Community Health Needs Assessment

Region 10 RHP's Community Health Needs Assessment (CHNA) offers Regional data and related county-specific health needs information to inform the selection of the delivery system reform projects that will effectively transform the health care experiences of our Region's residents by addressing unmet needs and contributing to overall population health improvements. This section summarizes Region 10's most pressing community health needs and the societal and market contexts in which they have developed. It also underscores the connections between the projects proposed by the participating providers listed in the Executive Overview and the Region's most serious community health needs, which are: (1) access to primary and specialty care, particularly in underserved areas of the Region and for low-income residents; (2) access to behavioral health resources and integration of behavioral and physical health care services; (3) improved primary care management and self-management of chronic care conditions; and (4) better overall coordination and service integration across the Region's providers.

Methodology

Region 10 RHP's CHNA includes both qualitative and quantitative data. Our primary data collection activities included stakeholder surveys and provider readiness assessments. Additionally, the RHP plan team reviewed and incorporated relevant and appropriate prior existing sub-Regional community health needs assessments. We also collected secondary data from national and state sources to create a full community profile that includes birth and death characteristics, indicators of health care access, chronic disease prevalence rates, as well as demographic variables affecting Regional health such as insurance status, socioeconomic status and educational attainment level. Some data is presented in this section with comparisons to state and national data, framing the scope of an issue as it relates to individual counties and the Region. (*Please see Appendix D in the originally submitted RHP 10 plan at http://www.rhp10txwaiver.com/aboutrhp10/rhpplan.html for all supplemental materials related to this Community Health Needs Assessment.)*

COMMUNITY PROFILE

Region 10 consists of nine contiguous counties in north central Texas. It is characterized by one urban center surrounded by a number of rural and suburban communities. This Region has a significant geographic footprint, spanning 7,221 square miles. Region 10's nine counties are: Ellis, Erath, Hood, Johnson, Navarro, Parker, Somervell, Tarrant and Wise. *(See Appendix D-1.1 for a map of Region 10. Additional count- specific information can also be found in Appendix D-4.)*

Demographics: Population by Age Cohort

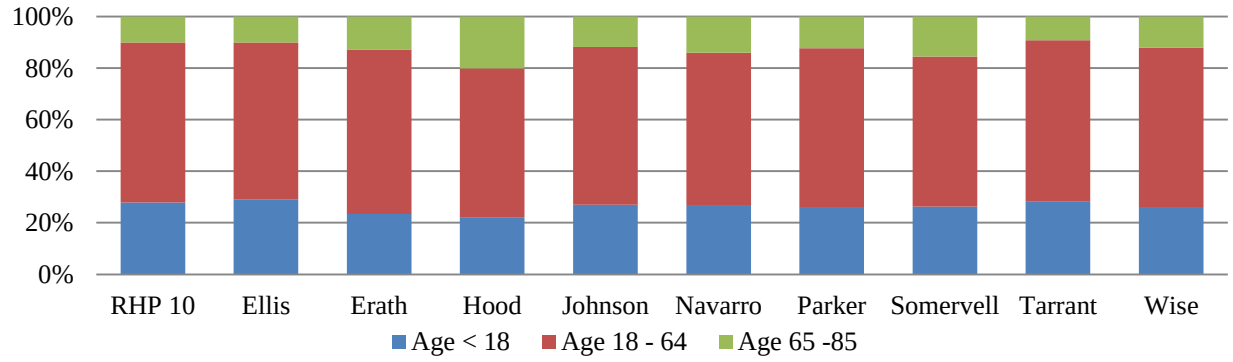
Region 10 had a population of 2,444,642 in 2011. The majority of Region 10 residents are working-age adults (62% ages 18-64). The remaining population is made up of seniors (11% of total Regional population) and children (28% of Regional total population). Region 10 is similar to the rest of Texas in terms of its 18-and-under proportion of total residents with the exception of Hood, Somervell and Navarro Counties. Hood County trends significantly older, with a larger proportion of seniors (20.1%), offset by a smaller adult population (57.8%) and child population (22.1%). Both Somervell and Navarro also have higher proportions of elderly residents than the

rest of the Region, but lower than that for Hood County. In Somervell, the senior population is 15.5% of the total population, with a smaller proportion of working-age adults (58.3%) and a child population similar to the Region (26.2%). Navarro's proportion of elderly residents is similar to Somervell's with seniors representing 14.0% of its population; working-age adults and children represent 59.1% and 26.9% of the county respectively. Tarrant and Ellis Counties have slightly higher proportions of children as a percentage of their total county population (28.4% and 29.4%, respectively) than the rest of the Region.

