 100% |
| Seniors (65 & over) | 482 | 24% | 606 | 29% | 674 | 31% | 715 | 33% |
| Hispanic Seniors (65 & over) | 150 | 31% | 201 | 33% | 234 | 35% | 274 | 38% |

Source: Texas Population Estimates and Projections Program, Texas State Data Center, retrieved April 1, 2015: http://txsdc.utsa.edu/Data/TPEPP/Index.aspx. The forward projections for 2017, 2020, and 2025 reflect the State Demographer's high-growth assumption that migration will equal the rates of the 2000-2010 time period.

There are 1.05 males in Edwards County for every female. Women and girls comprised 49 percent of the population according to the State Demographer's 2012 population estimates. Projections indicate the female population will increase minimally in number through 2025, but stay steady as a segment.

| Table 5<br>Females: 2012 Estimate with Projections to 2025 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Groups | 2012 | | 2017 | | 2020 | | 2025 | |
| Total Population | 2,024 | 100% | 2,122 | 100% | 2,162 | 100% | 2,188 | 100% |
| Female (all ages) | 987 | 49% | 1,036 | 49% | 1,060 | 49% | 1,079 | 49% |
| Female (ages 13-17) | 49 | 5% | 50 | 5% | 54 | 5% | 63 | 6% |
| Hispanic Female (ages 13-17) | 40 | 82% | 26 | 52% | 30 | 56% | 42 | 67% |

Source: Texas Population Estimates and Projections Program, Texas State Data Center, retrieved April 1, 2015: http://txsdc.utsa.edu/Data/TPEPP/Index.aspx. The forward projections for 2017, 2020, and 2025 reflect the State Demographer's high-growth assumption that migration will equal the rates of the 2000-2010 time period.

Teen pregnancy and a range of associated factors particularly affect girls age 13-17. Estimates suggest the representation in this age group to slightly increase from 5 to 6 percent by 2025. Hispanic females comprise the majority (82%) of this age group. Despite a decrease in representation by 2025, Hispanic females will still comprise the majority (67%) of the 13-17 female age group.

## COMMUNITY HEALTH RESOURCES

Health resources located in Edwards County are few. Sutton County Hospital District works through Lillian Hudspeth Memorial Hospital to provide clinical services to residents of Edwards County via telemedicine.[3] However, the majority of Edwards County residents go to the surrounding counties for services.

### Utilization of Health Resources

The Edwards County Sheriff's Department works with the Edwards County EMS to provide emergency medical services to Edwards County. The Texas EMS & Trauma Registries report that Texas hospitals received 58 trauma patients from Edwards County over five years from 2010-2014. This computes to an average of 12 EMS trauma incidents per year. The most common trauma incidents were unintentional fall incidents at 34 percent.[4]

Texas hospital usage data documents a total of 1,281 visits by Edwards County residents to outpatient facilities during 2013.[5] This computes to 1 visit for every 1.9 residents of the county. Outpatient facilities located in neighboring Kerr County received the vast majority of outpatient visits (67%) from Edwards County residents.

Edwards County residents also checked into hospitals for 254 inpatient visits during 2013. This equals 1 hospitalization for every 8 county residents. Residents checked into most of the facilities in in the study region, but the frequent option (39%) was Peterson Regional Medical Center located in Kerrville.[6]

### Other Health Care Resources

Table 7 depicts the supply EMS and other of key health professionals in Edwards County according to the Department of State Health Services data for 2014. According to the data, there is a relative shortage of health care professionals in the county. The total of 56 professionals residing in Edwards County translates to one health worker per 37 residents. This ratio compares to one worker per 33 residents in the study region and one per 38 Texans statewide.

[3] For information, see http://sonora-hospital.org/getpage.php?name=Rocksprings_Medical_Clinic&sub=Clinics.
[4] Data provided by the Injury Epidemiology & Surveillance Branch from the Texas EMS & Trauma Registries, Texas Department of State Health Services, June, 2015.
[5] Texas Department of State Health Services, Outpatient Public Use Data Files, 2013.
[6] Texas Department of State Health Services, Inpatient Public Use Data Files, 2013.

