RHP 17 REGIONAL HEALTH ASSESSMENT 2013

REGIONAL HEALTH PARTNERSHIP 17 EXECUTIVE REPORT

PREPARED BY:

CENTER FOR COMMUNITY HEALTH DEVELOPMENT

TEXAS A&M HEALTH SCIENCE CENTER

SCHOOL OF RURAL PUBLIC HEALTH

2013 REGIONAL HEALTH ASSESSMENT DATA USER AGREEMENT

The Center for Community Health Development has made a significant attempt to ensure that the RHP 17 Regional Health Assessment serve as a comprehensive, valid, and reliable source of information for the entire region. The survey methodology, state-of-the-art instrument, and community discussion groups allowed us to measure the behavior, attitudes, perceptions, and characteristics of local residents at levels previously unavailable to communities in the region. A careful analysis of existing data collected by other groups and organizations (such as the U.S. Census, Texas Department of State Health Services, and the Centers for Disease Control and Prevention) was also a vital component of the community health assessment.

It is crucial for users to recognize that the comprehensiveness and depth of these data make them valuable. It is ***imperative*** for users to understand the information, including appropriate and inappropriate ways these data can be used. The user must understand that associations between factors do not necessarily indicate a causal relationship between those factors. For example, the tendency to smoke is not caused by low income, even though those two are frequently correlated. We are describing a broken health care system, and in order to remedy the situation, substantial effort was expended toward identifying problems. It would be easy to place the blame for this situation on certain groups and organizations based on data and comments taken out of context. Blaming either the recipients or the providers in this broken system contributes nothing toward the solutions desired by all.

The underlying goal upon which the community health assessment is based is collaboration to ***improve the health status of the population*** of the region. When using this information, we ask that you reflect upon that goal, and determine if the intended use of this information will help reach that goal or delay its achievement. References to the data contained in this report should include an appropriate citation.

Your acceptance of the data set carries with it tacit acceptance of the principles and concerns expressed above and a commitment to abide by these principles.

SUGGESTED CITATION:

Center for Community Health Development. (2013). *Regional Health Partnership 17 Health Assessment Executive Report*. College Station, TX: School of Rural Public Health.

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Brazos Valley Area Agency on Aging
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Brazos Valley Community Action Agency
Brazos Valley Council of Governments
Brazos Valley Council on Alcohol and Substance Abuse
Brazos Valley Food Bank
Brazos Valley Health Partnership
Burleson County Health Resource Commission
Center on Disability and Development at Texas A&M University
City of Bryan
City of College Station
College Station Medical Center
Conroe Regional Hospital
Department of State Health Services
Family Promise
Grimes County Health Resource Commission
Health For All
Hospice Brazos Valley
Huntsville Memorial Hospital
Kingwood Medical Center
Leon County Health Resource Commission
Madison County Health Resource Commission
Memorial Hermann The Woodlands Hospital
Montgomery County Hospital District
Montgomery County United Way
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RHP 17 REGIONAL HEALTH ASSESSMENT

EXECUTIVE REPORT

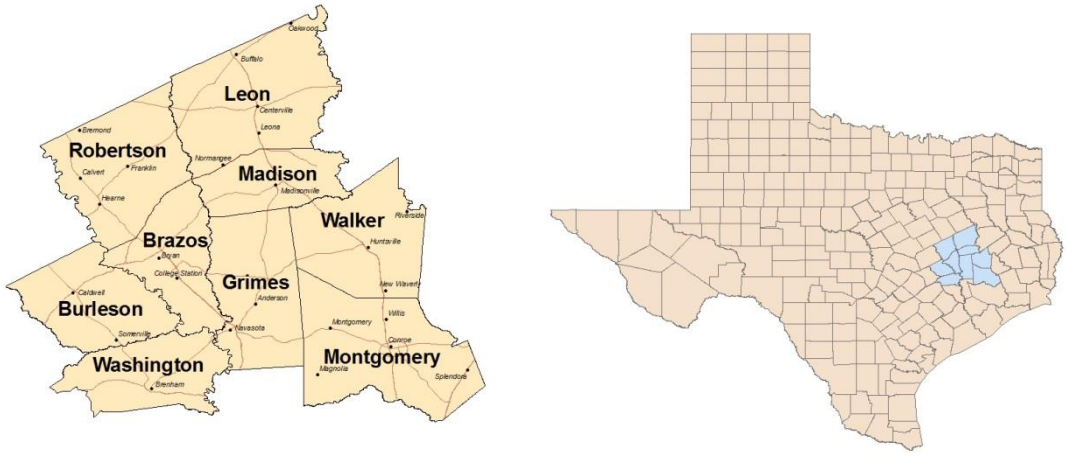
INTRODUCTION

The 2013 Regional Health Assessment, conducted by the Center for Community Health Development (CCHD) at the Texas A&M Health Science Center School of Rural Public Health (SRPH), covers the nine-county region of south-central Texas consisting of Brazos, Burleson, Grimes, Leon, Madison, Montgomery, Robertson, Walker, and Washington Counties. As illustrated in Figure 1, these nine counties define the geographic boundaries of Regional Healthcare Partnership 17 (RHP 17), an entity organized in March 2012 as a mechanism to participate in the Texas 1115 Medicaid Waiver Program. The Texas A&M Health Science Center is the RHP 17 anchor, an institution that facilitates the daily operations of the partnership.

Regional assessments have been conducted in the seven-county Brazos Valley region in 2002, 2006, and 2010 previously. A variety of local stakeholders provided funding for these assessments, including the School of Rural Public Health, Brazos Valley Council of Governments, St. Joseph Health System, College Station Medical Center, Brazos County Health Department, United Way of the Brazos Valley, Mental Health Mental Retardation Authority of the Brazos Valley, Brazos Valley Community Action Agency, the City of Bryan, and the City of College Station. With the addition of Montgomery and Walker Counties to the traditional seven counties of the Brazos Valley region as part of the 1115 Medicaid Waiver implementation, the current assessment includes all nine counties. Funding for the assessment was provided in part by a match by the School of Rural Public Health and a one-time funding opportunity through the Texas 1115 Medicaid Waiver. The Center for Community Health Development funded the community discussion groups, secondary data compilation, as well as the staff time for analysis and reporting.

Many regional health and human service providers and organizations provided non-financial support through assistance in planning and organizing community discussion groups and developing the final survey instrument.

Figure 1. Map of Regional Healthcare Partnership 17



This is the fourth comprehensive regional health assessment conducted in the past 11 years. As mentioned, the previous three assessments focused on the seven-county Brazos Valley region: Brazos, Burleson, Grimes, Leon, Madison, Robertson, and Washington Counties.

The objectives of the first assessment, completed in 2002, were to identify factors influencing health status, to recognize issues and unmet needs of the local community, to inventory resources within the region, and to produce a source of reliable information that may be utilized in developing effective solutions. That process brought together a variety of institutions and increased their ability to work collaboratively to catalyze constructive changes in the Brazos Valley, leading to the creation of the Brazos Valley Health Partnership.

The Brazos Valley Health Partnership (BVHP) is a non-profit corporation with a mission *to support the health resource commissions and their communities in improving health and well-being*. The partnership is focused on developing collective strategies that, implemented locally, will leverage and cultivate resources to improve access to services in the Brazos Valley. The BVHP is a community-owned organization whose board is comprised of county health resource commission representatives.

The second assessment, conducted in 2006, aimed to track progress in some specific areas of health and to reassess local health priorities. The results of the assessment provided information for local strategic planning and contributed to the acquisition of substantial grant funding for the region targeting health improvement activities.

The third assessment, conducted between January and July 2010, had objectives similar to the previous two and allowed for comparison of health status and various indicators across time.

This process was intended to highlight progress, as well as continuing and emerging needs, concerns, issues, and opportunities for community health improvement.

The 2013 Regional Health Assessment expanded the assessment from the seven-county Brazos Valley region to also include Montgomery and Walker Counties. The nine-county RHP 17 Regional Health Assessment also initiated a new triennial assessment schedule. Survey planning began in November 2012 and data collection and analysis concluded in August 2013. The process shared the objectives of earlier assessments, with the added goals of acquiring data from Walker and Montgomery Counties to serve as a baseline for future assessments.

METHODS

This assessment consisted of three components: secondary data analysis, community discussion groups/interviews, and a household survey. Approval was obtained by the Institutional Review Board at Texas A&M University prior to data collection.

Secondary Data Analysis

Existing data previously collected for other purposes, called secondary data, were compiled from a variety of credible local, state, and federal sources to provide a context for analyzing and interpreting the survey data collected specifically for this assessment. Sources of secondary data include the Texas Department of State Health Services (DSHS), the 2010 Census and more recent Census estimates, the Behavioral Risk Factor Surveillance System survey, the Centers for Disease Control and Prevention (CDC), the Texas Workforce Commission, Kaiser Family Foundation, as well as objectives and priorities set by *Healthy People 2020*.

Community Discussion Groups/Interviews

Community discussion groups (CDGs), much like town hall meetings, were organized by CCHD staff with assistance from local contacts in many communities across the nine-county region. Staff members contacted local intermediaries to convene discussion groups with clinical and other service providers, community leaders, and general "consumers" in each of the counties. Throughout the nine-county region, over 1,000 individuals participated in 84 discussion group meetings. Those participating represented the diversity of the region's population; attendees were 33.2 percent male and 66.8 percent female, and 70.8 percent White/Caucasian, 13.9 percent Black/African American, and 13.6 percent Hispanic/Latino. Each discussion group was guided by the following prompts:

- Describe your community.

- What are the most important issues or challenges your community is facing?

- What are the key resources in your community?
- How has your community come together in the past to address important issues?

- If a group were to try to address the issues you have identified, what advice would you have to help them be successful?

These meetings served to gain perspective on the health status of the community and to provide context for analysis of the survey data. The discussion groups also allowed access to sectors of the population that are underrepresented in the household survey.

Household Survey

The survey committee included representatives from a variety of community stakeholders within the geographic boundaries of RHP 17. Thirty-nine organizations participated in the survey committee; the committee met from November 2012 to January 2013 to create and refine the instrument to be used for the household survey. Participants in the process represented local primary care clinics, local hospitals, a broad range of community-based organizations, local governments, the local health department, educational institutions, and volunteer organizations. Committee members spent several meetings adapting the technical language of the survey to reflect common usage and understanding of local community members.

The final instrument was a 24-page survey including items from the Centers for Disease Control and Prevention's Health Related Quality of Life scale; Behavioral Risk Factor Surveillance System survey; scales from Felix, Burdine and Associates; University of Washington Health Promotion Research Center; the Canadian Fitness and Lifestyle Research Institute; the National Institute of Mental Health, as well as some original questions of interest developed by the committee.

ETC Institute, a research firm out of Olathe, Kansas, was contracted to collect the survey data. A target number of completed surveys was set for each county based on population; the selected number would allow for county-level data analysis. From a comprehensive list of residential addresses, 36,000 households were randomly selected, and letters were mailed informing them of their selection. One week following the letter, potential participants began receiving phone calls. Respondents were randomized by asking for the adult resident of the household who had the birthday that would occur next. That person was then informed of the purpose of the survey, and if they agreed to participate, a survey packet was mailed to them (including the survey instrument in English or Spanish, instructions, and a self-addressed stamped envelope). Of the 36,000 selected, 24,768 were reached by phone, and 12,177 agreed

to complete a survey (49%). Of those who agreed, 5,230 actually returned a completed survey (43%). Table 1 shows the surveys completed by county.

Table 1. Surveys completed by county

County	Targeted # of Surveys	Completed Surveys
Brazos	900	1,622
Burleson	300	239
Grimes	300	252
Leon	300	241
Madison	300	161
Montgomery	1300	1,522
Robertson	300	231
Walker	300	396
Washington	500	566
TOTAL	**4,500**	**5,230**

FINDINGS

This report presents the health assessment findings for RHP 17 as a region. Some data will be presented as "RHP 17," "Brazos Valley," or "urban (Brazos and Montgomery Counties)" and "rural (Burleson, Grimes, Leon, Madison, Robertson, Walker, and Washington Counties)," but comparisons across counties will also be given where appropriate. For specific county-level data or for seven-county Brazos Valley regional data, please refer to the supplemental reports.

Community Discussion Groups

Community discussion groups (CDGs) were conducted in all nine counties of RHP 17 with individuals representing various sectors of the community: clinicians, social service providers, community leaders, and the general population. Extensive notes were taken by multiple observers at each meeting, and these notes were then compiled. Multi-stage thematic analysis was conducted that identified broad themes from each community and then sub-themes. The consolidated findings for the RHP 17 region are offered here.

Community

Throughout RHP 17, discussion group participants described their communities as great places to live that are filled with friendly, giving, and supportive community members. Residents mentioned that the region provided benefits of small town living while having access to big city

amenities. Many perceived the region to be growing, with both advantages and challenges to its growth. The area is said to be traditional and rich in history; however, with growth comes change. Community members discussed an increase in the older adult population, mentioning that the area is very attractive to retirees. Residents also discussed an increase in diversity, specifically citing growth in the Hispanic population. Other regional characteristics included being close knit and a wonderful place to raise children and have a family, and being a good place to have a business.

Community Issues

Though there are numerous positive characteristics associated with the region, residents highlighted several community issues as well.

Transportation was mentioned in every discussion group throughout the region; the need for a reliable, affordable public transportation system is a critical issue for RHP 17 residents. Economic disparities also emerged as a theme within the region; job shortages and poverty were mentioned as issues in all counties. For some counties, a divide based on socioeconomic status was added to the list of issues related to economic disparities. Other regional issues of note include housing problems, such as a lack of rental properties, affordable housing, and land shortages; homelessness in the urban areas; and a need for more businesses in the rural areas.

With the growing population of older adults in the community, many residents are concerned about the lack of resources and services to accommodate them. Many health care services, such as home health and respite care, are needed in the community for older adults, but these services are limited, if available at all, in the region.

