The 2013 Texas Rural Survey: Medical and Healthcare Report

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Rural Texas

Of the 25.1 million people living in Texas, 3.8 million (15.3%) live in rural areas.[1] According to the Census Bureau, the land area of Texas is approximately 261,232 square miles, which approaches the area covered by New Mexico, Oklahoma, Arkansas, and Louisiana combined. With such a large geographic expanse, much of the population is concentrated in dense urban areas, whereas the 15.3 percent of the population residing in rural areas is spread across 96.7 percent of the state.2 Located throughout these rural spaces are a majority of the industrial, agricultural, cultural, and natural resources that drive the state's development and ultimately link urban and rural people and places. While the demographic, social, environmental, and economic landscape of Texas continues to change, one thing that remains constant is the significant interrelationships between urban and rural. As rural places face the significant social and economic challenges that accompany population decline, it is imperative that researchers work to understand, strengthen, and maintain rural areas.

In 2012, the Center for Rural Studies at Sam Houston State University conducted the first Texas Rural Survey. Between August and October 2012, Texas residents from 22 rural places3 were randomly selected to complete a questionnaire. The findings from the study were used to develop a series of summary reports regarding public services and community amenities, public perceptions of urban and rural living, economic development strategies and efforts, medical and healthcare services, and natural disaster issues.

The results from the 2012 survey prompted an interest in an additional study. In 2013, the Texas Rural Survey was revised and sent to residents of 22 additional rural Texas places. This report contains a snapshot of the 2013 Texas Rural Survey respondents' demographic profile.

The 2013 Texas Rural Survey

Between June and August 2013, a random sample of 5,608 individuals living in 22 Texas rural places were contacted and asked to participate in the 2013 Texas Rural Survey. This report explains the methodology and summarizes the findings from one topical section of the study.

Methodology

Study Site Selection

Following the methodology used with the 2012 Texas Rural Survey, case study sites were selected. Study sites included both incorporated places (concentrations of population having legally defined boundaries) and census designated places (concentrations of population that are locally identifiable by name but not legally incorporated).[4] In 2010, according to the Texas State Data Center, there were 1,752 places in Texas with 1,511 (86%) of those places having a population of 10,000 or less.

[1, 2] U.S. Census Bureau. 2010a. "2010 Census Urban Lists Record Layouts." http://www.census.gov/geo/reference/ua/ualists_layout.html

[3] For our purposes, the term "places" refers to incorporated places and census designated places.

[4] U.S. Census Bureau, 2012. "Geography." http://www.census.gov/geo/index.html

For this study, one place within each of the three population categories (499 or fewer, 500-1,999, and 2,000-10,000) was selected as a study site within each of the seven Rural Economic Development Regions as classified by the Texas Department of Agriculture (see Appendix). In addition, because there are a large number of places in the 499 or fewer population category in the West Region, an additional case study site was added to the sample. Therefore, 22 places were randomly selected as study sites (see Appendix).

Data collection

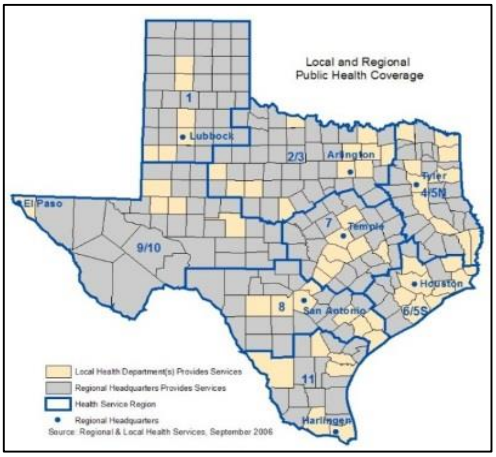
Following the multiple contact approach of the tailored design method,[5] a standard self-administered mail survey was distributed. Sampled households received repeated mailings with the aim of increasing the response rate. The first mailing, which also contained an informational letter, was mailed in June 2013 to a stratified random sample of 5,608 households across the 22 study sites. The informational letter, printed in English on one side and Spanish on the other, notified residents that their household had been randomly selected to participate in an upcoming study focused on rural Texas. The letter contained instructions for completing the questionnaire in one of two ways: (1) online at the provided URL, or (2) by returning the mailed questionnaire they would soon receive. Of the selected households, no rejections to participation in the study nor mistaken addresses were identified. Therefore, the final sample size remained at 5,608.