By 2016, the Region is projected to see its population grow by an estimated 9.4% to a Regional total of 2,674,022 people (60.7% adults ages 18-64; 27.8% children ages 0-18; and 11.5% seniors ages 65 and older). This projected growth is unevenly spread across the counties: Ellis and Parker counties will see the greatest population growth (13.9% and 11.2%, respectively). Erath and Navarro will see a much lower rate of growth than the rest of the Region (3.9% and 4.3%, respectively). The other five counties in Region 10 are projected to have population growth similar to that of the Region as a whole.

Overall, Region 10's elderly population (65 and older) is anticipated to grow more rapidly as a percentage of total population than its working-age adults and children (*Figure 1*). The highest percentages of elderly are projected for Ellis and Parker counties at a rate of 32% for both counties, compared with the Region-wide estimate of 26%. In contrast, Erath and Navarro counties' elderly populations as a percentage of total county population will grow much less than the rest of the Region (12% and 13%). *(Please see Appendix D-1.2, 1.3 and 1.4 for summary data tables of Region 10's population, including projected population growth.)*

Figure 1: Age Distribution of Region 10 Counties in 2011

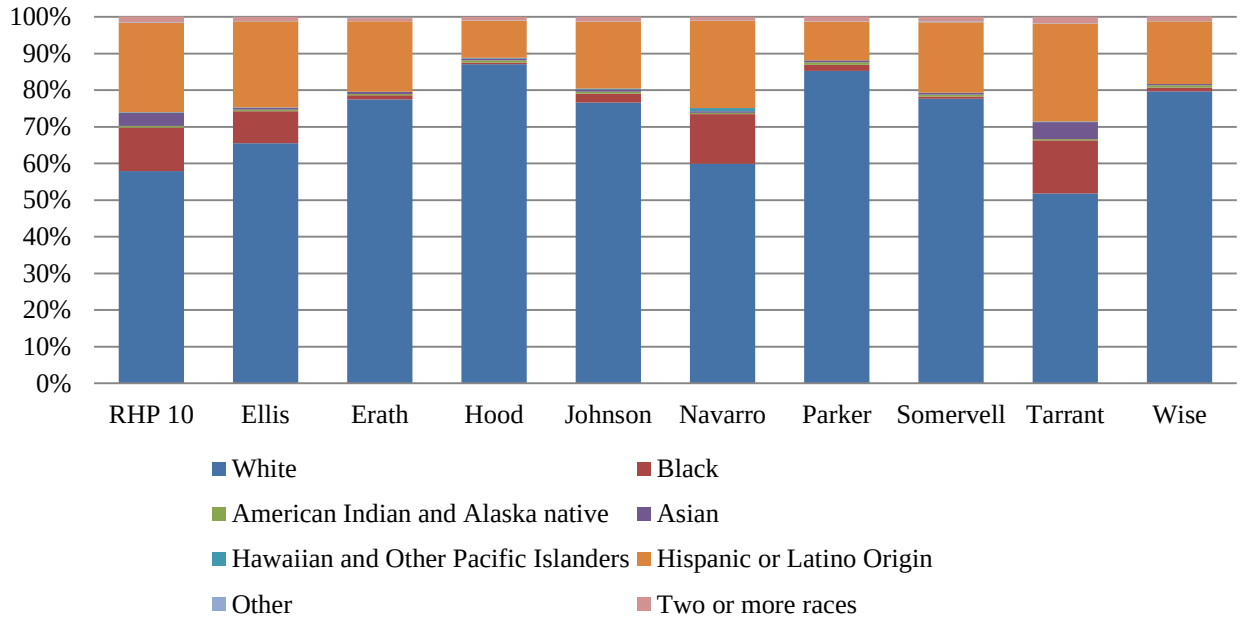


Source: Thomson Reuters 2011

Demographics: Population by Race and Ethnicity

Region 10's population is predominantly White (57.9%), Hispanic (24.4%), and African-American (11.9%). The Region is less diverse than the state, but more diverse than the nation. Region 10 also has a smaller proportion of Hispanic residents than the state (24.4% versus 40%), but the Region's Hispanic population is still a significantly larger proportion of total population than nationally. Hispanics and other minorities are projected to have higher population growth rates over time. Much of Region 10's racial diversity is concentrated in Ellis, Navarro and Tarrant counties. Of Region 10's remaining six counties, Hood and Parker counties are the least diverse at 87.1% and 85.3% White, respectively *(Figure 2)*.