The lack of recreational activities in the area was cited as an issue for some counties, while in others the lack of *affordable* recreational activities was more of a problem. In some areas of the region, an increase in youth risk behaviors was mentioned, particularly crime-related behaviors. This increase was attributed to community growth as well as youth not being involved in recreational outlets. Another community issue discussed by residents was both alcohol and drug (illegal and prescription) abuse.

Health Concerns

In addition to the broader community issues, the region expressed concern over the obesity epidemic. Community leaders, health care and social service providers, and the general public all spoke of an increase in obesity-related chronic diseases such as diabetes, high cholesterol, and high blood pressure within the region. Residents also discussed the issue of accessing care and resources—a major concern for residents of the region. Many attributed ongoing health problems to poor access to care. In particular, the region noted a lack of specialty care, especially mental health services and affordable dental care.

Resources

Across the region, community discussion group participants were readily able to identify resources and assets to the community. Civic organizations, and social service organizations, such as Health Resource Centers in the rural counties, were cited as good community resources for those in need. Health care organizations, such as local hospitals and health clinics, were said to be assets to the community; health clinics in particular were said to be helpful to the indigent and low-income populations. Some counties mentioned local school districts, community colleges, and universities as resources, while others discussed human capital, in the form of volunteers and local leadership, as being community resources. Economic development opportunities, like local businesses and tourism, were said to be good sources of revenue for the community. National parks and lake amenities were seen as valuable resources as well.

Household Survey

As indicated in Table 1, a specific number of surveys was targeted in each county to allow for both regional and county-level analysis. Changes in human subjects protection protocols resulted in a lower response rate than we have obtained in the past; thus, some counties were not able to reach their target within the timeframe available to conduct the survey. Typical in survey research, those who actually responded to the survey disproportionately represented women, older residents, Caucasians, and those more educated and more affluent. To deal with some of this bias, the analysis was performed on scientifically weighted data, weighting the responses to match the age and gender distribution by county. Even with the weighting, however, we also know by comparison to Census estimates that the current sample underrepresents low-income residents. This should be considered when interpreting the results; what the survey analysis indicates is a more positive reflection of the community than actually exists. Regardless, the data provides us a useful snapshot of what residents are currently experiencing.

Demographics

Where possible, demographic comparisons are made to 2012 Census estimates. However, for certain counties and categories, only earlier data were available. In these cases, actual 2010 Census data or multiple year averages were used. The data sources are noted in the report.

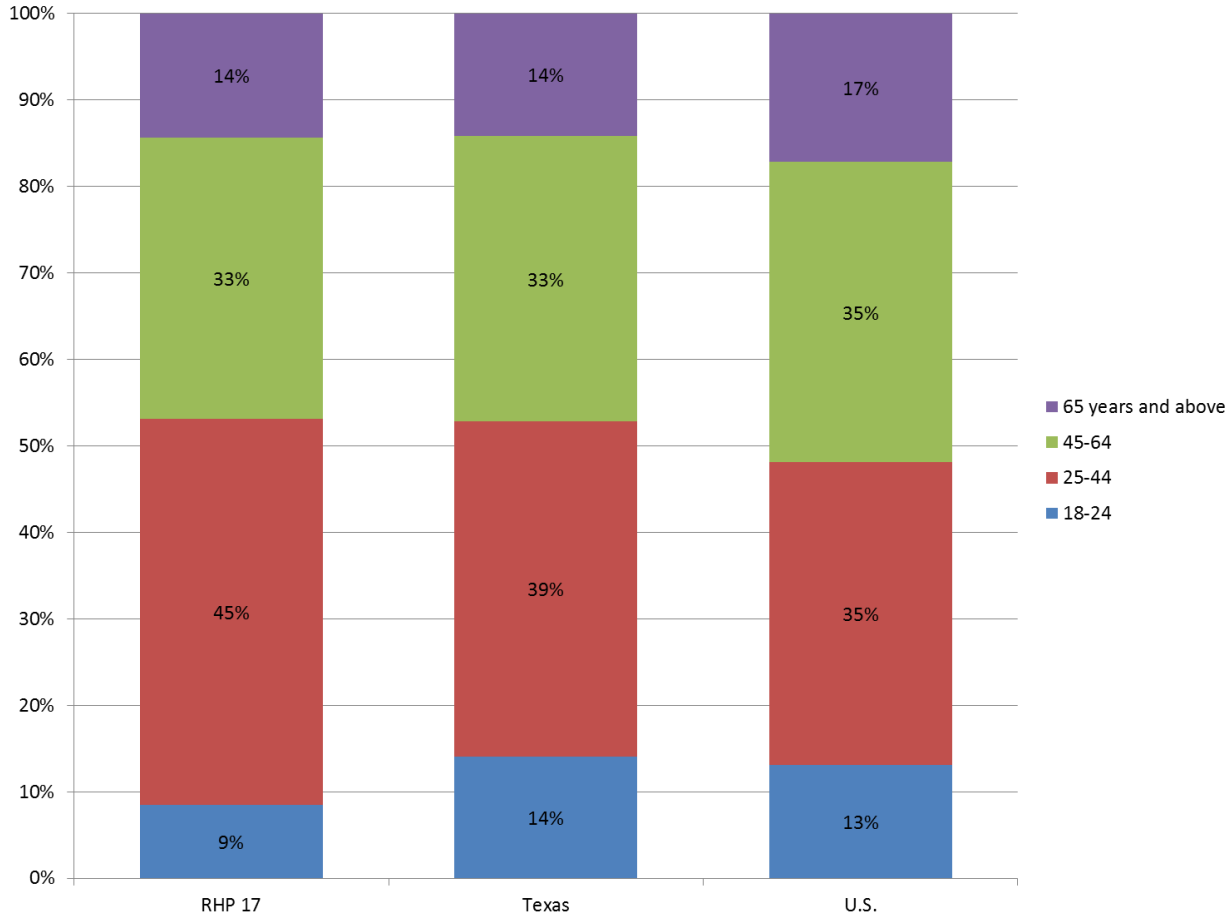
The total population of RHP 17 at the time of the last assessment (2010) was 843,054. The 2012 population estimates indicate a population increase of 4.3 percent to 879,312. The age distribution continues to shift towards a larger population of older adults as the baby boomers age and as an increasing number of retirees move into the region.

Age and Gender

Because the data are weighted by age and gender, the gender and age distribution of respondents in this analysis closely matches the actual population characteristics with 50 percent male and 50 percent female.

The mean age of survey respondents was 45.6 years for RHP 17. Figure 2 illustrates the age distribution of RHP 17 respondents compared to Texas and the U.S.

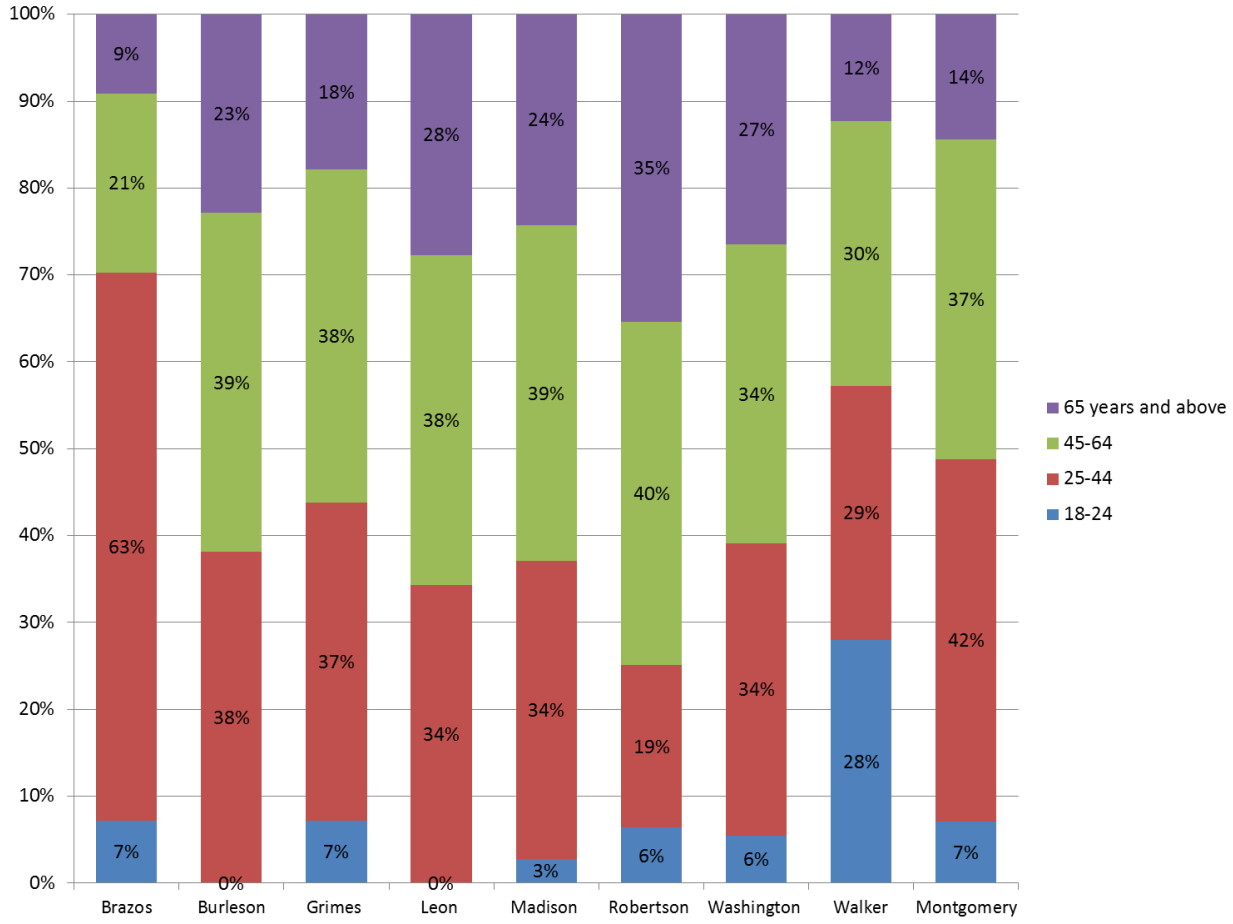
Figure 2. Age distribution of RHP 17 respondents, Texas, and U.S.[1]



Brazos and Walker Counties have a greater proportion of those 18 to 44 years of age (70.3% and 57.2%, respectively) compared to the other counties. Some of this can be attributed to the presence of Texas A&M University and Blinn College's Bryan Campus in Brazos County and Sam Houston State University in Huntsville. Nevertheless, this is an important difference. In addition, both counties have a smaller proportion of residents over the age of 65, with 9.1 percent in Brazos County and 12.3 percent in Walker County; Robertson County reports the highest proportion of adults over 65 at 35.4 percent. Understanding that older populations generally have more chronic disease and also face more barriers in accessing care, the concentration of the aging population in the more rural counties where there are fewer services is potentially of concern. Figure 3 shows the age distribution of survey respondents across each of the RHP 17 counties.

[1] http://quickfacts.census.gov/qfd/states/48000.html

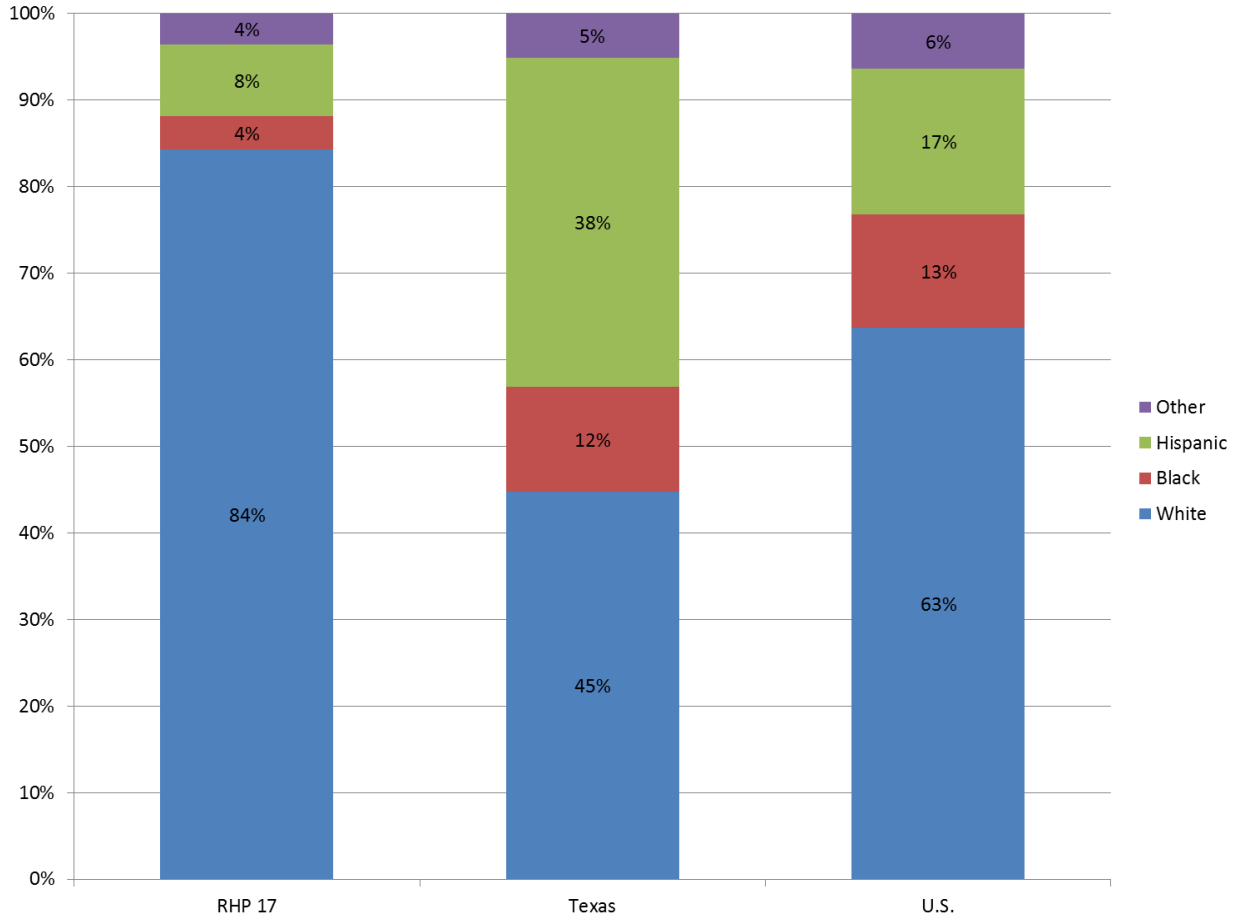
Figure 3. Age distribution of RHP 17 survey respondents by county



Race and Ethnicity

Respondents were asked to indicate what race best described them, and to indicate whether they were of Hispanic/Latino ethnicity. A majority of survey respondents identified themselves as White/Caucasian (84.3%), 3.8 percent indicated Black/African American, and 8.3 percent Hispanic/Latino. The percent of those identifying as other races (3.6%) was very small; thus, the categories of Asian or Pacific Islander/Hawaiian Native, Native American or Alaska Native or those of more than one race have been combined as "All Other Races" for the purpose of analysis. Figure 4 shows the racial/ethnic distribution of survey respondents.