Later in June 2013, the survey questionnaire was mailed to the sampled households. In the cover letter, in order to obtain a representative sample of individuals within the households, we requested that the adult in the household who had most recently celebrated his or her birthday would be the one to complete and return the survey. The 52-item survey questionnaire was offered in English and Spanish as a self-completion booklet and online, and it required approximately 50 minutes to complete. After the initial survey mailing and two follow-up mailings during July and August, 757 completed questionnaires[6] were returned for a response rate of 13.5 percent.

Medical and Healthcare Services

Survey respondents were asked to assess the issues of health and healthcare of Texas rural residents overall, as well as by community size and Texas Department of State Health Service Regions. The specific areas examined were: (1) overall health; (2) access to healthcare; (3) perceived quality of healthcare services; and (4) need for healthcare services. The following report outlines the 2013 Texas Rural Survey findings regarding medical and healthcare services overall, by population size (≤499, 500 to 1,999, and 2,000 to 10,000), and by Health Service Regions.

The Texas Department of State Health Services (DSHS) divides the state into eleven public health regions. However, for administrative purposes, there are eight regional public health offices[7]. The eight regions, shown on the map below, were used for the data analysis.



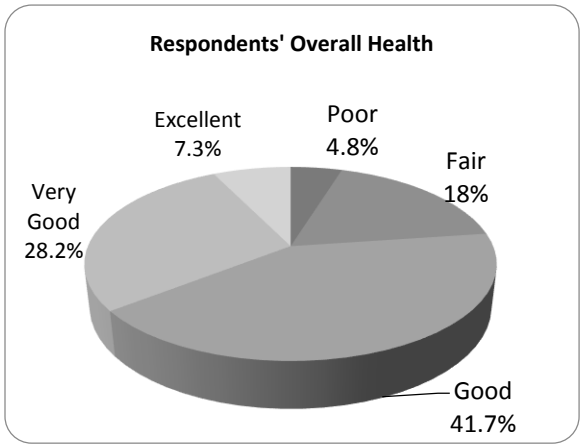
[5] Dillman, Don A., Jolene D. Smyth, and Leah Melani Christian. 2009. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method.* Hoboken, NJ: John Wiley & Sons, Inc.

[6] One household requested a Spanish mail survey, and one completed the Spanish version online. In total, 701 completed the mail survey and 56 completed the online survey.

[7] Texas Department of State Health Services. "Center for Health Statistics Texas County Numbers and Public Health Regions." Available at: http://www.dshs.state.tx.us/chs/info/info_txco.shtm.

Overall Health

Respondents were asked if their current health was "excellent," "very good," "good," "fair," or "poor." Slightly over thirty-five percent (35.5%) of respondents reported their health as "excellent" or "very good," 41.7 percent as "good," and 22.8 percent reported their health as "fair" or "poor."



When asked to assess their physical and mental health, about one quarter (24.1%) of respondents indicated that their daily activities were limited by their physical health, whereas approximately one tenth (9.7%) indicated that their daily activities were limited by their mental health for at least one of the past 30 days.

Access to Healthcare

The following section outlines results related to respondents' access to healthcare. These results include respondents' health insurance rates, ability to obtain needed healthcare, barriers to receiving healthcare, and usual sources, distance, and location of healthcare.

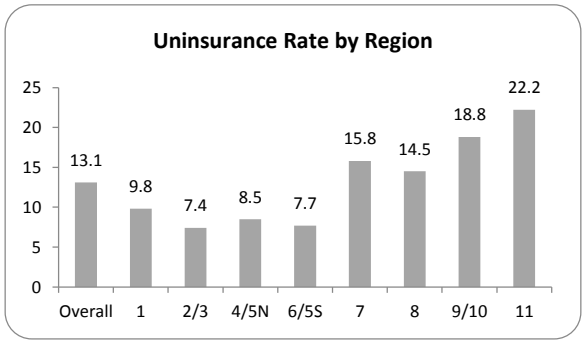
Health Insurance

The majority (86.9%) of respondents had some type of health insurance. Of those respondents, only 48.1 percent had employer-sponsored insurance and 21.6 percent had health insurance purchased by themselves or their family members. Almost half of respondents (45%) had Medicare.

There were little differences in health insurance coverage by community size.

Health Insurance by Region

Substantial regional differences existed in insurance rates. More than 22 percent and about 19 percent of respondents in Regions 11 and 9/10, respectively, were uninsured, compared to 7.4 percent in Region 2/3 and 7.7 percent in Region 6/5S.