Edwards is one of 19 counties served by Hill Country Mental Health and Developmental Disabilities (MHDD) Centers based in Kerrville. Hill Country MHDD maintains two satellite offices that serve Edwards County, one in Junction (Kimble County) providing access to mental health services and another in Uvalde (Uvalde County) for intellectual and developmental disability (IDD) service access.[7]

Despite the appearance of an adequate overall supply of health care professionals, Edwards County is seriously undersupplied with advanced practitioners. The majority of the health professionals in Edwards County are EMS professionals or certified nurse aides (77%). There are no psychiatrists or psychologists, physician assistants or advanced practice nurses, pharmacists, or dentists in Edwards County.

**Table 6**
**Selected Health Professionals by Geography, 2014**

| Licensed or Certified Professionals | Number in Edwards County (2,079 Population) | Ratio of Population per Professional | Number in 20 County Study Region (239,529 Population) | Ratio of Population per Professional | Number in Texas (26,581,256 Population) | Ratio of Population per Professional |
|---|---|---|---|---|---|---|
| Certified Nurse Aides | 26 | 80 | 1,879 | 127 | 124,616 | 213 |
| Dentists | 0 | No Supply | 70 | 3,422 | 12,767 | 2,082 |
| Dieticians | 0 | No Supply | 33 | 7,258 | 4,668 | 5,694 |
| Emergency Medical Services | 17 | 122 | 812 | 295 | 60,690 | 438 |
| Licensed Chemical Dependency Counselors | 0 | No Supply | 87 | 2,753 | 9,285 | 2,863 |
| Licensed Professional Counselors | 0 | No Supply | 158 | 1,516 | 20,655 | 1,287 |
| Licensed Vocational Nurses | 7 | 297 | 1,197 | 200 | 77,624 | 342 |
| Marriage and Family Therapists | 0 | No Supply | 12 | 19,961 | 3,149 | 8,441 |
| Medication Aides | 1 | 2,079 | 139 | 1,723 | 10,012 | 2,655 |
| Occupational Therapists | 0 | No Supply | 45 | 5,323 | 7,914 | 3,359 |
| Optometrists | 0 | No Supply | 18 | 13,307 | 3,272 | 8,124 |
| Pharmacists | 0 | No Supply | 146 | 1,641 | 23,561 | 1,128 |
| Physical Therapists | 0 | No Supply | 109 | 2,198 | 13,136 | 2,024 |
| Physician Assistants | 0 | No Supply | 51 | 4,697 | 6,543 | 4,063 |
| Physicians (Direct Patient Care) | 1 | 2,079 | 357 | 671 | 47,289 | 562 |
| Primary Care Physicians | 1 | 2,079 | 168 | 1,426 | 19,277 | 1,379 |
| Psychiatrists | 0 | No Supply | 12 | 19,961 | 1,971 | 13,486 |
| Promotores (Community Health Workers) | 0 | No Supply | 15 | 15,969 | 2,032 | 13,081 |
| Psychologists (All) | 0 | No Supply | 43 | 5,570 | 7,382 | 3,601 |
| Registered Nurses | 3 | 693 | 1,696 | 141 | 206,027 | 129 |
| Advanced Practice (APRN) | 0 | No Supply | 119 | 2,013 | 15,194 | 1,749 |
| Social Workers | 0 | No Supply | 117 | 2,047 | 19,536 | 1,361 |
| Total Selected Health Professionals | 56 | 37 | 7,283 | 33 | 696,600 | 38 |

Source: Texas Department of State Health Services, Supply and Distribution Tables for State-Licensed Health Professions in Texas, retrieved May 26, 2015: http://www.dshs.state.tx.us/chs/hprc/health.shtm.

[7] See Hill Country MHDD Centers at http://hillcountry.org/default.asp.

## HEALTH STATUS

### Family and Maternal Health

The Census Bureau's 2009-2013 5-Year American Community Survey estimated an average 547 families residing in Edwards County over that time. Our calculations indicated that about 74 (13.5%) of these were single-parent (mostly female-parent) families with one or more children at home. This aligns with the 20-county study region. Indeed, indicators of family and maternal health are generally positive in Edwards County.