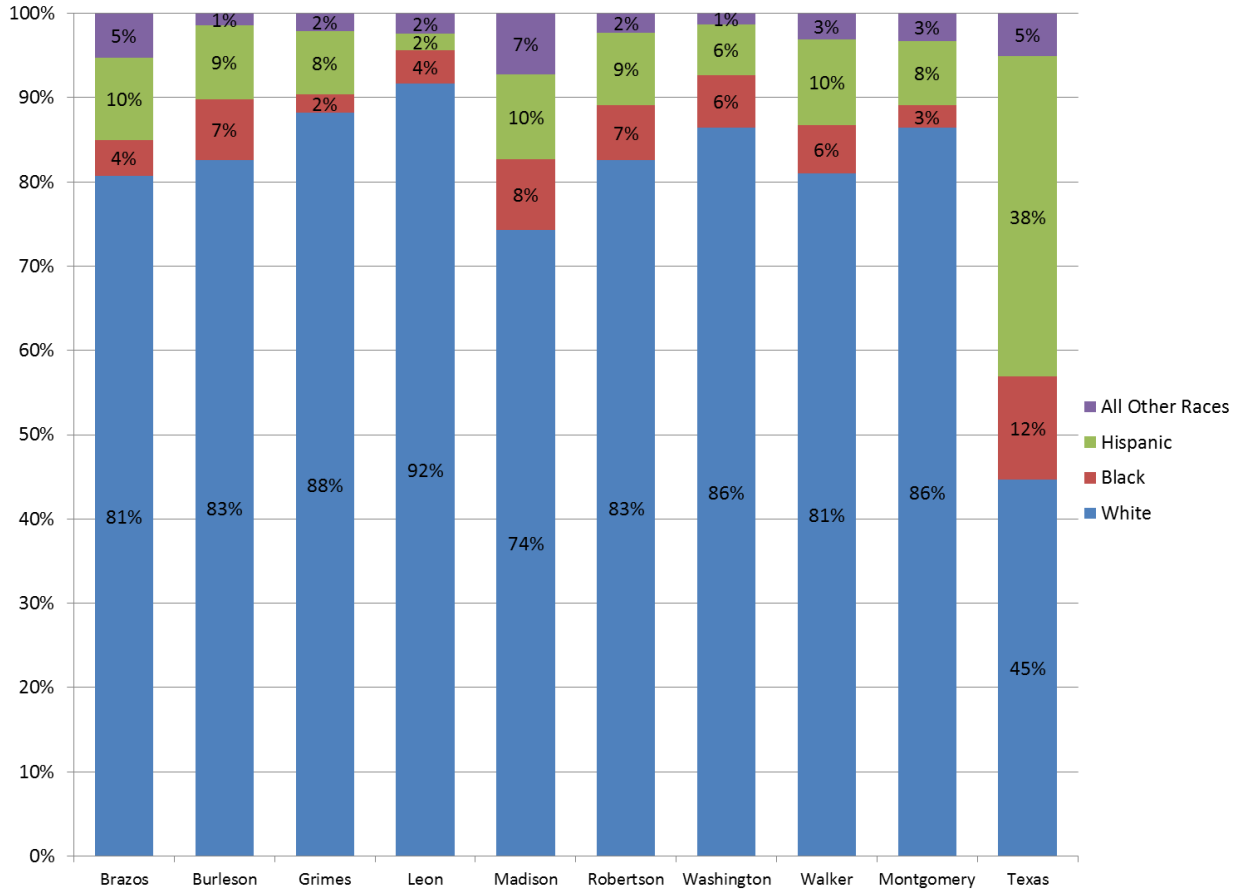
Figure 4. Racial/ethnic distribution of RHP 17 survey respondents, Texas, and the U.S.[2]



In 2013, the survey indicates a greater proportion of minority residents live in Brazos (19.3%), Madison (25.7%), or Walker (19%) Counties than other counties in the region. However, this should be interpreted with caution, as racial/ethnic minorities are often underrepresented in survey research. Figure 5 compares the racial/ethnic distribution of RHP 17 survey respondents in each county compared to the distribution for Texas residents.

[2] http://quickfacts.census.gov/qfd/states/48000.html

Figure 5. Comparison of racial/ethnic distribution of survey respondents by county vs. Texas



Marital Status

Across RHP 17, the majority of survey respondents reported being married (73.4%), while 14 percent indicated that they were single (never married), 5.8 percent separated or divorced, 3.7 percent widowed, and 3.1 percent not married and living with their partner. In comparison, close to half of Texas and U.S. residents reported being married (49.6% and 48.3% respectively). Additionally, Texas and the U.S. had a greater proportion of residents who reported being single (31.4% and 32.5% respectively), separated or divorced (13.7% and 13.2% respectively), and widowed (5.2% and 6% respectively).

Household Composition

The mean household size in RHP 17 is 3.2 persons, ranging from 2.5 in Burleson County to 3.3 in Brazos County. This is larger than the average household size both in Texas (2.8) and the U.S. (2.6)[3]. Regionally, 53.2 percent of households do not have children, compared to 65.9 percent in the rural counties. Statewide, 61.1 percent of households do not have children, and nationally, 64.4 percent of households are childless.

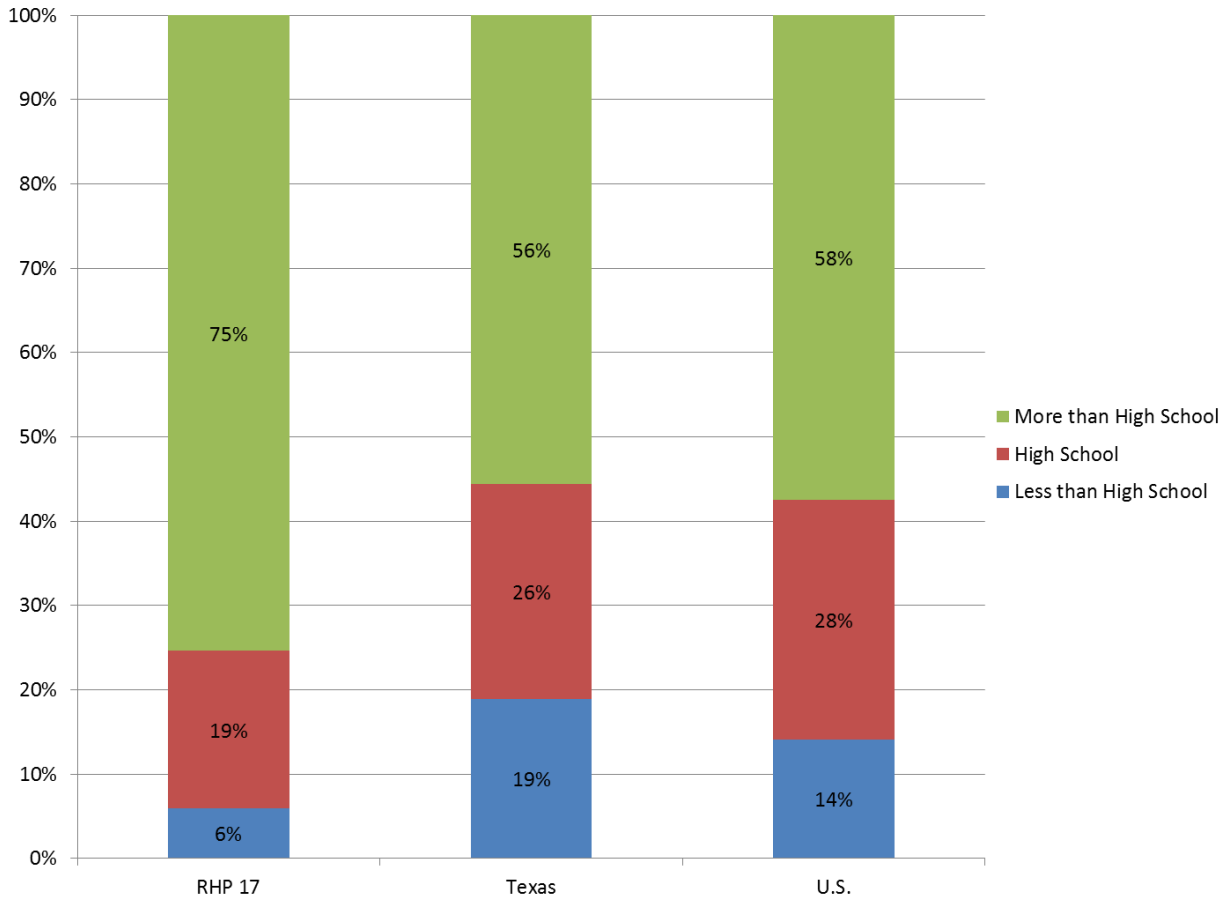
[3] http://quickfacts.census.gov/qfd/states/48000.html

Education

Education is a social factor that influences health. The mean educational attainment in RHP 17 is 14.6 years, which is equivalent to a high school diploma, plus slightly over two years of college. In all nine counties, the mean educational attainment is more than a high school diploma, but how much more varies by county.

Three-quarters of the respondents (75.3%) reported having completed some higher education as illustrated in Figure 6. The proportion of residents who did not complete high school varies by county, ranging from four percent in Montgomery County to 20 percent in Madison County. Across Texas, 19.6 percent of residents over the age of 25 did not complete high school. Nationally, this figure is 14.6 percent.

Figure 6. Educational attainment in RHP 17 survey respondents, Texas and the U.S.[4]



Employment

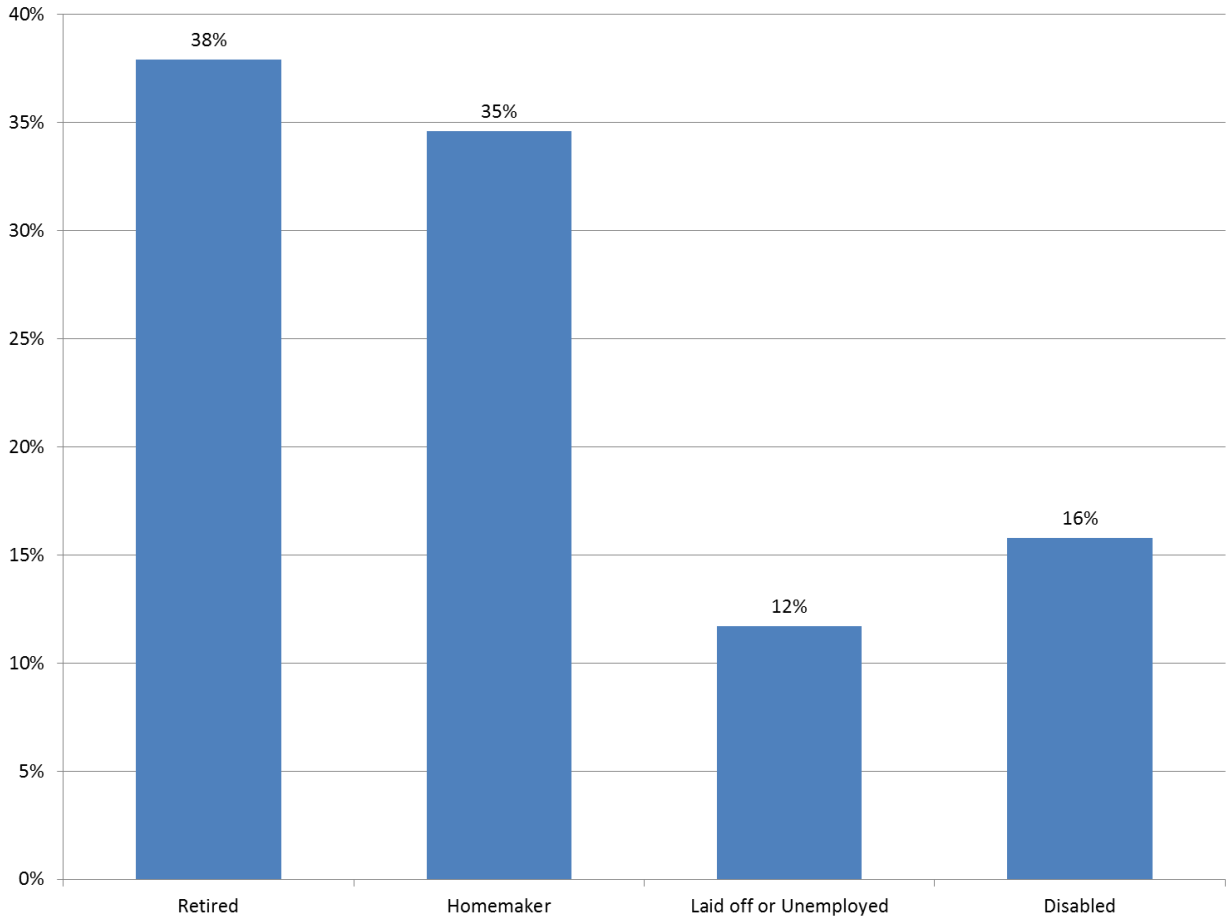
With the recent state of the economy, employment emerged as a key issue in this assessment. Many of the community discussion group attendees expressed concerns over unemployment and the impact it was having on families throughout their communities.