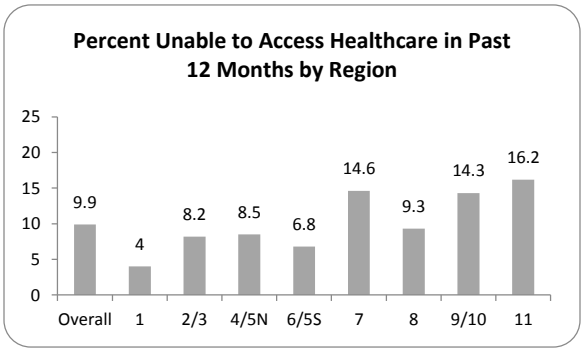
Access to Needed Care Overall

Respondents were asked whether they or a family member living with them were able to get the healthcare they needed within the past 12 months. A majority of respondents (77.8%) reported being able to access healthcare, 8.6 percent reported that they were unable to get healthcare, and 13.6 percent claimed that healthcare was not needed during the past 12 months.

There were little differences in healthcare access by community size.

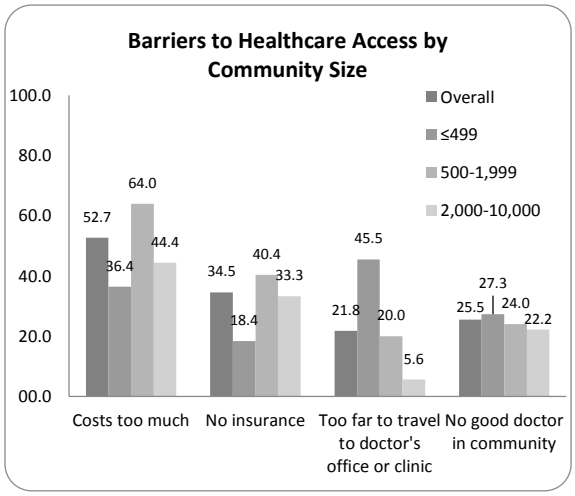
Access to Needed Care by Region

Healthcare access varied by Health Service Region. Among respondents who needed healthcare, 16.2 percent of Region 11, 14.6 percent of Region 7, and 14.3 percent of Region 9/10 respondents were unable to access needed healthcare within the last 12 months. This is compared to only 4 percent of respondents from Region 1. The chart shows the percent of respondents by region who were unable to obtain healthcare for themselves or a family member within the last 12 months.



Barriers to Healthcare Access Overall

If respondents reported that they were unable to get healthcare within the past 12 months, they were asked to then indicate why. The most common barrier to healthcare access was high healthcare costs (52.7%), followed by lack of health insurance (34.5%), unavailability of good doctors within the community (25.5%), and long travel distance to doctor's office or clinic (21.8%).



Barriers to Healthcare Access by Community Size

As the following chart shows, financial issues such as the cost of healthcare and lack of health insurance were more often identified as barriers for respondents in medium-sized communities, while structural barriers including unavailability of good doctors and long distance travel were more problematic for respondents in small communities.

Barriers to Healthcare Access by Region

High healthcare costs and lack of insurance were more problematic for respondents in Region 4/5N than any other region. Within that region, 75 percent of respondents identified high healthcare costs and another 75 percent identified lack of insurance as barriers to care. Long distance to travel to a doctor's office was more often identified as a barrier to healthcare access for Region 1 (33.3%), Region 7 (42.9%), and Region 8 (36.4%), and lack of good doctors in the community was the most common barrier among Region 7 (42.9%) and Region 8 (45.5%) respondents.

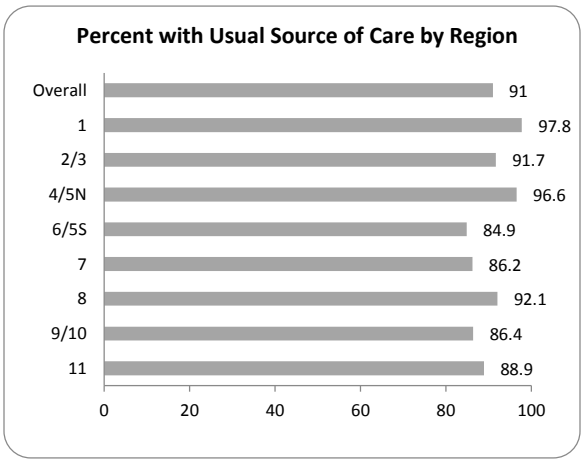
Usual Source of Healthcare Overall

The majority (91%) of respondents reported that they have a healthcare provider they usually visit when they are sick or need health advice. A doctor's office was identified by 89.6 percent of respondents as the most common source of healthcare, followed by a clinic or health center (76.8%), hospital emergency room (73.9%), hospital outpatient department (68.4%), and urgent care center (63%).

Rates of having a usual source of healthcare differed little by community size.