Figure 2: Race/Ethnicity Distribution of Region 10 Counties in 2010

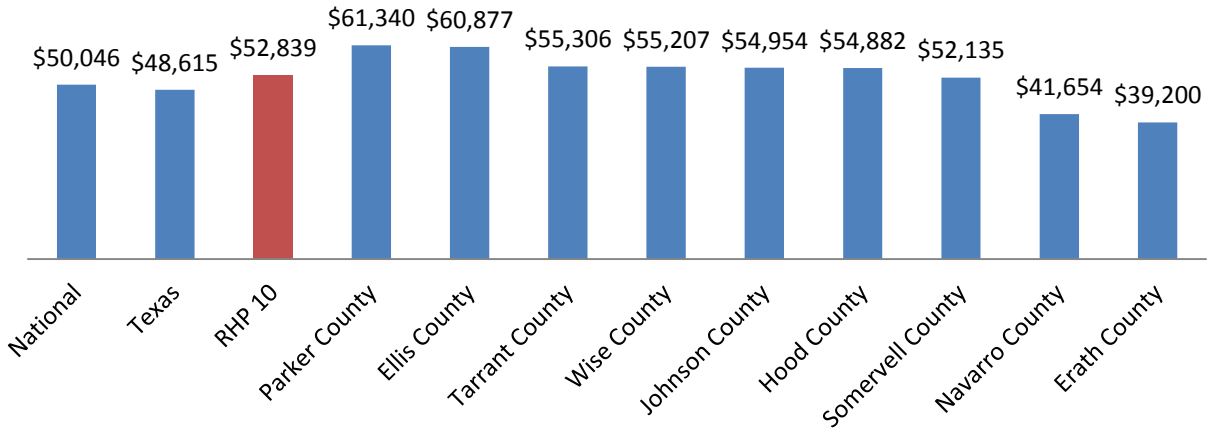


Source: Thomson Reuters, 2011

Demographics: Household Income

Region 10 has a higher per capita income than Texas or the nation with a median household income of $52,839 per year, compared to $48,615 median state income and $50,046 national median income *(Figure 3)*. The wealthiest counties in Region 10 are Ellis and Parker, which have higher median household incomes of $60,877 and $61,340, respectively. Conversely, Erath and Navarro are the Region's least affluent counties with median household incomes of $39,200 and $41,654, respectively.

Figure 3: Median Household Income of Region 10 Counties in 2011



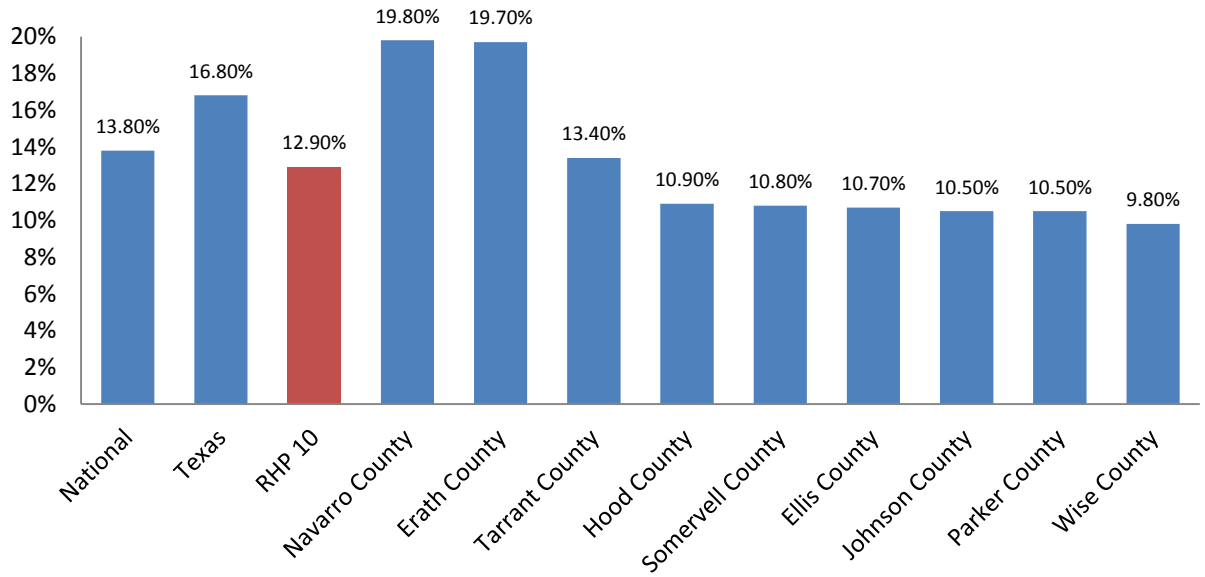
Source: Thomson Reuters, 2011

Demographics: Population Living in Poverty

Poverty is highly correlated with poorer health status and poorer health outcomes. Empirical research has demonstrated conclusively that people living on limited incomes are likely to forego visits to the doctor in order to meet their more pressing financial responsibilities, such as food and housing.[i] Low-income wage earners are less likely to be covered by an employer's health insurance program, and even if they are covered, they are often less able to pay for premiums or out-of-pocket expenses.