[4] http://quickfacts.census.gov/qfd/states/48000.html

Among RHP 17 survey respondents, 57.9 percent reported being employed. Of those currently employed, 28 percent reported working part-time. Part-time employment varied widely across the region ranging from 15.1 percent in Grimes County to 52 percent in Walker County. The survey also asked respondents how many employers they had; again, results varied significantly by county. The majority of those employed reported only having one employer—89.1 percent across the region. However, the percentage reporting only one employer ranged from 66.2 percent in Burleson County to 94.3 percent in Walker County.

Participants were asked to describe their work situation if not currently employed. Figure 7 provides a breakdown of the responses for the region. It is important to note that survey respondents were allowed to select more than one response option.

Figure 7. Percentage of responses regarding work situation if not currently employed



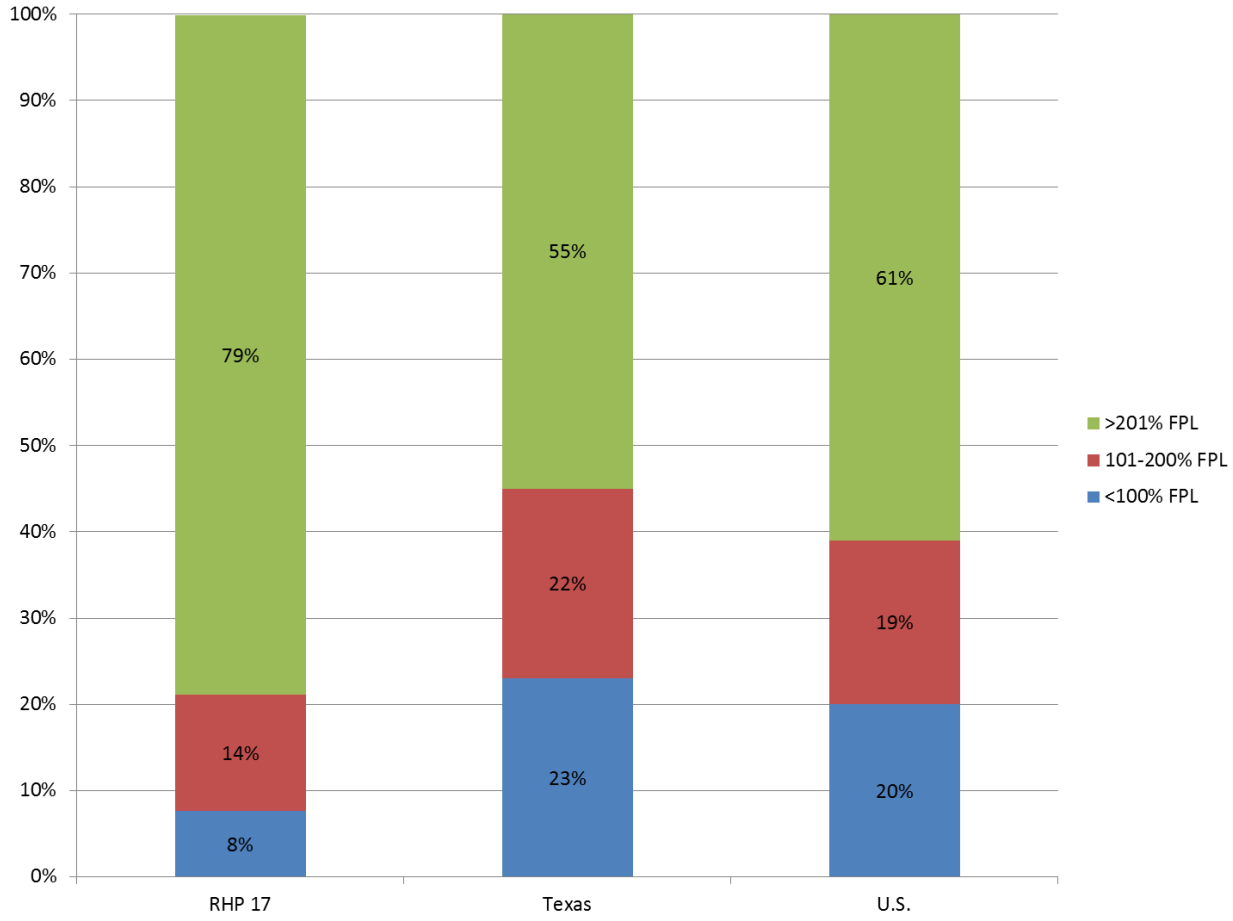
Across the region, only 8.7 percent of respondents reported being enrolled as a college student, ranging from none in Leon County to 12.9 percent in Brazos County. In line with the age distribution across the region, among those who were not currently employed, Brazos County had the smallest proportion of retirees at 30.1 percent, while 49.7 percent of the rural county respondents were retirees.

Household Income

Closely related to education and employment is household income. Survey respondents were asked to write in their total household income before taxes for 2012. The median household income for survey respondents across the region was $86,000; this is significantly higher than census estimates for Texas ($50,920) and the U.S. ($52,762). As mentioned, for a variety of reasons, a persistent characteristic of survey research is the tendency of survey respondents to over represent those who are more affluent; again, this is why secondary data and community discussion group data are used to reach those who are underrepresented and inform the analysis of the survey data.

The federal poverty level (FPL) for 2012 is $23,050 for a family of four. Across RHP 17, 7.6 percent of survey respondents were living at or below the poverty level, with another 13.5 percent in the low-income category (between 101 and 200 percent of FPL). Families in this low-income category are typically the ones who earn too much to qualify for assistance programs but earn too little to be able to afford to pay for services out-of-pocket. Given the state of the economy, this group is growing. Figure 8 presents income and poverty distributions for RHP 17 respondents compared to the U.S.

Figure 8. Income and poverty in RHP 17, Texas, and the U.S.[5]



[5] http://quickfacts.census.gov/qfd/states/48000.html

Across the region, the number of survey respondents living below the poverty level ranged from four percent in Washington County to 17.4 percent in Leon County. Leon and Madison county respondents reported the greatest percentage of those living in the low-income category with 24.4 percent and 28.8 percent, respectively. Census data indicate poverty rates in the region range from 13.7 percent in Montgomery County to 29 percent in Brazos County[6].

Military Service

With a growing number of veterans and their unique health needs, the survey committee thought it wise to ask about military service. Across RHP 17, 11.4 percent of survey respondents identified themselves as ever having served in the United States Armed Forces, ranging from 10.3 percent in Brazos County to 22.2 percent in Robertson County. The proportion for the rural counties combined was 11.9 percent. Nearly half of RHP 17 respondents who had ever served in the United States Armed Forces reported having served in an active duty war zone (47.6%). Across the region, Brazos County had the largest proportion reporting so, with a rate of 63.4 percent of those who had served in the U.S. Armed Forces, while Grimes County had the least (28.9%). There are 1,618,413 veterans in Texas, representing approximately six percent of the population.

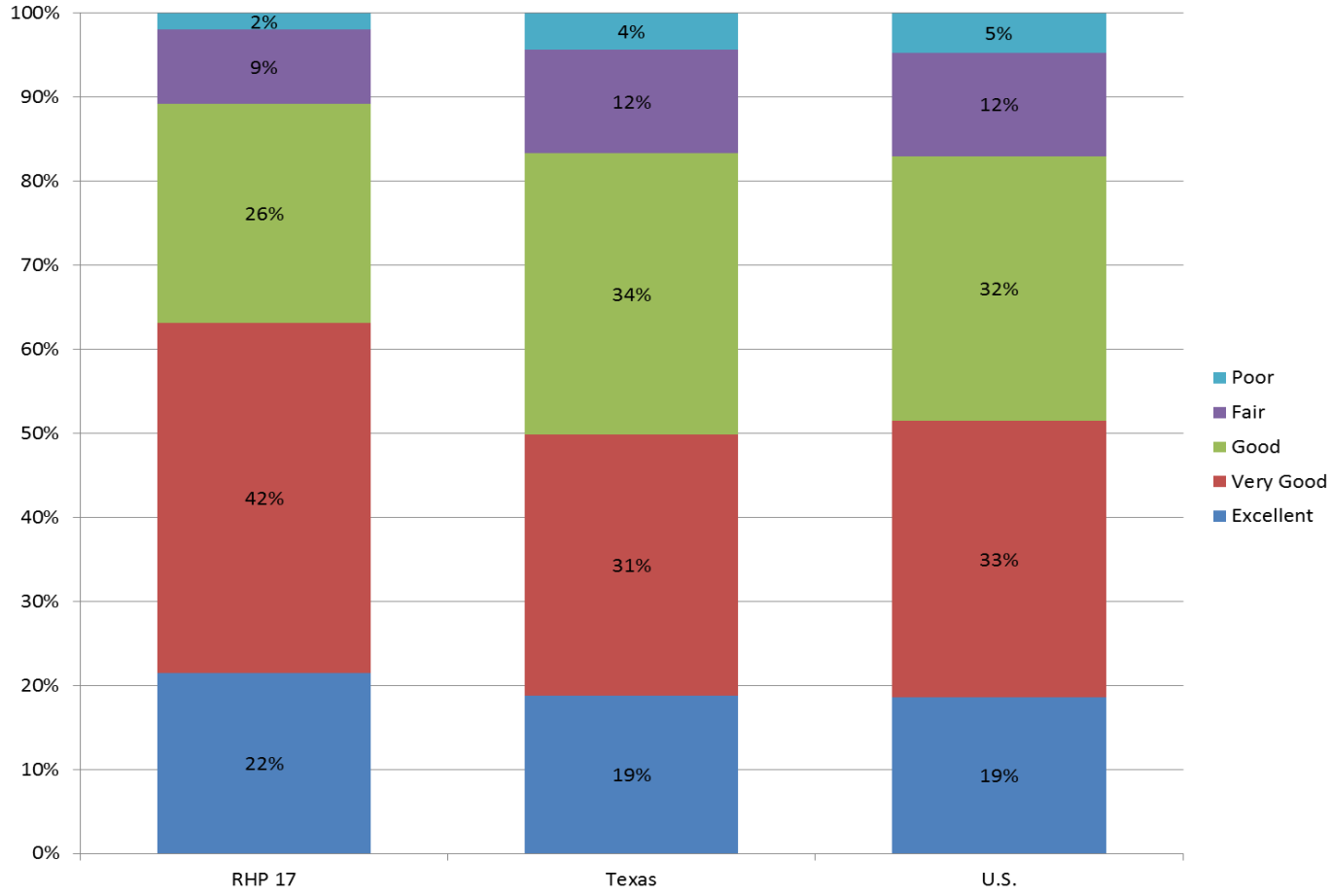
Health Status

The first four questions in the survey are taken from the Health Related Quality of Life scale developed and tested by the Centers for Disease Control and Prevention (CDC). These are simple but powerful indicators of functional health status and its impact on daily life.

The first question simply asked respondents to rate their health; the possible responses were *excellent*, *very good*, *good*, *fair*, and *poor*. In RHP 17, 21.5 percent of respondents indicated their health was *excellent* and 41.7 percent said their health was *very good*. In contrast, 8.8 percent indicated their health was *fair*, and two percent said their health was *poor*. Figure 9 compares self-reported health status for RHP 17, Texas, and the U.S. Figure 10 illustrates the self-reported health status of the region by county.

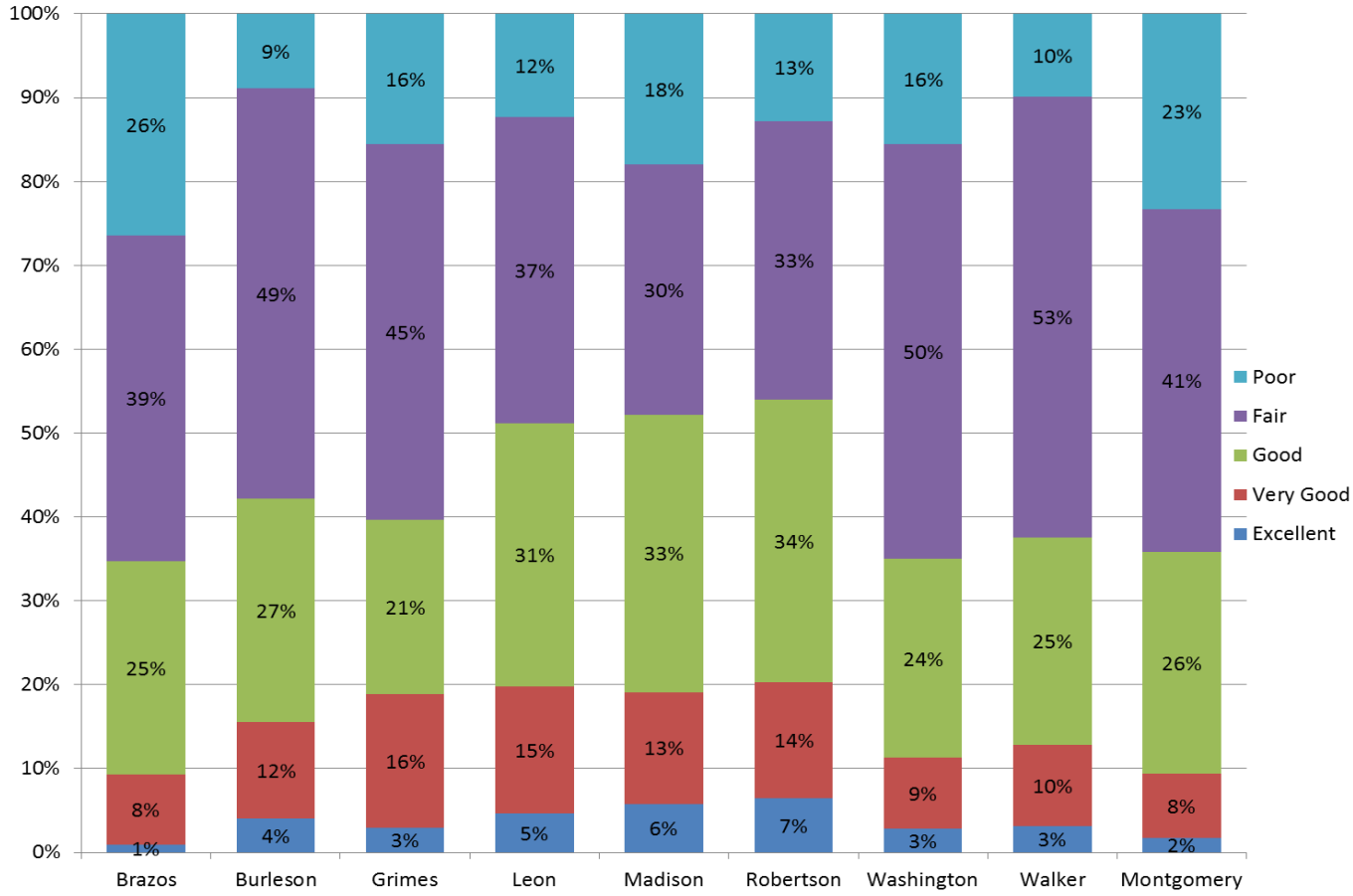
[6] http://www.txcip.org/tac/census/morecountyinfo.php?MORE=1009

Figure 9. Self-reported health status in RHP 17, Texas and U.S.[7]



[7] http://apps.nccd.cdc.gov/brfss/display.asp?cat=HS&yr=2011&qkey=8001&state=UB

Figure 10. Self-reported health status in RHP 17 by county



The second question asked how many days out of the past 30 days was the respondent's physical health not good. Among RHP 17 respondents, the mean number of poor physical health days was 3.6, ranging from 3.2 days in Brazos County to 6 days in Burleson County. The mean for the rural counties combined was 4.2 days. Over one-quarter of respondents (27%) reported between one and five days of poor physical health in the past month. One in 10 respondents (10.1%) indicated *more than 10 days* of poor physical health. In comparison, 63.3 percent of Texans reported no days of poor physical health, with a 19.5 percent reporting more than five days of poor physical health each month.