Usual Source of Healthcare by Region

As shown in the following chart, there are salient regional differences in the rates of having a usual source of healthcare. Regions with the lowest rates of usual sources of healthcare included Region 6/5S (84.9%), Region 7 (86.2%), and Region 9/10 (86.4%). However, an overwhelming majority of respondents in Region 1 (97.8%) and Region 4/5N (96.6%) indicated that they had a usual source of healthcare.



Distance to Healthcare Usual Source of Healthcare

Among respondents who had a usual source of healthcare, the average distance traveled to a provider was 30.8 miles.

Distance to Usual Source of Healthcare by Community Size

Significant differences in the distance traveled for healthcare existed by community size, as the respondents from the smaller communities reported traveling farther for their providers. The average distance traveled by respondents from small communities was 43.6 miles, as compared to 30.8 miles for those from medium-size communities, and 19.3 miles for respondents from large communities.

Distance to Usual Source of Healthcare by Region

Regional differences also existed in terms of distance traveled to healthcare provider. Respondents in Regions 7 and 8 reported the longest distance (average of 51.5 miles and 40.5 miles, respectively), as compared to only 19.2 miles among Region 2/3 respondents.[8]

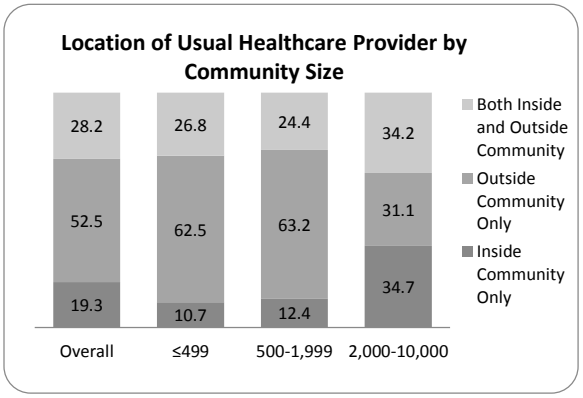
[8] Although the places in the study were randomly selected, distances to usual sources of healthcare are influenced by the places selected in each region. Results should be interpreted with caution.

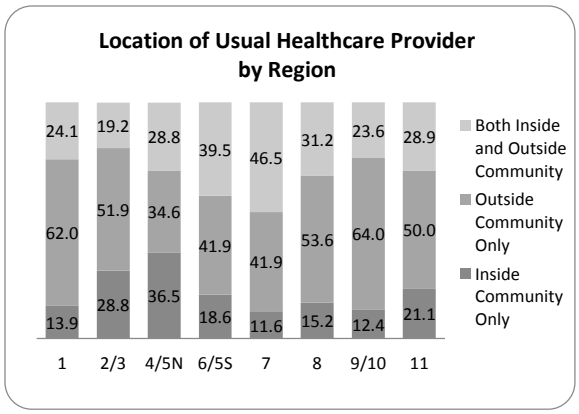
Location of Usual Source of Healthcare

The majority of respondents who had a usual source of healthcare reported that this source of care was located outside of their community. Less than 20 percent (19.3%) of respondents sought healthcare solely within their community. Over half of respondents (52.5%) sought healthcare exclusively from outside of their community and 28.2 percent sought from both within and outside of their community.

Location of Usual Source of Healthcare by Community Size

The location of usual healthcare providers (inside or outside of the community) varied significantly by community size. As the graph shows, the majority of respondents in small and medium-sized communities (62.5% and 63.2%, respectively) sought healthcare exclusively from outside of their communities, as compared to 31.1 percent in large communities. More than a third of respondents (34.7%) in large communities sought healthcare only within their community, while far less from small (10.7%) and medium-sized communities (12.4%) did so.





Location of Usual Source of Healthcare by Region

The location of the usual healthcare providers varied by Health Service Region, as more than 60 percent of respondents in Region 9/10 and Region 1 sought healthcare exclusively from outside of their community, as compared to 34.6 percent in Region 4/5N. In Region 7, less than 12 percent of respondents reported that they sought healthcare only within their own community.