**Table 7**
**Edwards County Family and Maternal Health Indicators***

| Indicator | Edwards County | Study Region | Region 9 | Texas |
|---|---|---|---|---|
| Divorce Rate (Annual Divorces as a Percent of Annual Marriages) | 15.2 | 43.2 | No Data | 45.0 |
| Percent Women Age 15 & Over who are Currently Divorced | 9.2 | 12.4 | No Data | 12.2 |
| Single-Parent Families (Percent of All Families) | 13.5 | 13.1 | No Data | 15.6 |
| Teen Pregnancy Rate (Pregnancies per 1,000 Females Age 13-17) | 42.8 | 25.3 | 30.5 | 21.4 |
| Teen Birth Rate (Births to Mothers Age 13-17 per 1,000 Same Age Females) | 19.7 | 23.1 | 28.1 | 18.4 |
| Abortion Rate (Abortions as a Percent of Pregnancies among Females Age 15-44) | 14.5 | 9.8 | 9.0 | 15.6 |
| Percent Births to Unmarried Mothers (Female Population Age 15-44) | 37.8 | 44.6 | 45.9 | 42.3 |
| Child Abuse Rate* (Confirmed Incidents of Abuse per 1,000 Children) | 9.4 | 12.9 | 13.8 | 9.5 |
| Intimate Violence Rate (Incidents of Family Violence & Sexual Assault per 1,000 Population) | 3.1 | 9.4 | No Data | 8.0 |

* All ratios and percents, except the Child Abuse Rate, cover 2008-2012. The Child Abuse Rate is for 2010-2014.
Sources: All calculations of rates and percents were performed by Community Development Initiatives at Angelo State University using data on Divorce, Teen Pregnancy, Teen Birth, and Abortion from Vital Statistics, Texas Department of State Health Services, retrieved, June 9, 2015: http://www.dshs.state.tx.us/. The Child Abuse Rate was calculated using data from the Annual Data Books, Texas Department of Family and Protective Services, retrieved June 9, 2015: http://www.dfps.state.tx.us/. Estimates of Single-Parent Families and Percent Divorced Women were computed using data from the US Census Bureau, American Community Survey 2009-2013 5 Year Data, retrieved June 9, 2015: http://factfinder.census.gov/. Intimate Violence Rates were derived from data at Crime in Texas, Texas Department of Public Safety, retrieved June 9, 2010: http://www.txdps.state.tx.us.

### Potentially Preventable Hospitalizations

Hospitalizations that would likely not occur if the individual had accessed and cooperated with appropriate outpatient healthcare are termed potentially preventable. The initiative to reduce potentially preventable hospitalizations works to improve health while diminishing the cost of health care.

The Texas Department of State Health Services estimates that potentially preventable hospitalizations for just ten identifiable health conditions generated $49 billion in hospital charges between 2008 and 2013. Some $386 million of these charges were incurred by residents of the 20-county study region.

**Table 8**
**Potentially Preventable Hospitalizations for Adult Residents of Texas, 2008-2013**

| Potentially Preventable Hospitalizations | Edwards County | | | Study Region | | | Texas | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Average Charge | Per Capita Charge | Number | Average Charge | Per Capita Charge | Number | Average Charge | Per Capita Charge |
| Bacterial Pneumonia | 41 | $20,494 | $513 | 3,572 | $20,816 | $437 | 280,079 | $36,925 | $530 |
| Dehydration | 0 | $0 | $0 | 936 | $3,222 | $30 | 91,238 | $21,706 | $101 |
| Urinary Tract Infection | 0 | $0 | $0 | 1,916 | $8,880 | $114 | 204,853 | $25,282 | $265 |
| Angina (without procedures) | 0 | $0 | $0 | 66 | $1,452 | $1 | 13,743 | $24,987 | $17 |
| Congestive Heart Failure | 32 | $25,283 | $494 | 3,580 | $22,942 | $421 | 326,337 | $41,191 | $689 |
| Hypertension (High Blood Pressure) | 0 | $0 | $0 | 463 | $1,927 | $8 | 65,973 | $25,365 | $85 |
| Chronic Obstructive Pulmonary Disease or Older Adult Asthma | 0 | $0 | $0 | 2,857 | $15,320 | $264 | 253,148 | $31,674 | $411 |
| Diabetes Short-term Complications | 0 | $0 | $0 | 466 | $2,952 | $11 | 63,954 | $26,913 | $88 |
| Diabetes Long-term Complications | 0 | $0 | $0 | 1,285 | $9,768 | $86 | 134,630 | $46,872 | $323 |
| All Hospitalizations | 73 | $22,593 | $1,006 | 15,141 | $21,483 | $1,371 | 1,433,955 | $34,178 | $2,512 |
| Total Charges, 2008-2013 | | $1,649,316 | | | $386,127,532 | | | $49,010,136,451 | |

Source: Potentially Preventable Hospitalizations, Center for Health Statistics, Texas Department of State Health Services, retrieved June 12, 2015: http://www.dshs.state.tx.us/ph/.