Similar to the previous question, the next question asked how many days out of the past 30 days was the respondent's mental health not good. Among RHP 17 respondents, the mean number of poor mental health days was 3.4, ranging from 2.7 days in Washington County to five days in Burleson County. The mean for the rural counties combined was 3.7 days. One in five respondents (20.3%) reported between one and five days of poor mental health in the past month, a percentage higher than rates for the state. Alarmingly, 10.2 percent of respondents indicated *more than 10 days* of poor mental health. In addition, 21.1 percent report having been diagnosed with depression and 20.4 percent with anxiety. Among Texans, 66.3 percent reported no days of poor mental health, and 14.4 percent reported experiencing between one

and five days of poor mental health. Given the persistent lack of sufficient mental health services available in the region, these numbers are cause for concern.

Feelings of anxiety and depression also affect respondents' mental health. Table 2 shows the percentage of respondents reporting mental health problems that bothered them over the past two weeks.

Table 2. Mental health problem experienced by survey respondents

Type of Mental Health Problem	Percentage of RHP 17 respondents
Becoming easily annoyed or irritable	44.7%
Feeling nervous, anxious, or on edge	38.8%
Worrying too much about different things	38.8%
Trouble relaxing	38.3%
Not being able to stop or control worrying	29.0%
Little interest or pleasure in doing things	24.9%
Feeling down, depressed, or hopeless	24.7%
Being so restless that it is hard to sit still	22.2%
Feeling afraid, as if something awful might happen	16.3%

The fourth question in this set sought to understand the extent to which physical and mental health limited one's daily activities. It asked how many days of the past 30 days did poor physical or mental health keep respondents from their usual activities. In RHP 17, the mean number of days in which usual activities were limited by poor physical or mental health was 2.6, and was relatively similar across counties. Slightly lower than Texas' rates, one-quarter of respondents (26.8%) reported *some* interruption of their usual activities, with 15.4 percent indicating between one and five days, 3.5 percent reporting six to 10 days, and 7.9 percent reporting more than 10 days. In comparison, 27.7 percent of Texans reported between one and five days of limited activities and 12.2 percent reported five or more days of limited activities due to poor physical or mental health.

Many residents reported being limited in their activities due to an impairment and/or health problem as well. Table 3 displays issues reported by residents that impacted daily activities during the past two weeks. Participants could identify more than one impairment; therefore the report represents percentages of the total number of *responses* instead of the percentage of respondents who reported the impairment.

Table 3. Health impairment or problems experienced by respondents

Major Impairment or Health Problem	Percentage of RHP respondents
Back or neck problems	15.9%
Arthritis/rheumatism	12.8%
Cardiovascular issues (heart problems, hypertension, high blood pressure)	10.2%
Other impairment/problem	9.0%
Depression/anxiety/emotional problems	8.5%
Fractures, bone/joint injury	8.1%

The most commonly reported impairments or health problems were related to joint and bone health issues: back or neck problems comprised 15.9 percent of the responses, followed by arthritis/rheumatism (12.8%) and fractures (8.1%). One in 10 responses were related to heart health. Surprisingly, nearly eight percent of responses indicated limited use of an arm or leg as the major impairment or health problem limiting daily activities.

For the given impairments and health problems, the duration of having limited activities varied among survey respondents. Most survey participants (67.1%) did not experience pain that impacted their daily activities during the past 30 days. Of those who did experience pain that impacted activity during the past 30 days, 18.3 percent reported pain for between one and five days, 3.8 percent had pain between six to 10 days, and 10.8 percent reported more than 10 days of pain. One in five participants reported their daily activities were limited for less than one year. Daily activities were reported as limited for one to five years by over one-third of respondents (35.1%). Another 21.9 percent reported limitations for the past six to 10 years, and 22.9 percent had limitations to their daily activities for more than 10 years.

In the final question about residents' overall health, respondents listed a range of days in the past month that they got a sufficient amount of sleep and felt very healthy and full of energy. Less than one-quarter of participants (22.6%) reported always feeling well-rested. The largest percentage of participants (35%) reported not feeling rested between one and five days in the past month, 16.9 percent reported the same for between six to ten days, and 7.7 percent reported not having enough rest or sleep for between 11 and 15 days. Nearly one in five participants (17.7%) reported not feeling rested for at least half of the days for the past month.

Forty-one percent of participants reported feeling healthy and full of energy for at least 21 days of the past month, and one in five participants (21.9%) reported feeling good for 11 to 20 days of the past month. Alarmingly, nearly one-quarter of participants (24.1%) did not feel very healthy and full of energy for at least one-third of the month, and an additional 13.2 percent reported never feeling healthy or full of energy.

Risk Factors

Several sets of survey questions asked about health behaviors or characteristics that often place individuals at greater risk of disease or injury. The risk factors of interest are those that individuals can sometimes control or manage to prevent development of related illnesses or complications.

Obesity

Being overweight or obese increases an individual's risk for developing many chronic diseases and other conditions such as depression and chronic pain. The way that overweight and obesity is typically assessed is through the calculation of the body mass index (BMI), which is a simple ratio of weight to height (kg/m^2). This measure does not account for individual variations in bone or muscle mass, but is a good general indicator of weight status for the population.

The National Institutes of Health have published the following guidelines:

Underweight = BMI score < 18.5

Normal weight = BMI score between 18.5 – 24.9

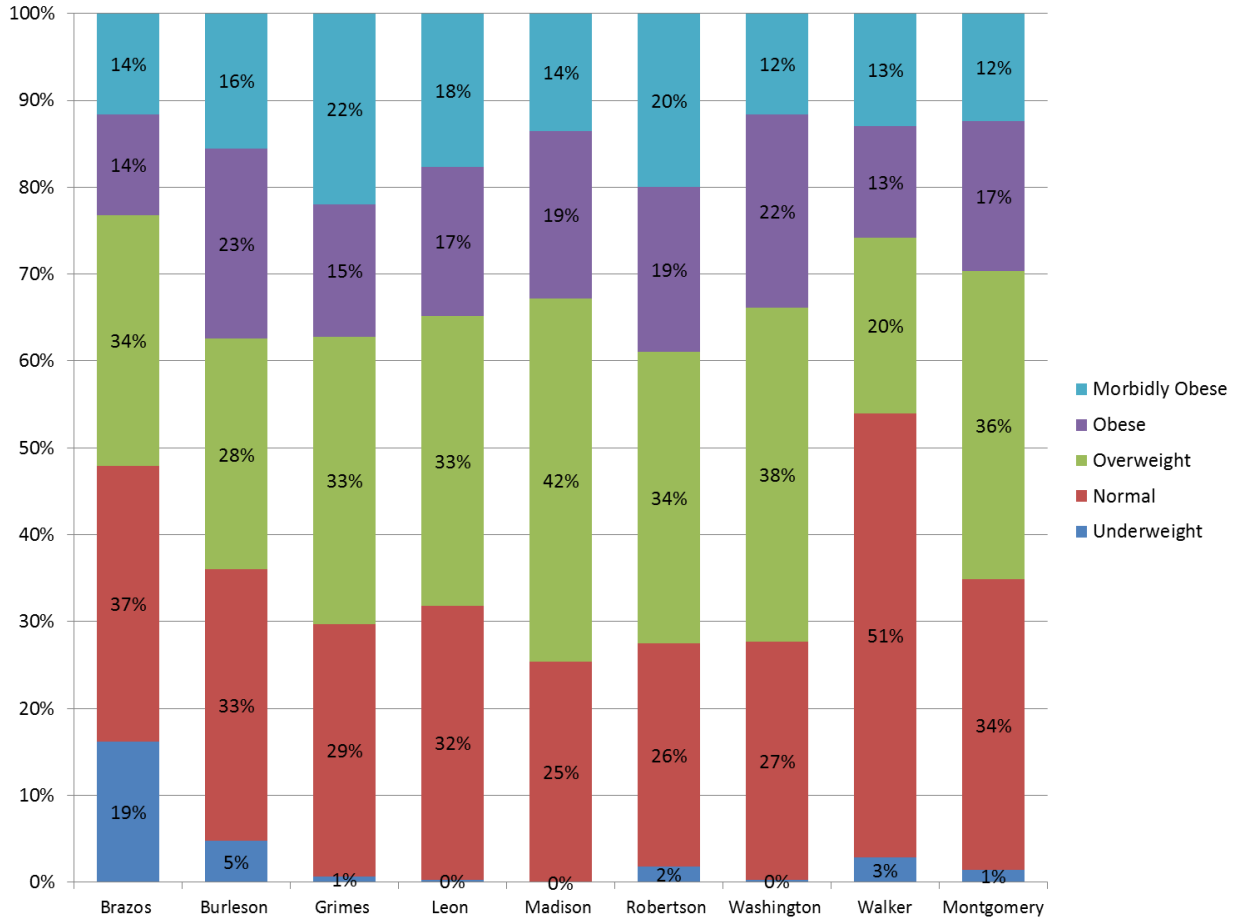
Overweight = BMI score between 25 – 29.9

Obese = BMI score between 30 and 34.9

Morbidly Obese = BMI score ≥ 35

Across RHP 17, the rate of overweight and obesity is cause for concern. Regionally, 35.2 percent of the adult population is within the "normal" weight range for their height. One-third of the population is overweight (33.7%), one in six residents is obese (16.3%), and 13.3 percent are morbidly obese. Figure 11 illustrates the BMI status for respondents in each county of RHP 17.

Figure 11. BMI status of survey respondents by county



Individuals who are overweight or obese are at a higher risk for developing a variety of chronic diseases, including type 2 diabetes, hypertension, and heart disease. Table 4 illustrates the differences in disease state for those at a healthy weight compared to those who are obese/morbidly obese.

Table 4. Chronic disease in RHP 17 survey respondents by BMI status

Disease/Condition	Healthy Weight	Obese/Morbidly Obese
Arthritis	24.0%	41.4%
Congestive heart failure	11.1%	52.1%
Depression	27.4%	43.9%
Diabetes	10.3%	59.7%
High cholesterol	22.3%	39.9%
Hypertension	18.8%	45.8%

As shown in the above table, respondents in the obese and morbidly obese BMI categories report substantially higher rates of the chronic diseases listed than those in the healthy weight category. Since the first regional health assessment in 2002, respondents' BMI have shown a pronounced increase. This trend of increasing obesity over time mirrors state and national increases as seen in Table 5.

Table 5. Change in BMI since the 2006 health assessment[8, 9]

Location	2006			2010			2013		
	Over-weight	Obese	Morbidly Obese	Over-weight	Obese	Morbidly Obese	Over-weight	Obese	Morbidly Obese
U.S.	36.5%	25.1%		36.2%	27.5%		35.8%	28.1%	
Texas	36.3%	26.1%		34.8%	31.7%		35.9%	29.2%	
RHP 17	-	-	-	-	-	-	33.7%	16.3%	13.3%
Brazos Valley	65.0%			32.0%	22.0%	14.4%	34.1%	15.7%	14.7%
Brazos	61.0%			31.9%	23.8%	14.7%	33.8%	13.6%	13.6%
Burleson	72.0%			32.6%	21.2%	11.8%	27.7%	22.9%	16.2%
Grimes	74.0%			42.7%	24.9%	14.1%	33.1%	15.2%	22.0%
Leon	73.0%			35.1%	18.0%	14.2%	33.4%	17.1%	17.7%
Madison	72.0%			42.8%	8.8%	12.5%	41.8%	19.3%	13.5%
Montgomery	-	-	-	-	-	-	12.4%	19.0%	20.0%
Robertson	68.0%			34.1%	14.9%	17.5%	33.6%	19.0%	20.0%
Walker	-	-	-	-	-	-	20.2%	12.8%	13.0%
Washington	69.0%			31.6%	23.0%	16.7%	38.4%	22.3%	11.6%

[8] http://apps.nccd.cdc.gov/brfss/display.asp?cat=OB&yr=2006&qkey=4409&state=UB
[9] http://apps.nccd.cdc.gov/brfss/display.asp?cat=OB&yr=2010&qkey=4409&state=UB

Nutrition

Nutrition is an important aspect of achieving and maintaining a healthy weight and overall health. Accordingly, the survey asked questions about individuals' grocery shopping and eating habits.