Perceived Quality of Healthcare Services

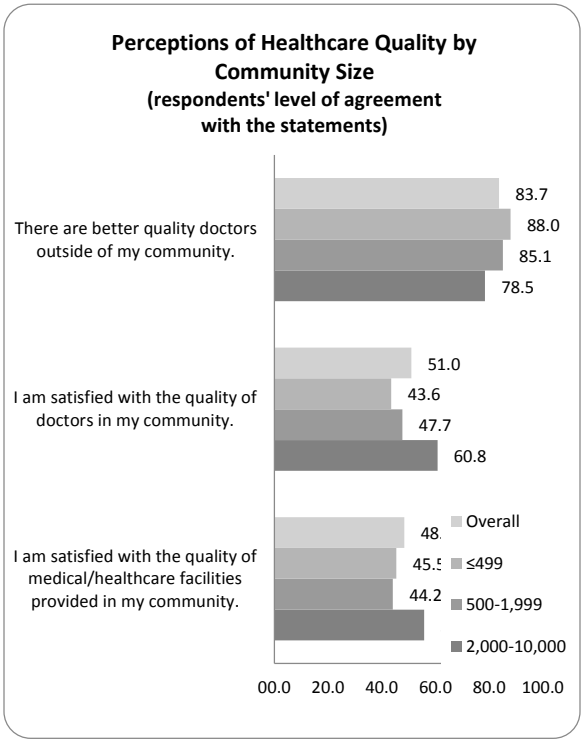
The section below summarizes the findings in terms of respondents' perceptions of overall and specific medical and healthcare services.

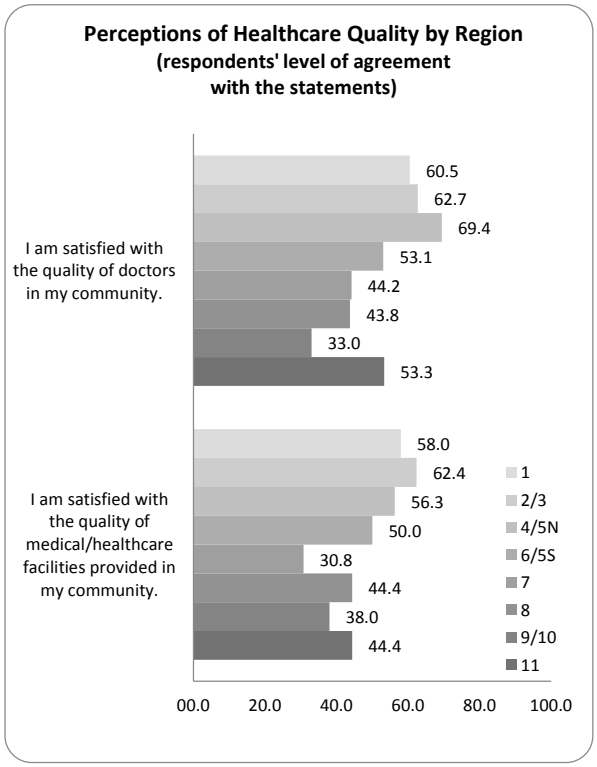
Overall Services

Respondents were asked to indicate their level of agreement with eight statements related to quality of and access to medical and healthcare services in and outside their communities. Only about half of respondents (51%) agreed with the statement: "I am satisfied with the quality of doctors in my community." Almost fifty percent (48.4%) agreed with the statement: "I am satisfied with the quality of medical/healthcare facilities provided in my community." In contrast, 83.7 percent of respondents perceived that there were better quality doctors outside of their communities.

Overall Services by Community Size

Across all population size categories, most respondents agreed that there were better quality doctors outside of their community. A lower percentage of respondents in large communities (78.5%) indicated that there were better quality doctors outside of their community, compared to those in smaller communities (88% and 85.1%). Respondents in small and medium-sized communities had lower levels of agreement with the statement: "I am satisfied with the quality of medical/healthcare facilities provided in my community" than respondents in large communities. See the following chart for an illustration of these findings.





Overall Services by Region

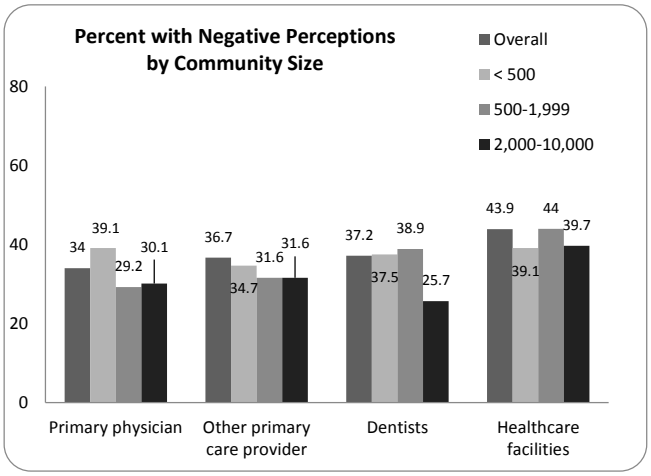
Notable regional differences existed in levels of satisfaction with the quality of doctors and medical/healthcare facilities within the community. About 70 percent (69.4%) of respondents in Region 4/5N agreed with the statement: "I am satisfied with the quality of doctors in my community," compared to only 33 percent in Region 9/10. More than six in ten respondents (62.4%) in Region 2/3 agreed with the statement: "I am satisfied with the quality of medical/healthcare facilities provided in my community," compared to only 30.8 percent in Region 7.