Edwards County residents experienced 73 hospitalizations for potentially preventable conditions between 2008 and 2013. These events stemmed from bacterial pneumonia and congestive heart failure. Associated hospital charges amounted to $1.6 million or about $1,006 per adult resident of the county. This compares to preventable charges of $1,371 per adult in

## Leading Causes of Death

The Department of State Health Services recorded 84 deaths from all causes among Edwards County residents between 2008 and 2012. This computes to a five-year crude death rate of 41.5 deaths per 1,000 residents based on the 2012 population estimate. This is slightly higher than the Texas rate of 32 per 1,000 over the same time frame. It is lower than the rate of 45.6 per 1,000 for the 20-county study region.

Cancer and heart diseases are the two leading causes of death in Edwards County. The county has higher death rates than the study region or the state on these leading causes.

| Table 9<br>Leading Causes of Death in Edwards County, 2008-2012 | | | | |
|---|---|---|---|---|
| Causes of Death | Deaths | Crude Death Rate* | Study Region Rate* | Texas Rate* |
| Malignant Neoplasms (ICD-10 Codes C00-C97) | 21 | 10.4 | 9.6 | 7.0 |
| Diseases of the Heart (ICD-10 Codes I00-I09, I11, I13, I20-I51) | 20 | 9.9 | 9.5 | 7.4 |

*All rates in the table express the number of deaths per 1,000 residents based on the estimated population for 2012. They are crude rates, not adjusted for age or other demographic characteristics.
Source: Texas Department of State Health Services, retrieved June 23, 2015: http://www.dshs.state.tx.us/chs/datalist.shtm.

## SURVEY OF THE POOR AND EXTREMELY POOR IN WEST TEXAS

The Census Bureau's 2009-2013 5-Year American Community Survey data approximates that 11,706 residents of Edwards, Kinney, and Val Verde counties, the southern-most counties in the 20-county study region, are living below the federal poverty level. This computes to a poverty rate of 22.2 percent for these three southern counties combined. Moreover, the Census Bureau data indicates that some 3,655 or 31.2 percent of these residents are extremely poor, living with incomes less than half the poverty level.[8]

Between April and September 2015, Angelo State University's Community Development Initiatives and 72 organizations collaborated to complete detailed interviews with poor and extremely poor residents of the 20 counties in the study region.[9] A total of 597 interviews were completed, including 147 with residents of the three southern counties in the study region: Edwards, Kinney, and Val Verde counties.[10] Respondents from the three southern counties had self-reported household incomes below the applicable federal poverty level. Approximately 40 percent were extremely poor with incomes equal to or below half of the applicable poverty level. They ranged in age from 18 to 83 with an average age of 50.3 years. About 71 percent were female. See Table 10 below for a summary of sample characteristics.

A schedule of questions covering health, behavioral health, and dental health topics was developed for the interviews. The Behavioral Risk Factor Surveillance System (BRFSS) surveys, conducted by state health departments in partnership with the Centers for Disease Control and Prevention (CDC), served as a model for questions.[11] Indeed, the three-page questionnaire yielded 31 indicators which closely parallel similar items in the 2013 BRFSS results for Texas.

---

[8] The combined rates of poverty and extreme poverty for the three counties were computed by Angelo State University's Community Development Initiatives based on data from the US Census Bureau, American Community Survey, 2009-2013 5-Year Estimates, retrieved October 2, 2015: http://factfinder.census.gov/.

[9] Residents were defined as extremely poor for the purposes of the interviews if their self-reported household income was near 50 percent or less of the applicable federal poverty level for 2015. They were deemed to be poor if self-report household income was near or below the applicable 2015 poverty level. Based on the results of the 2009-2013 five-year combined samples of the Census Bureau's American Community Survey, we estimated that approximately 14,743 extremely poor individuals reside in the 20-county study region. See the US Census Bureau's 2009-2013 5-Year American Community Survey at http://factfinder.census.gov.