In RHP 17, 82.8 percent of residents do their grocery shopping within 10 miles of their community; in Brazos and Montgomery Counties 94.6 and 88.9 percent of residents (respectively) reported shopping within 10 miles of their community compared to rural counties, where only 57.8 percent did the same. The mean distance RHP 17 residents travel to buy groceries is 7.2 miles, compared to an average of 13.8 miles for rural county residents (ranging from 7.8 miles in Washington County to 28.8 miles in Leon County).

As mentioned, concerns about the economy have a pronounced impact on residents' overall nutrition. Across the region, 8.7 percent of respondents said that *sometimes* or *often,* the food they bought did not last and they did not have money to get more. Also, 7.3 percent reported eating less and 4.7 percent did not eat when hungry during the past year because of financial concerns. Additionally, food pantries and food banks serve many members of the community; 3.6 percent of residents reported receiving food from a food pantry or food bank in the past six months, but this varied widely by county (see Table 6).

Table 6. Percentage of residents reporting use of a food pantries or food banks

Used a food pantry or food bank in:	County of residence	Another county	Mobile food pantry/bank
RHP 17	3.6%	0.4%	1.3%
Brazos Valley	4.7%	0.5%	1.3%
Brazos County	3.8%	0.1%	0.7%
Burleson County	3.9%	3.5%	2.5%
Grimes County	8.1%	0.6%	3.4%
Leon County	12.4%	0.4%	2.7%
Madison County	10.0%	4.6%	5.3%
Montgomery County	2.5%	0.2%	0.9%
Robertson County	6.0%	1.0%	0.3%
Walker County	4.6%	0.4%	3.3%
Washington County	1.6%	0.1%	0.6%

Physical Activity

Physical activity is also a key aspect of maintaining a healthy weight and good health. The National Institutes of Health recommend 150 minutes of moderate or 75 minutes of vigorous physical activity each week, in addition to engaging in strengthening exercises twice weekly. Across RHP 17, only 29.7 percent of respondents meet this recommendation, while 16.1 percent reported they rarely do any physical activity.

Specific community characteristics can influence perceptions of safety and the likelihood for community members to engage in activities outside their home. Table 7 summarizes these perceived characteristics for each county of RHP 17 – listing the percentage of respondents who reported *agree* or *strongly agree* with each statement.

Table 7. Community characteristics related to physical activity by county

County	I see many people being physically active around my neighborhood	If I were to fall, there would be someone in my neighborhood to help	Problems in my neighborhood make it hard to go outside and walk	Concerned that I may be victim of crime if walked/biked in neighborhood
Brazos	81.3%	81.8%	16.7%	6.5%
Burleson	41.4%	57.3%	35.6%	11.3%
Grimes	43.0%	63.7%	40.0%	6.9%
Leon	23.3%	51.4%	45.5%	13.4%
Madison	26.0%	61.3%	34.2%	12.4%
Montgomery	80.9%	88.2%	17.7%	5.9%
Robertson	49.3%	62.7%	33.7%	13.7%
Walker	62.5%	82.0%	27.4%	5.7%
Washington	60.5%	80.1%	23.3%	7.3%

Across the region, residents described their community as a safe place, reporting that their neighborhood is a place where others are physically active (73.8%) and that someone would help them if they were to fall or get hurt in their neighborhood while walking (82.7%). Many disagreed that their neighborhood has problems that make it hard to walk or go outside (79.3%) and nearly all reported they did not feel as if they would be a victim of crime in their neighborhood (93.4%).

The survey also sought to assess RHP 17 residents' sedentary time. In a seven day period, respondents' reported sitting an average of 372 minutes (6.2 hours) on weekdays and 320 minutes (5.3 hours) on weekends.

In addition to obesity, several other behavioral risk factors are key determinants of subsequent health and safety issues.

Cigarette Smoking

In comparison to rest of the nation, RHP 17 respondents reported a smaller proportion of those who smoke. While 19.3 percent of Americans smoke, nearly two-thirds of adults in RHP 17 report having never smoked (63.9%), while another 25.4 percent used to smoke but have quit. Only 10.6 percent of adult respondents said that they currently smoke, ranging from 8.1 percent in Walker County to 24.7 percent in Madison County. Among those who smoke, 49.8 percent say they smoke half a pack or less per day. Among all current smokers in Texas, 9.7 percent smoke every day and 6.2 percent smoke some days. Nearly one-quarter of Texans are former smokers (22.5%) and 61.6 percent of Texans have never smoked.

Few RHP 17 residents (2.3%) reported using other tobacco products, including chewing tobacco, snuff, or dip some days or every day. Across the region other tobacco product use rates ranged from 1.2 percent in Brazos County residents to 6.1 percent in Madison County.

Substance Use and Abuse

Among RHP 17 survey respondents, the average number of alcoholic drinks consumed in a normal week was 3.2, ranging from 2.5 in Leon County to 5.7 in Madison County. While only 1.4 percent of respondents reported driving after drinking at least three drinks for the region, the rate in Brazos County was more than twice as high at 3.4 percent.

In the past 30 days and in the past year, 2.8 and 5.1 percent (respectively) of RHP 17 residents reported using prescription medications for nonmedical reasons or not as prescribed. Reported rates of consumption of marijuana and other illegal drugs was less than two percent across the region.

Chronic Diseases and Conditions

The survey asked residents to report if they had ever been diagnosed by a health care provider with a list of 16 common diseases/conditions. The six most frequently reported conditions across RHP 17 are:

- High Cholesterol 33.2%
- Hypertension 32.8%
- Overweight/Obesity 32.3%
- Depression 21.1%
- Arthritis 20.5%
- Anxiety 20.4%

Only 32.3 percent of respondents reported being told by a health care professional that they were overweight or obese, yet when calculating BMI from reported heights and weights of respondents who had not been diagnosed as such, 47.8 percent of respondents are overweight or obese. Over one-third of undiagnosed respondents were overweight (36.7%), 9.1 percent were obese, and two percent were morbidly obese. This raises serious concern regarding doctor patient communication with respect to healthy weight, overweight, and obesity. Table 8 summarizes the differences in 12 chronic conditions between RHP 17, Brazos County, Montgomery County, the rural counties, and the nation.

Table 8. Chronic condition rates, comparisons by population

Disease/Condition	RHP 17	Brazos County	Montgomery County	Rural Counties	U.S. [10,11,12]
Anxiety	20.4%	24.7%	18.9%	19.1%	17%
Arthritis/Rheumatism	20.5%	14.6%	20.3%	27.0%	22%
Asthma	13.1%	19.6%	10.4%	12.2%	13%
Cancer	6.2%	4.8%	6.4%	7.4%	8%
Congestive Heart Failure	2.4%	1.9%	1.9%	4.1%	2%
Depression	21.1%	27.3%	19.6%	17.9%	12%
Diabetes (type 2)	9.1%	5.4%	9.5%	12.0%	9%
Emphysema/COPD	4.7%	4.2%	3.9%	6.8%	2%
High Cholesterol	33.2%	26.3%	36.2%	33.5%	13%
Hypertension	32.8%	29.5%	32.6%	36.6%	24%
Overweight/ Obesity[13]	63.3%	61.0%	65.2%	61.8%	62%
Stroke	1.6%	1.2%	1.4%	2.6%	3%

The survey also asked residents if their health care providers had ever referred them to a chronic disease management program. Almost eight percent said yes, and another eight percent reported attending a program to prevent or manage a chronic illness.

[10] http://www.cdc.gov/nchs/data/series/sr_10/sr10_242.pdf
[11] http://www.cdc.gov/nchs/data/databriefs/db92.pdf
[12] http://apps.nccd.cdc.gov/NCVDSS_DTM/LocationSummary.aspx?state=United+States
[13] Overweight/obesity percentage was calculated based on reported high and weight of participants, NOT diagnosed by a health care professional.

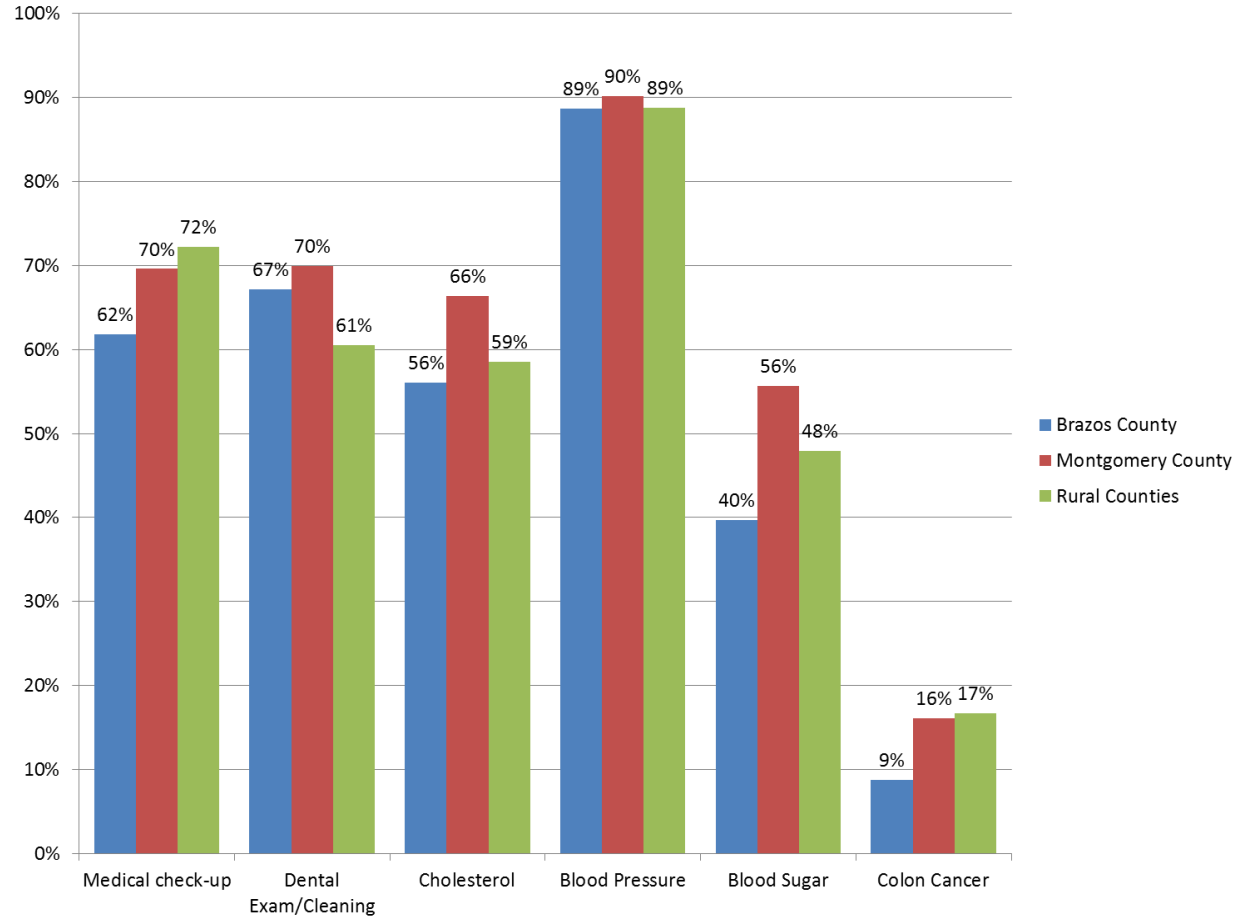
The following points regarding chronic conditions in RHP 17 are worth noting:

- Obesity and Type 2 Diabetes are higher than the national rate.
- High cholesterol and hypertension rates are also substantially higher than the national rate.
- Rural county rates were higher than Brazos and Montgomery Counties for arthritis/rheumatism, diabetes, cancer, congestive heart failure, emphysema/COPD, hypertension, and stroke.
- Regionally, the rate of depression is higher than the nation. Depression and anxiety affect one in five residents, and mental health is among the most significant unmet needs.

Preventive Screenings

This assessment also collected information regarding preventive screenings in addition to the previously reported information about risk factors and disease. Preventive screenings include medical tests or other services that are used to detect and possibly prevent certain diseases. Screenings can catch conditions early and limit long-term impacts of certain conditions. The U.S. Preventive Screening Guidelines Task Force has established specific age and gender groups for a variety of screening activities. Figure 12 illustrates use of recommended preventive screenings by RHP 17 survey respondents.

Figure 12. Percentage receiving recommended screening in RHP 17



The rate of those participating in routine medical screenings was slightly higher in 2013 compared to the 2010 survey. In 2010, for screening activities like check-ups, cholesterol, and blood pressure, the majority of respondents (40-60%) fell within the national guidelines. In 2013, only 68.3 percent of RHP 17 residents reported having a medical check-up in the past year; 67 percent reported having a dental check-up/cleaning in the past year; 62 percent had a cholesterol check in the past year; and 49.9 percent had their blood sugar tested in the past year. Nine out of 10 respondents (89.5%) indicated they had their blood pressure checked in the past year. For almost every screening in the above chart, Montgomery County had a higher rate of compliance with screenings than Brazos County or the rural counties of the region.

Screening for cancer among women is a significant opportunity to reduce morbidity and mortality. Clinical guidelines for preventive screenings among women suggest that women aged 50 years or over obtain a mammogram every one to two years. In RHP 17, only 41.3 percent of women 40 and older reported having a mammogram in the past year. Women 21 years of age or older should also receive a pap test at least every three years. Across the region, 57 percent of women reported their last pap test was within the past year, and another 25.4 percent said it was between one and three years ago.

Prenatal Care

Adequate prenatal care has been a concern in the region for several years, promoting the establishment of multiple neonatal intensive care units (NICUs) in the nine-county region. The Kessner Index guidelines establish the criteria for adequate prenatal care as having received care before the 14th week of pregnancy (i.e. during the first trimester).[14]

Among RHP 17 survey respondents, 14.1 percent reported having given birth within the past two years. Of those, 95.4 percent reported receiving prenatal care by the 14th week of pregnancy. The *Healthy People 2020* goal for women receiving adequate prenatal care was 78%, which RHP 17 has attained.