Specific Healthcare Services

Respondents were asked to assess the quality of nine types of healthcare services within their community using the response categories of "poor," "fair," "good," "very good," and "excellent." These nine services included: primary physician, other primary care provider, specialists, mental health providers, dentists, eye doctors, medical and healthcare facilities, emergency rooms, and pharmacies. Responses were recoded into two categories: negative perception as "poor or fair" and positive perception as "good, very good, or excellent." Among healthcare services, respondents perceived the quality of mental health providers the most negatively (66.1%), followed by specialists (54.8 %) and emergency rooms (48.9%).

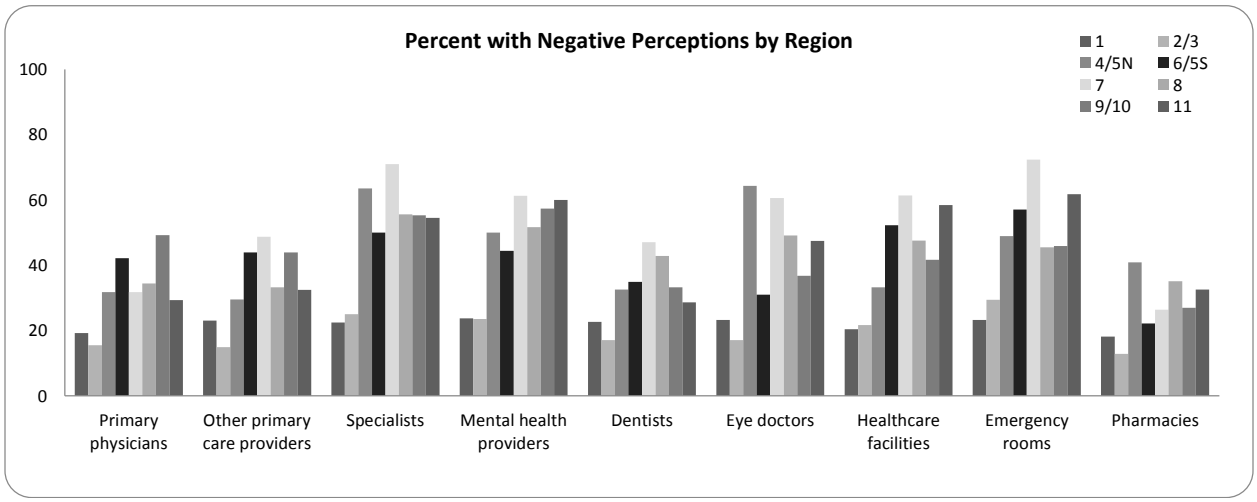
Specific Healthcare Services by Community Size

Respondents living in small communities were more likely than those in medium-sized and large communities to have negative perceptions of the quality of primary physicians (39.1%, 29.2%, and 30.1%, respectively) and other primary care providers (34.7%, 31.6%, and 31.6%, respectively). Respondents living in medium-sized communities reported more negative perceptions than those in small and large communities of the quality of dentists (38.9%, 37.5%, and 25.7%, respectively) and healthcare facilities (44%, 39.1%, and 39.7%, respectively).



Specific Healthcare Services by Region

Differences in perceptions about healthcare services within the community also existed between Health Service Regions. Respondents in Regions 1 and 2/3 consistently reported the lowest level of negative perceptions about most services. Respondents in Region 7 most negatively perceived six types of healthcare services: other primary care providers (48.7%), specialists (71%), mental health providers (61.3%), dentists (47.1%), medical and healthcare facilities (61.4%), and emergency rooms (72.4%). Compared to other regions, residents in Region 4/5N more negatively perceived eye doctors (64.3%) and pharmacies (40.9%) in their community.