[10] The number of interviews conducted in the respective counties was proportional to the estimated total of extremely poor population from the American Community Survey. Based on the American Community Survey, for instance, we estimated that 24.8% of extremely poor individuals in the study region resided in the southern counties of Edwards, Kinney, and Val Verde. Reflecting this, we conducted 147 or 24.6% of the interviews in these counties

[11] BRFSS interviews are conducted by telephone. In contrast, the interviews for this project were conducted by trained community-based interviewers in a face-to-face informal format. More information on the BRFSS is available at http://www.cdc.gov/brfss/index.html. Information on Texas participation and results for the BRFSS is at http://www.dshs.state.tx.us/chs/brfss/default.shtm.

| Table 10<br>Sample Characteristics* | | |
|---|---|---|
| **County of Residence** | | |
| Edwards | 5 | 3.4% |
| Kinney | 19 | 12.9% |
| Val Verde | 123 | 83.7% |
| **Poverty Status** | | |
| Severly poor | 59 | 40.1% |
| Poor | 82 | 55.8% |
| **Gender** | | |
| Male | 42 | 28.6% |
| Female | 104 | 70.7% |
| **Ethnicity** | | |
| Not Hispanic | 16 | 10.9% |
| Hispanic | 130 | 88.4% |
| **Age** | | |
| 18-29 | 19 | 13.2% |
| 30-39 | 24 | 16.7% |
| 40-49 | 22 | 15.3% |
| 50-64 | 44 | 30.6% |
| 65 & Over | 35 | 24.3% |
| Average Years of Age | | 50.3 |
| **Years of Schooling** | | |
| Less than 12 | 75 | 52.8% |
| 12 or More | 67 | 47.1% |
| Average Years of Schooling | | 9.5 |
| **Household Composition** | | |
| Single Person | 15 | 10.2% |
| Single Parent | 25 | 17.0% |
| Couples with Children** | 39 | 26.5% |
| Couples without Children** | 37 | 25.2% |
| Other*** | 31 | 21.1% |
| Average Household Size | | 3.0 |

*The sample size in the south counties was 147. Some frequencies and percentages reported do not sum to 147 or 100% because of missing data for selected variables.

**Couples may be married couples or unmarried partners.

***Other households includes small numbers of respondents living with their parents, grandparents living with grandchildren, persons living with extended relatives, and persons living with roommates.

The results in Table 11 below apply only to the southern counties (Edwards, Kinney, and Val Verde) of the study region. The table compares results from the Survey of the Poor and Extremely Poor to BRFSS estimates of health risk among the total adult populations of the south counties and the state overall. The first row of the table, for instance, reports that 55 individuals or 37.4 percent of the 147 survey participants from Edwards, Kinney, and Val Verde counties said they were limited by poor mental, physical, or emotional health conditions. Texas BRFSS results from a similar question[12] asked in 2013 estimate that only 13.7 percent of all adult residents in the three counties share this risk of impairment.

**Table 11**
**Health Risks of the Poor and Extremely Poor in South Counties with BRFSS Comparisons**

| Risk Indicators | Survey Results: South Counties* | | | BRFSS Risk Comparisons** | |
|---|---|---|---|---|---|
| | Sample | Population at Risk | Percent at Risk | South Counties | Texas |
| Limited by poor physical, mental, or emotional health conditions | 147 | 55 | 37.4 | 13.7 | 11.6 |
| Could not see a doctor because of cost during past 12 months | 147 | 81 | 55.1 | 21.0 | 19.3 |
| Diagnosed high blood pressure | 147 | 77 | 52.4 | 35.8 | 31.2 |
| Diagnosed heart disease | 147 | 13 | 8.8 | 7.3 | 5.7 |
| Diagnosed stroke | 147 | 9 | 6.1 | 4.5 | 2.5 |
| Diagnosed COPD (including emphysema, chronic bronchitis) | 147 | 21 | 14.3 | 5.0 | 5.4 |
| Diagnosed arthritis, rheumatoid arthritis, gout, lupus, fibromyalgia | 147 | 45 | 30.6 | 23.8 | 20.7 |
| Diagnosed depression (major, chronic, minor) | 147 | 44 | 29.9 | 15.1 | 16.0 |
| Diagnosed kidney disease | 147 | 12 | 8.2 | 2.0 | 3.1 |
| Diagnosed diabetes | 147 | 43 | 29.3 | 14.5 | 10.9 |
| Diagnosed diabetes, not checking blood glucose or sugar daily | 43 | 30 | 69.8 | 44.3 | 39.1 |
| Morbidly Obese BMI => 35 | 147 | 41 | 27.9 | 12.0 | 12.7 |
| Current smoker | 147 | 34 | 23.1 | 18.6 | 15.9 |
| Current smokeless tobacco user | | | | 7.6 | 4.3 |
| Binge drinking | 147 | 26 | 17.7 | 14.4 | 16.7 |
| Difficult to access fresh fruits & vegetables | 147 | 25 | 17.0 | 8.8 | 7.7 |