Health Insurance

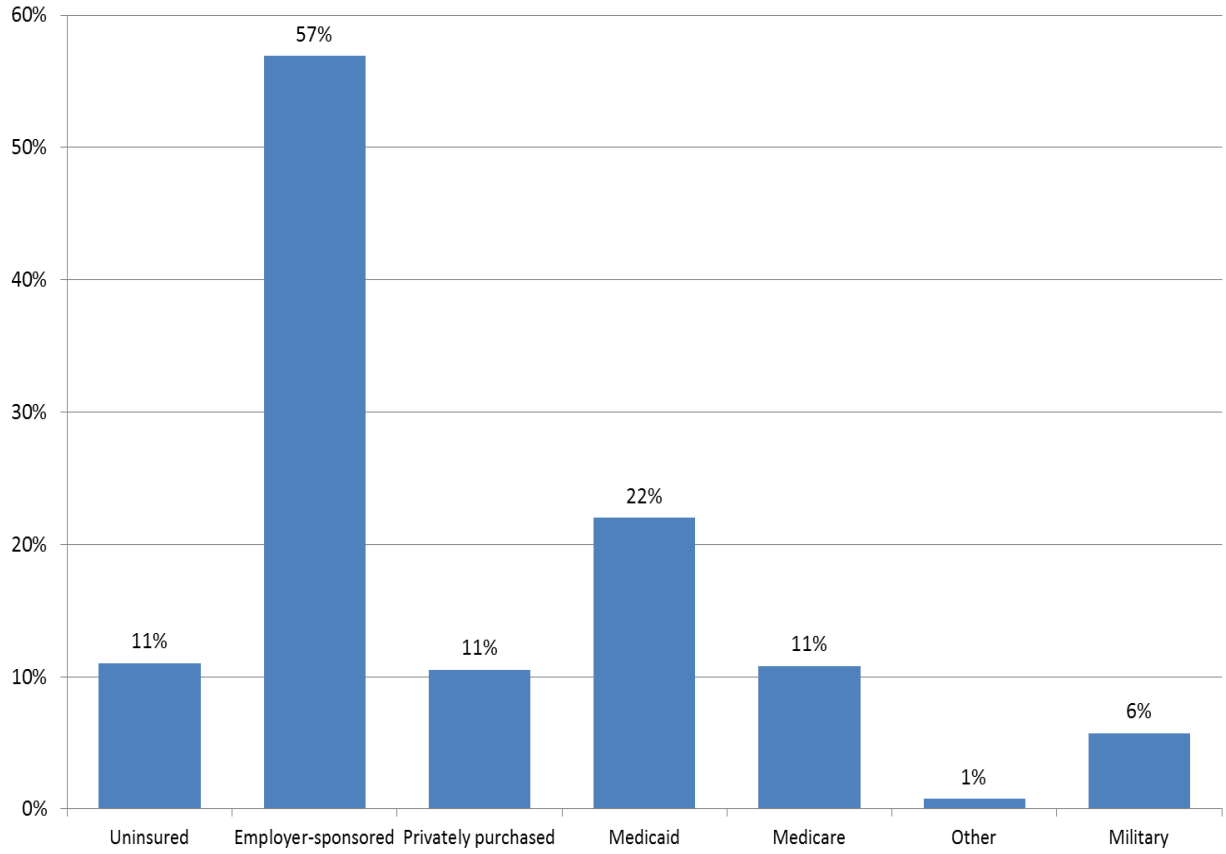
The *Healthy People 2020* goal for health insurance was that by 2020, every resident would have some type of health insurance. The 2010 Patient Protection and Affordable Care Act[15] was intended to advance this goal, but currently, many residents are still uninsured. Eighteen percent of Americans under the age of 65 lack health insurance[16], and Texas ranks last among the 50 states in access to care, with a 24 percent overall uninsurance rate[17].

Among RHP 17 survey respondents, nine percent of participants indicated they did not have health insurance of any kind, ranging from 5.3 percent in Robertson County to 17.4 percent in Leon County. Of respondents who were currently insured, less than one percent indicated that they had been uninsured at least one month in the past three years.

As illustrated in Figure 13, a majority of responses (56.8%) showed RHP 17 participants mainly reported having a health insurance plan through a current or former employer or union. Medicare and Medicare Plus cover 14.2 percent of the population, and 11 percent purchase their own coverage. Relatively small proportions of the population reported other sources of coverage.

[14] Kessner Index guidelines available at http://hit.state.tn.us/Reports/Picofpres/Picofpres96/aii1.pdf.
[15] *Patient Protection and Affordable Care Act* (HR 3590) signed into law on March 22, 2010
[16] http://kff.org/state-category/health-coverage-uninsured/
[17] http://kff.org/other/state-indicator/total-population/

Figure 13. Health insurance coverage in RHP 17[18]



Health Resources and Medical Home

Availability of health resources and services is an important factor influencing health status. The overall health of the seven Brazos Valley counties is closely tied to resources in Bryan/College Station—the metropolitan hub of the Brazos Valley region. Similarly, residents in Walker and Montgomery Counties frequently access health resources in the Conroe area. In the past several years, though, local efforts in several of the rural counties have focused on developing health resources locally as well. New services are being offered in some rural communities, including additional primary care, prenatal care, case management, substance abuse counseling, transportation, and others. Access to specialty care continues to be a persistent issue for rural residents, particularly the uninsured and underinsured.

Every county of the RHP 17 is designated by the federal Health Resources and Services Administration (HRSA) as a Health Professional Shortage Area (HPSA) wholly or in part. Table 9 outlines designations in the region.

[18] Note that the percentages add up to more than 100 percent because some individuals are covered by more than one plan.

Table 9. HPSA designations for RHP 17 by county[19]

County	Primary Care HPSA	Mental Health HPSA	Dental Care HPSA
Brazos	Partial	Yes	No
Burleson	Yes	Yes	Yes
Grimes	Yes	Yes	No
Leon	Yes	Yes	No
Madison	Yes	Yes	No
Montgomery	Partial	Yes	No
Robertson	Yes	Yes	Yes
Walker	Yes	No	No
Washington	Yes	Yes	No

Survey participants were asked about their ability to get care when they needed it. Across the region, 73.1 percent said that their access to health care was *excellent* or *very good*, while 5.5 percent said their access was *poor* or *very poor*. Montgomery County reports the best perceived access with 76.2 percent indicating access is *excellent* or *very good*, and Leon County reports the worst perceived access with only 45.4 percent saying *excellent* or *very good* and 20.2 percent saying *poor* or *very poor*.

Outpatient Care

In terms of having a regular place for care, three-quarters of RHP 17 respondents (77.8%) reported having a provider they considered their regular health care provider. Although some did not indicate having a person they considered their regular health care provider, 83.1 percent reported a private doctor's office or clinic as the place where they usually go for medical care. For outpatient care, 2.9 percent said a community health center, two percent said an urgent care clinic, 1.4 percent said a Veterans Affairs clinic, and one percent named the emergency room of a hospital as a place they usually go for medical care. Of those respondents without health insurance, the number of respondents having a regular place for outpatient care drops to 57.8 percent. Nationwide, 53 percent of uninsured adults had no usual source of care[20].

Health Care Utilization

During the past 12 months, RHP 17 residents accessed a range of venues for their own health care. A majority of residents (86.6%) reported using a doctor's office or clinic for their health care. In the same time frame, 16.1 percent of respondents reported visiting a hospital emergency room for their own medical care. Reasons given for visiting an emergency room

[19] http://hpsafind.hrsa.gov/HPSASearch.aspx
[20] http://kff.org/health-reform/fact-sheet/the-uninsured-and-the-difference-health-insurance/

included medical reasons such as pregnancy/labor, kidney or gall stones, heart attack, chest pains; accidents or injury; because their doctor's office was closed (i.e., nighttime or weekend); being told by their doctor to go to the emergency room; or, being out of town or traveling.

The survey also asked about residents' health literacy and preparation for medical visits. Among RHP 17 respondents, only 24.7 percent *fairly often*, *very often,* or *always* prepare a list of questions for their health care provider. Most residents appear to communicate well with their health care providers, asking questions about medications and treatment, and discussing personal problems.

Sixty percent of RHP 17 residents perceived *very good* or *excellent* communication between themselves and their health care provider. However, this number varied across counties; only 26.8 percent of residents of Walker County reported this same perception of good communication with their provider but 66.6 percent of Montgomery County residents felt the same. Table 10 displays health communication behaviors by RHP 17 residents.

Table 10. RHP 17 residents' reported communication with health care providers

Behaviors	Never/Almost Never	Sometimes	Fairly often/Very often/Always
Ask questions about medications	15.1%	15.4%	69.6%
Ask questions about treatment	10.8%	19.6%	69.6%
Discuss personal problems	20.9%	21.4%	57.8%
Prepare a list of questions	44.9%	30.4%	24.7%

Delayed Care

The survey included questions to explore the issue of why residents delay care and found that across the region, 13.6 percent of all survey respondents put off seeking medical care because of cost. This information should be considered in light of survey demographics—survey respondents had a higher median income than the population. Table 11 below shows the percentage of overall survey respondents who reported delaying care.

Table 11. Percentage of residents delaying care for any reason

Type of Service Delayed	RHP 17
Medical care	38.4%
Dental Care	35.7%
Medication/treatment	18.1%
Mental health care	13.4%

Throughout the region, less than 10 percent of residents (9.1%) said that in the past six months, they have experienced days when they had to choose between buying food, paying rent, and paying for medications. Given the growth of generic and $4 prescriptions at many retailers, this provides one option for residents to get the medications they need. However, even with these assistance programs, some medications are not covered or are still cost-prohibitive.

Caregiving

Many residents of RHP 17 act as caregivers, providing regular care or assistance to a friend or family member at home who has a long-term health problem or disability. During the past month, 12.7 percent of residents reported providing care for at least one person. Across the region, Robertson had the greatest percentage of residents serving as a caregiver (23.9%), while Brazos had the lowest percentage (8.8%).

The majority of the people being cared for were aged 65 or older (57.9%); 22.6 percent reported caring for someone between the ages of 45 and 64. Less than 10 percent of respondents (8.6%) reported caregiving for a child between the ages of one and 17. Across the region, 46 percent reported caring for a parent or spouse's parent. Other relationships reported between caregiver and charge included caring for a spouse (18.7%), child (13.1%), and non-relative (9.9%).

The survey also asked caregivers how many hours they provided care, how long they had provided care, the areas in which the person they're caring for most requires help, and how much difficulty they faced in caregiving. Two-thirds of caregivers in the region (66.4%) reported providing care between one and two days (1-47 hours) per week while 23.3 percent care for someone between three and six days and 9.5 percent care for provided care for seven days per week. Nearly three-quarters of participants had cared for someone for less than five years (40.2% reported one to five years; 32.3% reported less than one year). Less than five percent of caregivers reported providing care for more than 20 years. Caregivers most commonly reported the individual they cared for as needing assistance in taking care of themselves (37.7%) with respect to activities of daily living (for example, bathing, eating, and getting dressed), with mobility (23.2%), and because of learning, memory or confusion problems (19.8%).

Caregiving for another person affects residents of RHP 17 in a variety of areas. Table 12 displays the reported impact of caregiving on the life of RPH 17 resident caregivers.

Table 12. Reported difficulties associated with caregiving

Difficulties Associated with Caregiving	A lot	Some	A little
Affects family relationships	19.4%	27.9%	52.7%
Creates/aggravates health problems	11.7%	26.4%	61.9%
Creates stress	34.7%	29.7%	35.6%
Financial burden	20.6%	26.1%	53.3%
Interferes with work	16.1%	22.6%	61.3%
Not enough time for self	20.7%	31.1%	48.3%
Not enough time for family	13.0%	27.7%	59.3%
Other difficulty	35.6%	19.1%	45.3%

Transportation

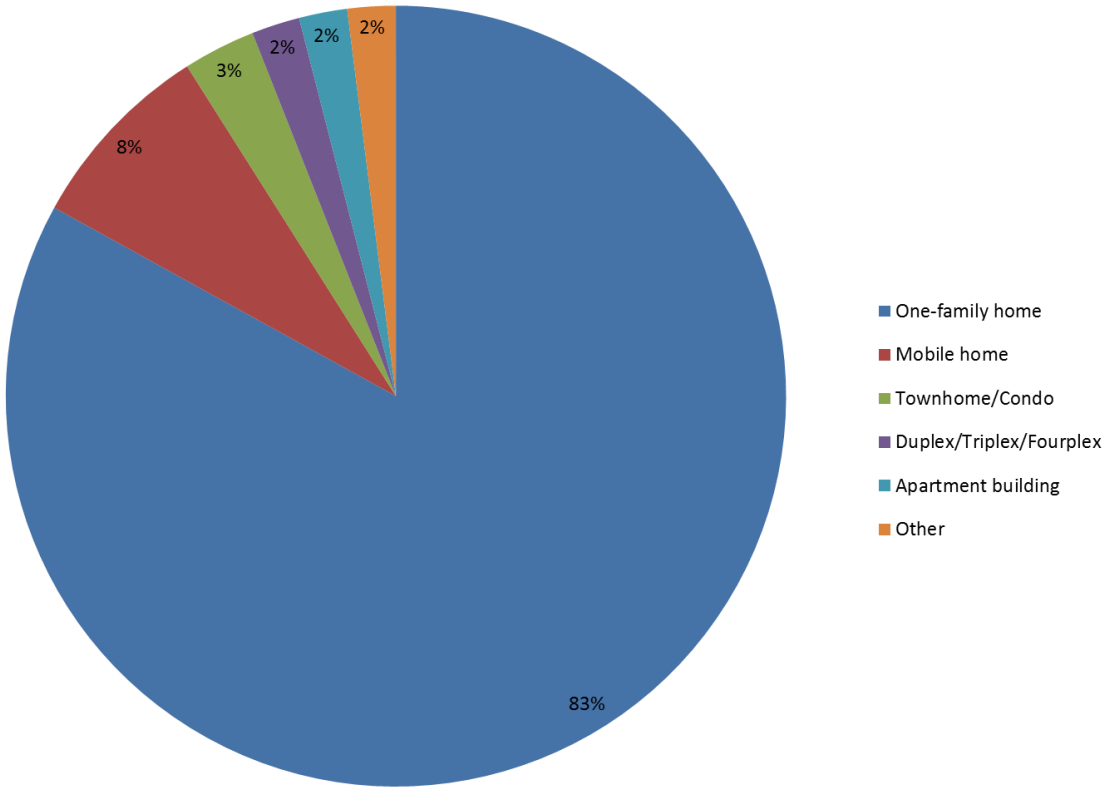
Poor transportation can be a formidable barrier to accessing health care services for many residents of RHP 17. This issue was repeatedly discussed in community discussion groups across the region and is highlighted in the survey findings. The average distance traveled by RHP 17 residents for medical services is 13.7 miles (21.3 minutes). The average distance traveled varied widely across the region ranging from 10.5 miles in Brazos County to 42 miles in Leon County. The median distances were eight miles (15 minutes) for RHP 17 residents and 12 miles (18 minutes) for residents of the rural counties. Similar distances were reported for dental care, and shorter distances were indicated for groceries and pharmacy.