Analysis of the Regional and county populations at or below the federal poverty level (FPL) mirrors the findings of the median household income analysis above *(Figure 4)*.[ii] Overall, Region 10 has fewer people living in poverty than the rest of Texas and the nation as a percentage of the total Regional population. However, the poorest Region 10 residents tend to be concentrated in a few counties and specific communities within the remainder of the Region. Erath and Navarro counties contain the highest relative percentage of population living in poverty with almost 20% of each county's population at or below 100% of the federal poverty level.

Figure 4: Population at or below 100% Federal Poverty Level in 2011



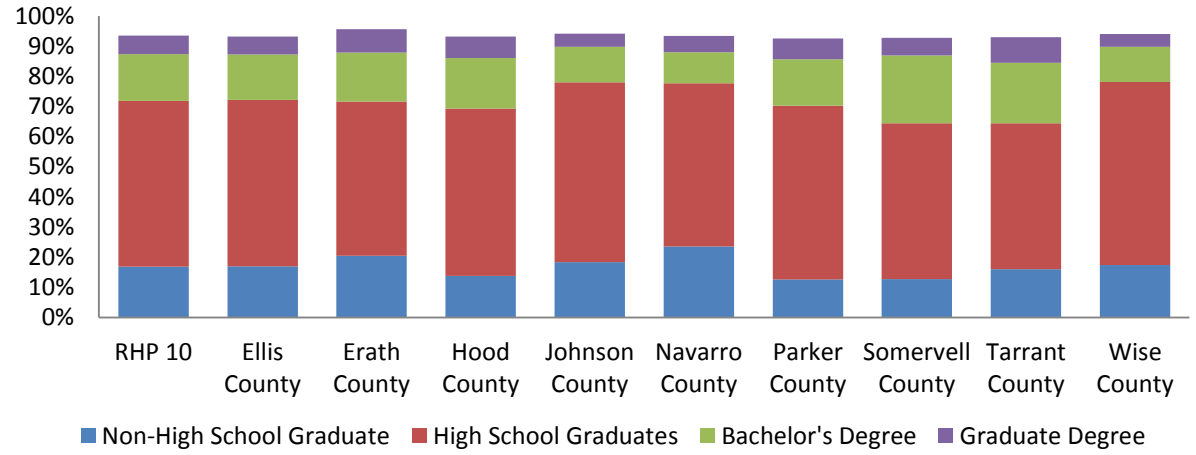
Notes: FPL 2011: $10,890 for an individual, or $22,350 for a family of four
Source: Texas Association of Counties, HealthData.Gov – Health Resources County Comparison Tool

Demographics: Education Level

Educational attainment level is another demographic variable that correlates strongly with overall health status as well as poverty level. Low levels of formal education are often cited as a major indicator of poor health. Lack of education is a formidable barrier to securing living-wage and higher-wage jobs, and further increases an individual's probability of living in poverty, being uninsured and having children who grow up in poverty.

Those with low levels of formal education and literacy are less likely to understand how personal behavior and lifestyle can affect health status and health outcomes. Educational attainment level is also related to a person's ability to understand medical information and recognize early symptoms of disease. While Region 10 has a smaller percentage of adults without a high school diploma (16.9%) than the rest of Texas, the proportion of the Region's population without a diploma is higher than the national rate of 14.4% *(Figure 5)*. Reflecting the correlations that exist between poverty level and education, Navarro and Erath counties contain the highest percentages of population that did not complete a high school education (23.6% and 20.5%, respectively), while the most affluent counties – Hood, Parker and Somervell – have the smallest proportions of residents without a high school diploma (13.8%, 12.6% and 12.7%, respectively).