*These columns report the Survey of the Poor and Extremely Poor in West Texas combined results for Edwards, Kinney, and Val Verde counties.
**These columns include results from the Texas BRFSS conducted by the Texas Department of State Health Services in 2013. The BRFSS estimates reported for the South Counties are risk-adjusted by Community Development Initiatives at Angelo State University to account for the specific demographic characteristics of Edwards, Kinney, and Val Verde counties.

The 15 risk indicators featured in Table 11 were selected because the Survey of the Poor and Extremely Poor suggests that the level of risk for these factors is at least 10 percent higher for the target group than the total adult population in the southern counties. Indeed, based on the comparisons to the BRFSS estimates, the vulnerable poor and extremely poor population experiences elevated risks that range from 21 percent higher (for being diagnosed with heart disease) to 301 percent higher (for being diagnosed with kidney disease).

Other significant findings from the Survey of the Poor and Extremely Poor add context to some of the elevated risks indicated in Table 11. For instance, the 55.1 percent of southern county poor and extremely poor residents who reported not seeing a doctor because of cost indicates

[12] The similar item in the BRFSS was a more formal question asking whether respondents were kept from normal activities for five or more days in the past 30 days by poor mental or physical health.

an elevated cost barrier to health care. Results from the survey expand on this by indicating that 41.5 percent of survey respondents lack health insurance. This compares to the Census Bureau's 2013 estimate that 36.9 percent of all adults age 18-64 in Edwards, Kinney, and Val Verde counties are uninsured.[13]

The survey findings also indicate that 83 percent of the poor and extremely poor do not have dental insurance; 69.4 percent do not have a regular dentist; 31.7 percent have not had a routine dental checkup within the past five years; and 42.9 percent never had dental cleaning or x-rays.

In addition to the apparent lack of access to preventative dental care, the survey shows other serious obstacles to preventative medicine among poor and extremely poor residents of the south counties. For instance, 36.5 percent of poor and extremely poor females reported never having a mammogram or Pap smear. Including men and women, 68 percent said they never had a colon/rectal exam.

Still other survey findings shine additional light on the indication in Table 11 of a 98 percent higher risk of poor and extremely poor adults being diagnosed with depression. Sizeable proportions of survey respondents also reported always, often, or sometimes feeling a fulfilling life is impossible (44.2%); avoiding situations out of nervousness, fear, or anxiety (54.4%); and feeling alone or not having much in common with people (43.5%).

Finally, Table 11 indicates that 17 percent of the poor and extremely poor in the southern counties have difficulty accessing grocery stores with fresh fruits and vegetables. This suggests a 93 percent higher level of food insecurity compared to the BRFSS estimate of 8.8 percent lacking such access in the overall adult population. Additional indications of insecure living conditions among the poor and extremely poor include a high percentage of respondents using food assistance services in the past 12 months (63.3%); homelessness within the past five years (13.6%); accidental injury in the past year (15.6%); and use of housing assistance (14.3%) and TANF (11.6%) within the past year.

[13] US Census Bureau, Small Area Health Insurance Estimates, retrieved September 29, 2015: http://www.census.gov/did/www/sahie/.

## IDENTIFICATION AND PRIORITIZATION OF HEALTH NEEDS

### Identification of Community Health Needs

The previous sections of this report summarize the findings relating to Edwards County from primary and secondary data collected by community-based participants in a comprehensive project to assess the Health and Behavioral Health Needs of vulnerable populations in a 20-county region of West Texas. The following data provide a foundation for identifying pertinent community health needs in Edwards County:

- Demographic Trend Data: Demographic projections of population growth in Edwards County were reviewed. Growth trends for vulnerable population groups were included in the review.
- Health Care Resources: Data and information on the supply of health care professionals, community clinics, nursing homes, home health agencies, and mental health services were reviewed.
- Family and Maternal Health: Indicators of family composition, domestic abuse data, and maternal health were reviewed.
- Potentially Preventable Hospitalizations: Data on hospitalization of Edwards County residents that might have been avoidable if individuals accessed and complied with relevant preventative and outpatient healthcare services were reviewed.
- Leading Causes of Death: Data on leading causes of death were used to identify specific diseases associated with higher death rates in Edwards County compared to the state.
- Survey of the Poor and Extremely Poor in West Texas: Original survey data was reviewed in conjunction with Texas BRFSS data to identify elevated health and behavioral health risks among the poor and extremely poor population of Edwards, Kinney, and Val Verde counties.