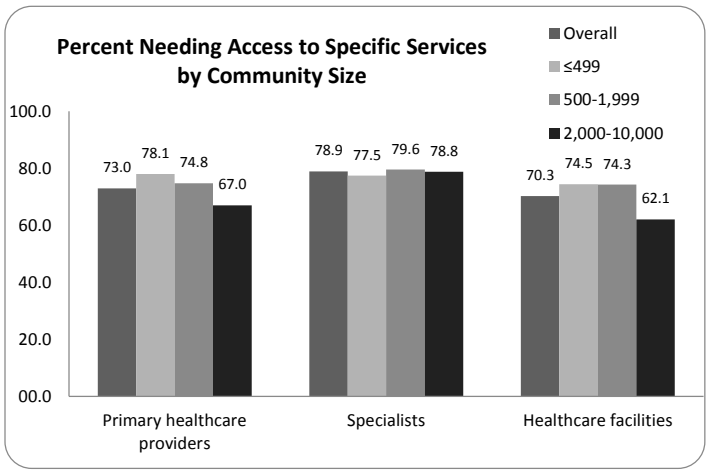


Need of Healthcare Services

Respondents were asked to indicate their level of agreement with four statements regarding the need for better access to primary healthcare providers, specialists, medical and healthcare facilities, and information about available health services. Additionally, respondents were presented with a list of specific services and asked to indicate which services that they would like to have in their area. The following section outlines the findings for the presented overall and specific services.

Overall Services

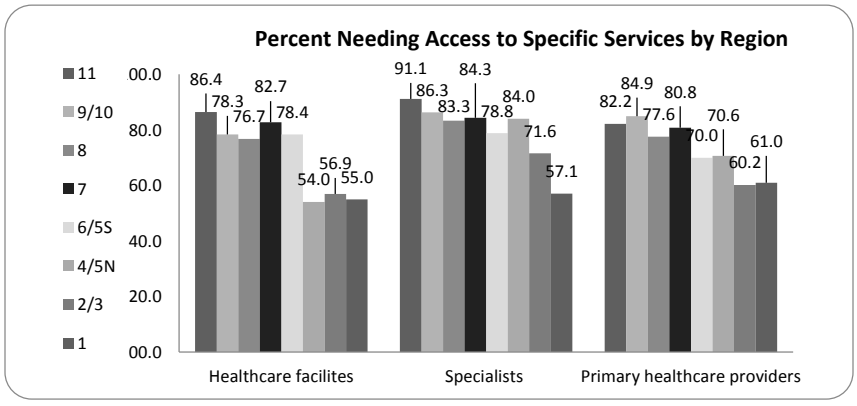
A majority of respondents reported that they needed better access to primary healthcare providers (73%), specialists (78.9%), healthcare facilities (70.3%), and information about available health services (73.9%) within their community.



Overall Services by Community Size

Although not statistically significant, a higher percentage of respondents in small and medium-sized communities reported the need for access to both primary healthcare providers (78.1% and 74.8% respectively) and healthcare facilities (74.5% and 74.3%, respectively) than those in larger communities (67% for primary healthcare providers and 62.1% for healthcare facilities).

Overall Services by Region



Significant regional differences in healthcare needs existed. Overall, Region 11 tended to be in greater need of services and Region 1 was in lower need. Specifically, more than 80 percent of respondents in Regions 9/10 and 11 (84.9% and 82.2%, respectively) reported a need for better access to primary healthcare providers in their community, compared to 61 percent in Region 1 and 60.2 percent in Region 2/3. More than 91 percent of respondents in Region 11 needed better access to specialists, compared to 57.1 percent in Region 1. Healthcare facilities were most needed in Region 11 (86.4%), followed by Region 7 (82.7%), Region 6/5S (78.4%) and Region 9/10 (78.3%).

Specific Healthcare Services

Respondents were asked to indicate what additional healthcare services they would like to have in their area. Over one half of the respondents (51.8%) reported that they would like to have primary care services. This was followed by emergency rooms (36%), transportation services (34.3%), pharmacies (33.8%), eye doctors (33.4%), and cardiology (28.3%).

Specific Healthcare Services by Community Size

Respondents' need for specific healthcare services varied by community size. Respondents in medium-sized communities were more likely than those in both small and large communities to report the need for additional services on four of the six most needed services: primary care services (60.2% vs. 58.1% and 36%), emergency rooms (41.7% vs. 33.8% and 29.8%), pharmacies (41.2% vs. 37.5% and 21.3%), and eye doctors (37% vs. 27.2% and 32.6%). Respondents in small communities had a higher need for transportation services than those in medium-sized and large communities (35.3% vs. 34.3% and 32.6%). Regarding cardiology, respondents in large communities reported a high higher need than those in medium-sized and small communities (40.4% vs. 30.6% and 27.2%).