Figure 5: Education Distribution of Region 10 Counties in 2011

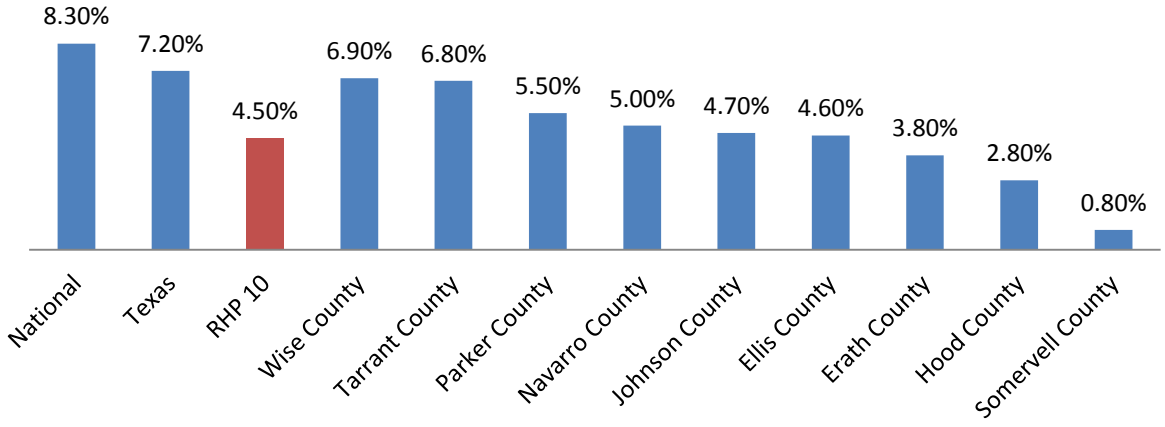


Source: U.S. Census 2011

Demographics: Employment

Generally, the Region has a higher rate of employed residents than the rest of the state and the nation (4.5% unemployment in Region 10 versus 7.2% and 8.3% unemployment for Texas and U.S., respectively) *(Figure 6)*. Tarrant and Wise counties have the Region's highest unemployment rates at (6.8% and 6.9%, respectively). Somervell has a significantly lower unemployment rate 0.8%) than the rest of Region 10.

Figure 6: Percent Unemployment of Region 10 in 2010



Source: Texas Department of State Health Services, United States Census Bureau

Insurance Status

Being uninsured is a major barrier to accessing primary and preventive care in Region 10. People without insurance tend to be working-age adults with less secure employment, lower wage levels, and pre-existing conditions. When individuals defer care because of cost concerns they are more likely to seek care when symptoms have become more severe and receive care in more expensive, acute and emergent care settings. Individuals who defer care also have a greater likelihood of poor long-term outcomes.

Put simply, uninsured patients tend to use hospital emergency departments and urgent care centers as a last resort, rather than managing their health through more cost-effective primary care clinics and physician offices. This unmanaged, episodic and health-event driven approach to seeking care has both serious financial cost implications at the county, Regional and national levels as well as potentially devastating health consequences for individuals.[iii]

Region 10's 2010 uninsured rate of 18% is closer to the national uninsured rate of 15.5% than Texas' statewide rate of 23.7% *(Figure 7).* More of Region 10's residents have private insurance than the rest of Texas (51.2%) or the nation (54%). The Region's public coverage rates are 11% for Medicaid, 8.9% for Medicare and 1.4% for the dually enrolled. The highest rates of uninsured residents are found Erath and Navarro Counties (30.2% and 28.0%, respectively) commensurate with the counties' higher rates of poverty and lower median household incomes than the rest of Region 10.

Figure 7: Uninsured vs. Insured, 2011

	Total Uninsured	Total Insured	Private: Employer Sponsored Insurance	Private: Direct Insurance	Medicaid	Medicare	Other Insurance
U.S.	15.5%	84.5%	49.0%	5.0%	16.0%	12.0%	2.5%
Texas	24.7%	76.3%	45.0%	4.0%	16.0%	9.0%	2.3%
Region 10	**18.0%**	**82.0%**	**55.3%**	**5.3%**	**11.1%**	**8.9%**	**1.4%**
Ellis	13.5%	86.5%	59.1%	5.7%	10.5%	9.7%	1.5%
Erath	36.5%	63.5%	35.7%	3.5%	10.6%	11.9%	1.8%
Hood	13.5%	86.5%	51.4%	5.1%	8.8%	19.6%	1.6%
Johnson	14.0%	86.0%	56.7%	5.5%	11.0%	11.4%	1.4%
Navarro	31.1%	68.9%	34.0%	3.3%	15.7%	12.8%	3.1%
Parker	13.6%	86.4%	60.4%	5.9%	8.7%	10.5%	0.9%
Somervell	14.2%	85.8%	55.5%	5.5%	11.2%	12.4%	1.2%
Tarrant	18.5%	81.5%	55.6%	5.4%	11.4%	7.9%	1.2%
Wise	16.1%	83.9%	56.8%	5.5%	9.7%	10.8%	1.1%

Source: U.S. Census Bureau, Thompson Reuters 2011

The proportion of Region 10 residents who remain uninsured in 2016 is projected to drop to 11.3%. Of those who will be newly insured, an estimated 58.1% will be covered by direct or employer-sponsored private insurance, while an estimated additional 15.7% of Region 10 residents will receive coverage through Medicaid and 10.2% through Medicare. These projections, however, are highly dependent on various federal and state policy and market factors, including availability and affordability of insurance products offered in the local market, impact of any potential state or federal health insurance exchange, and whether or not the state moves forward with a Medicaid expansion.