It is important at this point to assert the community-wide and regional focus of this study of the health needs of vulnerable populations in the 20-county study region of West Texas. With this perspective at the forefront, the needs assessment has made every effort to use data to identify needs of community-level importance which, in many instances, can only be addressed through cooperative, collective community action. Analysis of the data from the community level focus leads to the following summary list of identified needs for Edwards County:

1. Needs of seniors.
   Increase capacity to address health needs of growing numbers of seniors.
2. Shortage of core health professionals.
   Create a collaborative community effort to recruit and retain one or more health professionals in core shortage areas including:

- Physicians, Physician Assistants, or Nurse Practitioners
- Dentists
- Pharmacists
- Psychiatrists or Psychologists

3. Access to dental care.
   Increase capacity and access to quality dental care, especially by poor and extremely poor residents and households.
4. Behavioral health.
   Increase capacity and access to quality behavioral health resources.
5. Preventative actions.
   Increase emphasis on preventative actions in treatment, case management, and community outreach and education to reduce prevalence of and preventable hospitalizations, re-hospitalizations, and mortality from:
   - Heart disease
   - Cancer
   - Influenza and pneumonia
6. Preventative outreach to the poor and extremely poor.
   Increase community capacity to reach the poor, extremely poor, and other vulnerable groups with preventative actions to:
   - Reduce obesity
   - Reduce cost barriers to treatment
   - Improve case management and outreach
   - Provide education to promote health living and wellness
7. Food, housing, and neighborhood security.
   Increase the security of poor and extremely poor individuals and households by:
   - Increasing access to nutritious foods
   - Increasing affordable housing in safe neighborhood environments

## Prioritization of Community Health Needs

A prioritization instrument was developed to facilitate a priority ranking of the identified health needs. The instrument was introduced to key informants and stakeholders across the study region at a series of community forums during October 2015. Invitations were sent to county judges and county officials, mayors and city officials, law enforcement officials, hospital/clinic administrators and key personnel, mental health leaders, dentists, health departments, church leaders, service organization leaders, school administrators and key personnel, chambers of commerce, and significant employers. One forum was held in Del Rio, one in Brady, and two took place in San Angelo.

Access to preview copies of the previous sections of this report, including the above list of identified needs, were subsequently distributed via e-mail to key informants and stakeholders interested in Edwards County. The informants and stakeholders also received an e-mail invitation and link to respond to the online instrument. Key informants and stakeholders responded from November 13 to December 14, 2015.

The prioritization instrument provided an opportunity for key informants and stakeholders to rank the health needs identified by the study for Edwards County. Respondents ranked the needs based the specified criteria. A total of five responses ranking the identified needs for Edwards County were returned.

Respondents ranked the identified community health needs on four criteria. A score between 1 and 5 was assigned for each criterion. The four criteria were presented to respondents as follows:

- Prevalence: How many people are potentially affected by the issue, considering how it might change in the next 5 to 10 years?

    5 - More than 25% of the community (more than 1 in 4 people)
    4 - Between 15% and 25% of the community
    3 - Between 10% and 15% of the community
    2 - Between 5% and 10% of the community
    1 - Less than 5% of the community (less than 1 in 20 people)

- Significance: What are the consequences of not addressing this need?

    5 - Extremely High
    4 - High
    3 - Moderate
    2 - Low
    1 - Minimal

- Impact: What is the impact of the need on vulnerable populations?

    5 - Extremely High
    4 - High
    3 - Moderate
    2 - Low
    1 - Minimal

- Feasibility: How likely is it that individuals and organizations in the community would take action to address this need?

    5 - Extremely High
    4 - High
    3 - Moderate
    2 - Low
    1 - Minimal

Table 12 reports the results of the prioritization of needs in Edwards County. The needs are listed in the rank order reflected in the adjusted averages on the right side of the table. The adjusted averages emphasize the importance of needs that respondents viewed as the most feasible ones for the community to take action upon.