Table 1. Percent Need for Specific Healthcare Services by Community Size

Services	Overall	≤499	500-1,999	2,000-10,000
Primary Care	51.8	58.1	60.2	36.0
Emergency Rooms	36.0	33.8	41.7	29.8
Transportation Services	34.3	35.3	34.3	32.6
Pharmacies	33.8	37.5	41.2	21.3
Eye Doctors	33.4	27.2	37.0	32.6
Cardiology	33.4	27.2	30.6	40.4

Specific Healthcare Services by Region

Regional differences existed in the desire for specific types of healthcare services. Primary care was most desired in Regions 9/10 and 7 (65.6% and 64.7%, respectively), while emergency rooms were most desired in Region 7(76.5%). The want for transportation services was similar across regions. Region 8 reported the greatest desire for pharmacies (56.4%) and Region 7 reported greatest desire for eye doctors (58.8%). Cardiology was most desired in Regions 11 and 7 (68.3% and 52.9%, respectively).

Table 2. Percent Need for Specific Healthcare Services by Region

Services	Overall	Region 1	Region 2/3	Region 4/5N	Region 6/5S	Region 7	Region 8	Region 9/10	Region 11	Sig.
Primary Care	51.5	49.1	45.8	31.8	46.8	64.7	55.6	65.6	34.1	**
Emergency Rooms	35.7	35.1	21.7	22.7	51.1	76.5	31.6	26.7	41.5	**
Transportation Services	34.0	22.8	37.3	27.3	29.8	31.4	32.5	43.3	41.5	
Pharmacies	33.6	42.1	21.7	40.9	10.6	21.6	56.4	33.3	14.6	**
Eye Doctors	33.0	22.8	21.7	45.5	19.1	58.8	39.3	25.6	39	**
Cardiology	33.4	10.5	20.5	34.1	38.3	52.9	29.9	32.2	68.3	**

Concluding Comments

Texas is one of the most disadvantaged states in the United States in terms of health and health care. According to the 2013 American's Health Rankings (2014),[9] the Lone Star State ranks 36th in overall, 50th in lack of health insurance coverage, and 43rd in the number of primary care physicians per 100,000 population. While rural Texas residents might face many of the same health issues and health care challenges that their urban counterparts experience, they are often considered a more vulnerable population due to their economic disadvantages, poorer health, and limited health care access.

The results from the 2013 Texas Rural Survey showed that a substantial number of rural Texas residents experienced difficulties in accessing healthcare services and obtaining quality care within their community. The majority of rural residents were highly concerned about the availability and quality of healthcare services and providers within their community.

Overall, rural Texas residents experienced difficulties in accessing healthcare when they needed it due to high medical costs, lack of health insurance, unavailability of quality medical doctors in their community, and long travel distance to a doctor's office or clinic. On average, rural residents traveled about 31 miles to get healthcare, and residents who live in smaller communities traveled much farther.

Most rural Texas residents sought healthcare from outside of their community due to low availability and quality of healthcare services and providers within the community, which were of great concern for rural residents. The majority of rural residents were not satisfied with the quality of doctors and healthcare facilities within their communities, and they perceived doctors outside of their community to be of better quality. The need for quality doctors and healthcare facilities, as well as more services available including primary care services, emergency rooms, transportation services, pharmacies, and various specialists was great among rural residents.

There were notable differences in healthcare access, barriers to access, availability, and quality of healthcare services across rural areas of different sizes and health service regions in Texas. Financial concerns were more often reported as barriers to healthcare for residents of mid-sized communities, while unavailability of good doctors and long distance travel were more often reported as barriers to healthcare for residents in the least populated communities.

Most residents of small and mid-sized communities sought healthcare from outside of their communities. In particular, residents in the smallest communities had the least healthcare services available within their communities and the farthest to travel to a healthcare provider. They had the lowest level of satisfaction with the quality of the doctors within their community.

Residents in Region 11 were the most likely to lack needed healthcare access, mainly due to high healthcare costs and lack of insurance. Need for healthcare access was also high in Regions 7 and 9/10. Scarcity of good doctors in the community was a major concern for respondents in Region 7. Further, residents in Regions 7 and 8, and 9/10 reported the farthest distance to travel to a healthcare provider.

Most respondents in Regions 7, 8, 9/10, and 11 were dissatisfied with the quality of healthcare services and doctors in their communities, and most thought that there were better doctors outside of their communities. Residents in Regions 7, 8, and 9/10 reported a high need for specialists, eye doctors, and emergency rooms. Primary physicians and pharmacies were also highly needed among Regions 8 and 9/10.

[9] United Health Foundation (2014). American's Health Rankings 2013: Texas. http://cdnfiles.americashealthrankings.org/SiteFiles/StateSummaries/Texas-Health-Summary-2013.pdf Retrieved on July 21, 2014.

Appendix