HEALTH CARE INFRASTRUCTURE AND ENVIRONMENT

(See Appendix D-2 for additional information regarding Region 10's health care infrastructure.)

Facilities and Health Care Workforce

Region 10's health care infrastructure consists of 46 acute care hospitals (the majority of which are privately owned), two psychiatric hospitals and 3,726 physicians *(Figure 8)*. The Region has a total of 6,491 acute care licensed beds and 170 psychiatric care licensed beds. The Region's provider options also include four MHMRs and one FQHC. *(See Appendix D-5 for a list of health care facilities by county.)*

Providers are most concentrated within Tarrant County and particularly in Fort Worth, Region 10's major urban center. The vast geographic expanse of Region 10 and the high level of provider concentration within Tarrant County combine to create serious specialty and primary care access barriers for many individuals in the Region's rural counties.

Figure 8: Acute Care Resources, 2009

	RHP 10	Ellis	Erath	Hood	Johnson	Navarro	Parker	Somervell	Tarrant	Wise
Acute Care Hospitals	46	2	1	1	1	1	1	1	36	2
Investor Owned Hospitals	28	1	0	1	0	1	1	0	24	0
Non-Profit Hospitals	18	1	1	0	1	0	0	1	12	2
Psychiatric Hospitals	2	0	0	0	0	0	0	0	2	0
Acute Care Licensed Beds	6,491	129	98	83	137	162	99	16	5,583	184
Psychiatric Care Licensed Beds	170	0	0	0	0	0	0	0	170	0

Source: Health Resources County Comparison Tool, Health Indicators Warehouse, Texas Department of State Health Services

The most frequent inpatient services for Region 10 in 2011 were obstetrics, internal medicine, cardiology, pulmonology, general surgery and orthopedics, according to Thomson Reuters. The Region's top outpatient services were laboratory services, internal medicine, physical therapy, diagnostic radiation, psychiatry and pulmonology.

Overall Regional physician demand is projected to increase by 30% over the five-year Waiver period. Demand for various specialties and types of providers is projected to increase anywhere from 22% to 36%, according to Thomson Reuters. The greatest demand increases are expected for obstetrics/gynecology, vascular medicine, cardiology, oncology/hematology and nephrology *(See Appendix D-2.1: for a table of Provider Supply and Demand by Specialty).*

Medically Underserved Areas and Health Professional Shortage Areas

Five of Region 10's counties – including Tarrant County, the Region's most populous county – are at least partially designated by the U.S. Health and Human Services Agency as Medically Underserved Areas (MUAs). Ellis, Erath, Johnson and Navarro are the Region's other MUA counties.

Four of Region 10's nine counties are also designated as partial primary care Health Professional Shortage Areas (HPSAs). Additionally, Tarrant, Wise and Ellis Counties are federal dental health professional shortage areas. Perhaps most alarming, all but one of Region 10's counties are federally designated mental health provider shortage areas (only Johnson County is not a MHPSA). These findings correlate with the Stakeholder Surveys and Providers Readiness Assessments Region 10 conducted as part of RHP plan development[iv] (*Figure 9*).

Figure 9: Health Professional Shortage Areas by County

HPSA Category	Ellis	Erath	Hood	Johnson	Navarro	Parker	Somervell	Tarrant	Wise
Primary Care	x				x			x	x
Dental Care	x							x	
Mental Health	x	x	x		x	x	x	x	x

Source: Region 10 Stakeholder Survey, Health Professional Shortage Areas

Health Care Infrastructure: Performing Provider Readiness Assessment

Region 10 RHP created and fielded a readiness assessment tool to assess current health care delivery competencies, capabilities and gaps with relation to integrated care delivery and population health management for all major providers within each county and across the Region. All providers participating in the DSRIP program completed this assessment. Region 10 also asked major health care providers and stakeholders in each Region 10 county not actively participating in DSRIP (e.g.,, hospitals, MHMRs, medical groups, independent physician associations, public health clinics and ambulance companies) to complete the assessment. Survey respondents assessed and specified gaps and needs in the Region's health care infrastructure across five domains:

1) Population health management,
2) Provider capacity,
3) Functional patient care teams,
4) Use of health information technology (HIT), and
5) Care coordination abilities.