Other transportation issues were also raised during the community discussion groups, including poor roads, increasing traffic, and the need for more affordable and reliable public transportation options.

Housing

For the first time in 2013, the survey asked residents about their housing conditions. Respondents across RHP 17 reported primarily living in a one-family home (83.1%) or a mobile home (7.9%). Figure 14 illustrates housing situations for each county.

Figure 14. Type of residential housing for RHP 17 residents



Residents reported their buildings' estimated age, as well as how long they had lived there. Many residents (42%) lived in a building built since 2000; 21 percent of residents reported their residence as being constructed prior to 1980. Regionally, over half of residents (57.9%) have lived in their current home for less than 10 years. When asked if their residence had experienced any types of severe problems in the past 12 months, survey respondents listed a range of issues. Table 13 shows the types of problems experienced by residents, and it can be seen that a higher proportion of rural county residents experienced problems than those in Brazos or Montgomery Counties. Across the region, the most reported problem with resident's homes was related to plumbing, heating/cooling, or electricity (going more than 24 hours without service).

Table 13. Severe housing problems reported in RHP 17

Housing problems	Montgomery County	Brazos County	Rural Counties
Broken plaster or peeling paint (interior)	4.9%	10.6%	13.0%
Broken windows	3.2%	2.4%	5.9%
Holes in the floor	0.9%	2.7%	5.5%
Mice, rats, or cockroaches	8.8%	8.7%	13.1%
Mold	3.8%	5.7%	8.2%
Plumbing, heating/cooling, electricity	15.7%	20.2%	22.8%
Roof problems (such as holes, leaks, or sagging)	7.8%	12.4%	11.8%

Community Issues

Survey respondents were asked to rate a list of issues based on their perception of the seriousness of the issues in their community. The top five issues rated a *serious problem* or *very serious* problem across the region were as follows:

- Poor or inconvenient public transportation (41.8%);
- Illegal drugs (29.6%);
- Risky youth behaviors such as alcohol or drug use, truancy, etc. (27.6%);
- Alcohol abuse (25.4); and,
- Lack of jobs for unskilled workers (25.1%).

Table 14 shows the top five issues rated by Brazos County and Montgomery County respondents versus those of the rural counties.

Table 14. Top community issues for Brazos County, Montgomery County, and rural counties

Brazos County	Montgomery County	Rural Counties
Illegal drugs (30.7%)	Poor or inconvenient public transportation (43.0%)	Poor or inconvenient public transportation (55.4%)
Alcohol abuse (29.3%)	Illegal drugs (24.7%)	Lack of jobs for unskilled workers (48.2%)
Poor or inconvenient public transportation (27.4%)	Risky youth behaviors (21.9%)	Unemployment (43.0%)
Risky youth behaviors (26.9%)	Alcohol abuse (18.7%)	Risky youth behaviors (41.3%)
Teen pregnancy (24.4%)	Lack of jobs for unskilled workers (16.8%)	Illegal drugs (37.9%)

It is important to recognize that the percentages of respondents ranking these issues indicate the perceived degree of seriousness. Several of the common issues may hold potential for regional strategies to address those issues.

Community Information and Services

Discussion regarding the health of a community should never be limited to only medical services or health insurance. Numerous social and community issues impact health, and various organizations exist in the community to address these issues.

The current survey included a set of questions asking about individuals' need for and utilization of a broad range of services with response options of *did not need*, *needed and used*, and *needed but did not use*. The top 10 community services **needed** (this included *needed and used* and *needed but did not use*) as reported by survey respondents were:

- The care of a medical specialist (40.2%);
- Financial assistance or welfare (13.5%);
- Work-related or employment services (12.8%);
- Mental health services (10.8%);
- Financial assistance for auto, appliance, or home repair; or weatherization (7.8%);
- Early childhood programs such as pre-school (7.4%);
- Utility assistance (7.2%);
- Affordable after school or summer day programs for children (6%);
- Literacy training, GED, or English as a second languages courses (5.9%); and,
- Services for the disabled or their families (5.7%).

While identifying the services most in demand is important, examining the differences between what services people said they *needed and used* and *needed but did not use* shows gaps in service delivery. These data offer a clearer picture of **unmet needs** in RHP 17. Table 15 below presents the top 10 significant gaps identified.

Table 15. Gaps in service delivery in RHP 17

Service Category	Percent Who Needed and DID NOT Get
Food, meal, and nutrition services (such as Meals-on-Wheels)	66.1%
Financial assistance for auto, appliance, or home repair; or weatherization	61.6%
Literacy training, GED, or English as a second language courses	59.3%
Utility assistance	56.7%
Information and referral services (such as 211)	54.5%
Child care services (such as assistance with payments for child care or child care subsidy)	52.8%
Affordable after school or summer day programs for children	49.8%
Work-related or employment services	46.7%
Services for the disabled or their families	42.3%
Respite care	41.7%

Additionally, the survey asked questions about community capacity including community trust, characteristics, and feelings of relative success. When asked about trusting people in general, there was an overall reserved feeling indicated by residents' responses. Forty-two percent reported most people can be trusted, 42.6 percent reported it depends, and 15.6 percent said one can't be too careful. However, when asked about their community, 90.7 percent of residents in RHP 17 reported agreement that people in their community are willing to help their neighbors. Similarly, people in the community were reported as people who could be trusted (84%) and that it was a close-knit community (68.8%). Two-thirds of residents felt that people in their community shared the same values as them. Less than half of the participants felt they were better off than others in their community (46%) and 47.1 percent felt they were about the same as others in the community.

Given the data provided through the analysis of secondary data, the community discussion groups and interviews, and the household survey, several key findings are clear for the RHP 17 region.

SUMMARY OF KEY FINDINGS

The findings of this assessment emphasize the impact of the current economic situation on residents and families in RHP 17. Several contextual issues emerged as key contributors to the current problems in this community:

➢ Transportation is a significant barrier to access to care for residents and to economic growth for communities.

- In every community, the public transportation system was described as unreliable, unaffordable, and inadequate.
- A third of all rural residents (32.9%) travel more than 20 miles to obtain medical care.
- The mean distance to medical care is 13.7 miles—ranging from 10.5 miles in Brazos County compared to 42 miles in Leon County.

➢ Communities throughout the region are recognizing rapid population growth without the infrastructure and capacity necessary to accommodate it.

- Many residents say that the infrastructure (roads, buildings, utilities) in their community is aging or does not have the capacity to accommodate the growing population.
- Growth in some communities is in the population, but not in the business sector to provide jobs and local resources for the increased population. This is causing increased socioeconomic disparities, particularly in rural communities that are close to more metropolitan areas.

➢ The state of the economy is making it difficult for families to maintain financial stability.

- Many communities are recognizing the need for more local opportunities for vocational training to enable residents to find employment.
- Unemployment and underemployment places families in situations where they cannot afford to meet their basic needs.

➢ Although the obesity rate in the region appears to be leveling off, the existing rate of obesity is cause for concern, as well as the prevalence of chronic diseases related to obesity.

- Across the region, 63.3 percent of adult residents are overweight or obese. The rate of morbid obesity is 13.3 percent.
- In the rural communities, many residents travel great distances (up to 30 miles) to purchase healthy foods, which may increase the disparities for those who do not have reliable transportation.
- Only 29.7 percent of respondents meet national physical activity recommendations (down from 43.9 percent in 2010), while 16.1 percent reported that they rarely do any physical activity.
- Across the region, respondents reported spending an average of 6.2 hours per day sitting on weekdays and 5.3 hours per day on weekends.
- Across the region, the rates of several chronic diseases far exceed the national rates.

Table 16. Chronic disease rates, RHP 17 vs. U.S.

Disease	RHP 17 (Rural Rate)	U.S.[21]
Depression	21.1% (17.9%)	12%
Emphysema/COPD	4.7% (6.8%)	2%
High cholesterol	33.2% (33.5%)	13%
Hypertension	32.8% (36.6%)	24%

[21] Data taken from the National Center for Health Statistics at the Center for Disease Control and Prevention.

- **Mental health needs continue to exceed the resources and services currently available, and many communities lack local mental health services altogether. Often accompanying mental health issues, alcohol and substance abuse are significant concerns that many residents feel are unacknowledged and unaddressed.**

    - Across the region, 21.1 percent report being diagnosed with depression, and 20.4 percent report being diagnosed with anxiety.
    - Nearly half of all residents report having at least one poor mental health day in the past month; 10 percent reported more than 10 poor mental health days.
    - One-quarter of residents in the region (25.4%) feel that alcohol abuse is a *serious problem* or a *very serious problem*.
    - Almost one-third of those surveyed (29.6%) feel that illegal drug use in the region is a *serious problem* or a *very serious problem*.

- **Residents are concerned about the risky behaviors of young people in their communities.**

    - Across the region, residents indicated that there is a lack of recreational opportunities for youth and adolescents.
    - Residents feel that having few organized recreational activities leaves youth with idle time that contributes to participation in risky behaviors and crime.

- **As the population grows, the proportion of older adults is increasing, and the current resources and services available for the older adult population and their caregivers are insufficient.**

    - In community discussion group in EVERY county, residents, community leaders, and service providers expressed concern for the unmet needs of older adults:
        - Gaps in coverage/services
        - Transportation services
        - Cost of available services
        - Lack of adult day care and respite care for caretakers
        - Inadequate financial resources forcing a choice among basic needs

➢ **The rural communities, the low-income, and those of a minority population continue to face substantial disparities in access to resources and services, as well as in health outcomes.**

Table 17. Disparities in RHP 17

	RHP17	Rural Counties	Minority	<High School Education	Uninsured	<Poverty
Fair or *Poor* health status	10.8%	15.1%	14.4%	30.3%	22.2%	28.5%
No regular health provider	22.2%	15.1%	36.9%	50.7%	62.4%	36.0%
Delayed medical care because of cost	13.6%	14.6%	17.0%	25.1%	49.3%	32.9%
Fair/Poor/Very Poor access to medical care	11.1%	14.6%	23.9%	37.2%	52.3%	34.6%

- Every community expressed concern with communication and outreach, particularly in its inability to reach the growing Hispanic community.
- Residents feel that there is not enough communication between them and the decision-makers in their communities—either to obtain input or to inform them about decisions that have been made.
- Communication among organizations that provide services is not organized; many do not know what other organizations provide.
- Community leaders see a need for better information distribution about available services to those who may need them.

COMMUNITY ADVICE

In light of the issues identified through the assessment process, substantial resources were also identified, and the community provided valuable advice to guide efforts aimed at addressing these issues. Across the region, the repeated recommendations included the following:

- **Do your homework.** Across the region, residents emphasized the importance of knowing the community. Being familiar with community history and learning

community values will assist with appropriate navigation through the community. It will also reveal how the community works and best practices for developing an initiative locally. Furthermore, researching the community will yield information pertaining to what has already been done, what is currently being done, and what still needs to be accomplished.

- **Communicate.** Frustration with poor communication was pervasive throughout the region. Participants in every community discussion group suggested that efforts be communicated early, often, and to the entire community. Community leaders and stakeholders should be involved in any initiative, but the entire community should know about efforts. While each county had differing preferred methods of communication, two were consistent across the entire region: word of mouth and local media outlets.

- **Be inclusive and engage the community.** Residents of the region stressed the importance of being inclusive, engaging the whole community, and finding ways to include those who may not be well-connected. Get involved in local initiatives, build trust, and gain support for what you are trying to accomplish. Listen to the feedback given and incorporate feasible suggestions into your efforts.

- **Collaborate and leverage resources.** Participants mentioned that it was imperative to collaborate resources because they are scarce. They stressed working together, building partnerships, and building on existing initiatives as a means to maximize efficiency and resource utilization. In this way, a venue for sustainability is created; community members expressed dissatisfaction with initiatives that are discontinued once funding ends.

These findings and recommendations are intended to provide accurate, timely local data that communities and organizations can use for planning and resource development to improve the health and quality of life for residents of RHP 17.

FIGURES AND TABLES

OVERVIEW OF SUPPLEMENTAL REPORTS

Each county of RHP 17 is unique. With generous support of each of our community partners as well as local residents and leaders within each county, the Center for Community Health Development was able to collect data that allows for county-level analysis.

The supplemental reports that follow contain a series of reports with data specific to each county and relevant comparisons to regional, state, and national data. Survey data as well as community discussion group findings present valuable information and insight that we hope will be utilized for planning, prioritizing, and leveraging resources to improve the health of all residents of each community.

The regional reports present an overview of the assessment process, an explanation of the methodology, and a comprehensive analysis comparing the region to other state and national indicators. The county reports are intended to focus on each county individually; thus, the analysis provided compares the county alone to the region, state, or nation.

SUPPLEMENTAL REPORTS

Brazos Valley Region

Brazos County

Burleson County

Grimes County

Leon County

Madison County

Montgomery County

Robertson County

Walker County

Washington County