**Table 12**
**Prioritization of Edwards County Community Health Needs**

| Community Health Need | Respondents | Prevalence | Significance | Impact | Feasibility | Adjusted Average |
|---|---|---|---|---|---|---|
| Create an engaged process for recruiting & retaining core health professionals including Dentists | 5 | 4.80 | 4.80 | 3.20 | 4.80 | 5.60 |
| Increase capacity to address health needs of Seniors | 5 | 4.80 | 4.60 | 4.60 | 3.40 | 5.20 |
| Increase emphasis on preventative actions (screening, treatment, case management, outreach & education) to reduce Cancer | 5 | 4.60 | 4.80 | 4.80 | 3.20 | 5.15 |
| Create an engaged process for recruiting & retaining core health professionals for Primary Care, including Physicians, Physician Assistants, & Nurse Practitioners | 5 | 4.60 | 4.60 | 4.60 | 3.40 | 5.15 |
| Create an engaged process for recruiting & retaining core health professionals including Pharmacists | 5 | 4.80 | 4.60 | 4.60 | 3.20 | 5.10 |
| Increase capacity and access to quality Dental Care, especially by poor and extremely poor residents and households | 5 | 4.60 | 4.80 | 4.80 | 3.00 | 5.05 |
| Increase emphasis on preventative actions (screening, treatment, case management, outreach & education) to reduce Heart & Vascular Diseases | 5 | 4.40 | 4.60 | 4.80 | 3.20 | 5.05 |
| Increase community capacity to reach vulnerable groups with preventative actions to reduce Obesity | 5 | 4.80 | 4.80 | 4.80 | 2.80 | 5.00 |
| Increase the Food Security of vulnerable populations by increasing access to nutritious foods | 5 | 4.60 | 4.60 | 4.60 | 2.80 | 4.85 |
| Create an engaged process for recruiting & retaining core health professionals including Psychiatrists & Psychologists | 5 | 4.60 | 4.40 | 4.40 | 2.80 | 4.75 |
| Increase community capacity to reach vulnerable groups with preventative actions to promote Healthy Living & Wellness | 5 | 4.60 | 4.40 | 4.40 | 2.80 | 4.75 |
| Increase the Residential Security of vulnerable populations by increasing affordable housing in safe neighborhood environments | 5 | 4.40 | 4.60 | 4.40 | 2.80 | 4.75 |
| Increase emphasis on preventative actions (screening, treatment, case management, outreach & education) to reduce Influenza & Pneumonia | 5 | 4.00 | 4.20 | 4.40 | 3.20 | 4.75 |
| Increase capacity and access to quality Behavioral Health resources | 5 | 4.40 | 4.40 | 4.40 | 2.80 | 4.70 |
| Increase community capacity to reach vulnerable groups with preventative actions to improve Case Management & Outreach | 5 | 4.40 | 4.40 | 4.40 | 2.80 | 4.70 |
| Increase community capacity to reach vulnerable groups with preventative actions to reduce Cost & Other Barriers to treatment | 5 | 4.40 | 4.40 | 4.40 | 2.60 | 4.60 |

The adjusted average for each need is based on the separate average scores assigned by respondents for prevalence, significance, impact, and feasibility. To emphasize the practicality

of community action, however, the average for feasibility is given double-weight according to the following formula:

***Adjusted Average = [prevalence score + significance score + impact score + (feasibility score x 2)] ÷ 4***

Thus, the first row of Table 12 shows the average prevalence score was 4.8 on the five-point scale. The averages for significance, impact, and feasibility were 4.8, 3.2, and 4.8 respectively. Applying the formula yields an adjusted average of 5.6, making an engaged process for recruiting and retaining health professionals like dentists the highest priority need in Edwards County. An engaged process for recruiting and retaining primary care professionals (tied for 3rd rank) and pharmacists (5th rank) also gained high priority in Edwards County.

Two top ranked items in Edwards County emphasize needs to preventative actions to reduce cancer (tied for 3rd rank), as well as heart and vascular diseases (tied for 6th rank).

Other items in the top Edwards County priorities emphasize needs to increase capacity and access for vulnerable groups, including children and seniors as well as the poor, to get dental care, reduce obesity, and gain access to nutritious foods.