Figure 10 shows respondents' assessment of system gaps and needs in each Region 10 County. ("Yes" indicates a gap exists.) We received a total of 15 responses, representing the majority of the Region 10 RHP performing providers.

Figure 10: Delivery Gaps Identified by the Performing Provider Readiness Assessments, 2012

PPRA Domain		Need(s) Identified								
		Erath	Ellis	Hood	Johnson	Somervell	Tarrant	Wise	Navarro	Parker
Population Health		Yes	No	Yes	No	No	Yes	No	*	*
Provider Capacity	Hospital Provider	No	Yes	Yes	No	No	Yes	No	*	*
	MHMR	Yes	Yes	No	No	No	Yes	No	*	*
	Physician Organization	*	*	*	*	*	*	*	*	*
	Other	*	*	*	*	*	*	*	*	*
Functional Patient Care Teams		Yes	No	Yes	Yes	Yes	Yes	Yes	*	*
Use of HIT		Yes	Yes	No	No	No	Yes	No	*	*
Care Coordination		Yes	Yes	Yes	Yes	Yes	Yes	Yes	*	*

*No assessments received.

Stakeholder Surveys

Region 10 RHP also conducted a stakeholder survey. The stakeholder survey collected qualitative data and feedback on the following:

1) Access to care,
2) Care coordination and
3) Community health.

The Region collected surveys over a period of one month via a Web-based survey tool for a total of 191 stakeholder responses. *(See Appendix D-2.2 for a PowerPoint Discussion of Stakeholder Responses and Results).*

Access to Care

Most survey respondents agreed that routine hospital services, routine primary/preventive care and routine specialty care were "difficult" to access. Mental/behavioral health care services were identified as the most difficult for low-income patients to access, while emergency services were consistently noted as the least difficult to access. The same access barriers were identified for all types of care:

- Lack of coverage/financial hardship (consistently the most frequently cited barrier);
- Difficulty navigating system/lack of awareness of available resources; and
- Lack of provider capacity.

Care Coordination

Top barriers to effective care coordination (between providers and systems) cited by survey respondents were the complexity of coordination, lack of staff, lack of financial integration, fragmented service systems and practice norms that allow providers to work in silos. Most respondents said they did not believe that low-income patients could:

- Choose and establish a relationship with a primary care provider;
- Access private primary care providers;
- Access community health centers, free clinics or public clinics; and
- Access behavioral/mental health providers.

Community Health

Region 10's most prevalent conditions are diabetes, obesity, hypertension, heart failure and chronic obstructive pulmonary disease (COPD), survey respondents reported. Survey respondents also reported that the conditions contributing most to preventable hospitalizations in Region 10 are hypertension, uncontrolled diabetes, COPD, congestive heart failure and diabetes short-term complications (in decreasing order of importance). Respondents reported that behavioral health, substance abuse and insufficient access to care were the top issues to target for population health improvement. Respondents reported that Region 10 residents were most likely to get their health education and health information from friends and family, the Internet and their doctor.

Key Survey Takeaways

Respondents overwhelmingly listed a lack of coverage and/or financial hardship as the most significant barrier to care for low-income patients. Survey respondent write-in comments also cited an overuse of emergency department services and patient inability to access primary and preventive care (due to difficulty navigating the system and a lack of capacity). Most respondents also indicated that the Region's primary care providers, hospitals and specialists were not coordinating care effectively.

Other Major Delivery System Reform Initiatives

We have identified several federal initiatives in which Region 10 providers participate. The majority of these are related to diabetes, cancer and infectious diseases. One of our participating providers, Baylor Health Systems, collaborates with AHRQ, NCI, and the National Institute of Allergy and Infectious Diseases on vaccine research, and diabetes and health care quality initiatives. Another Region 10 participating provider, The University of North Texas Health Science Center, works with several federal agencies on Alzheimer's, education and health disparities research. Another Region 10 participating provider, Tarrant County Department of Public Health, is a consortium member of the North Texas Accountable Healthcare Partnership, a recipient of HITECH funds awarded to 12 Regional HIEs in the state of Texas. We will provide in our final and complete RHP Plan submission a comprehensive listing of all participating providers' federal initiative involvement based on the list specified in the DSRIP Companion Document issued on October 15, 2012. *(See Appendix D-6 for the draft survey questionnaire sent to all Region 10 participating providers to develop a complete list of each provider's federal initiative participation activities.)*

KEY HEALTH CHALLENGES

Population health statistics for Region 10 residents reveal important trends and opportunities for delivery system improvement. The most important of these statistical trends are summarized below. *(See Appendix D-3 for additional information, including summary data tables.)*

Region 10 RHP Pregnancy and Birth-Related Statistics

Teen pregnancy increases the risk of poor health outcomes for both young mothers and their children. Pregnancy and delivery negatively impact a teenager's health both directly and indirectly and often result in long-term negative consequences including increased risk of poverty and low socioeconomic status. Babies born to teen mothers are more likely to be born preterm and/or low birth weight; much of this increased risk is attributable to delayed onset of prenatal care. For this reason, Healthy People 2020 stresses the importance of responsible sexual behavior to reduce unintended pregnancies and the number of births to adolescent females.

Region 10 fares slightly better than the state overall in its teen pregnancy rate (4.3% versus 4.9%) and the incidence of low birth weight babies (7.2% versus 8.4%). However, Region 10 has a slightly lower rate of early (first trimester) prenatal care than the state overall (58.1% versus. 60.1%). Navarro and Somervell Counties have Region 10's highest teen pregnancy rates (6.2% and 5.4% compared with the Regional average of 4.3%). Navarro and Tarrant Counties have the Region's highest percentages of low birth weight babies and its lowest rates of early prenatal care.

Morbidity and Mortality

Cancer and obesity are Region 10's most common morbidity factors. Hood and Navarro Counties have the Region's highest cancer rates. Obesity rates are statistically the same across all nine counties in Region 10 at around 26 to 29 persons per 100,000. Johnson County has the Region's highest rate of diabetes at 10.0 per 100,000. Tarrant County has the Region's highest HIV rate, though small sample sizes reduce the precision of county-level HIV statistics across the Region.

Cardiovascular disease is the number one killer in Region 10 (4,931 deaths in 2011). Cancer is Region 10's second most frequent cause of death (3,668 deaths in 2011). These two causes of death are also the two highest for Texas overall.

Preventable Hospitalization

Region 10's preventable hospitalization rate of 931 per 100,000 persons is lower both than the state's average of 5,923 per 100,000 and the national average of 1,433 per 100,000. Navarro County's preventable hospitalization rate is the Region's highest (17 per 1,000 population), followed by Johnson County (14 per 1,000 population). Region 10's most prevalent cause of preventable hospitalization is congestive heart failure (195 per 1,000 Medicare enrollees), closely followed by anginas without procedures (190 per 1,000 Medicare enrollees).

Access to Care

County Health Ranking surveys place difficulties in accessing care due to lack of insurance coverage at the top of health care problems. Although the county-level information is difficult to interpret with certainty because of variations in county response levels, it appears that Johnson and Ellis Counties reported the greatest access problems throughout the Region *(Figure 11)*.

Overall Region 10 performs at or slightly better than the rest of the state in providing diabetes and mammography screenings. Within the Region, Wise County and Navarro County have the lowest screening levels for diabetes and mammography and are below both state and national average screening rates. Wise County's diabetes screening rate is 76%, compared with the statewide and national rates of 84% and 80%, respectively. Navarro County has the Region's lowest mammography screening rate at 55%, compared with statewide and national rates of 60% and 59%, respectively.

Figure 11: Utilization of Health Services, 2011

	U.S.	Texas	RHP 10	Ellis	Erath	Hood	Johnson	Navarro	Parker	Somervell	Tarrant	Wise
Access to Care	*	*	16%	18%	N/A	15%	22%	N/A	12%	N/A	16%	15%
Emergency Department Visits	*	*	1,093,860	74,949	22,748	23,994	68,934	17,199	44,794	5,708	798,904	36,630
Diabetic Screening	89%	80%	84%	80%	81%	87%	89%	82%	79%	92%	82%	76%
Mammography Screening	74%	59%	60%	59%	59%	47%	73%	55%	53%	56%	62%	46%

* Data unavailable
Source: County Health Rankings, 2011

Communicable Diseases

In general, Region 10 has lower rates of communicable disease than the rest of the state, although prevalence rates for Region 10's Somervell County are statistically questionable because of its small population size. Specifically, Region 10 has lower AIDS rates (3.4), tuberculosis rates (2.3) and whooping cough rates (10.3) than the state. However, Region 10 has a much higher rate for chicken pox infections (26.3%) versus the overall rate in Texas of 17.9%. Tarrant County has the Region's highest TB infection rate. Johnson, Navarro and Tarrant Counties have the Region's highest rates of AIDS infections (6.1, 7.9 and 6.1, respectively). Hood County had the Region's highest chicken pox and whooping cough infections.

Sexually Transmitted Diseases

Region 10 generally has lower reported sexually transmitted disease rates (STDs) than the overall state rates. Region 10 has lower rates of syphilis (2.7 versus 4.9 per 100,000) and gonorrhea (99.0 versus 504.1 per 100,000) than the state overall. Conversely, Region 10 has a higher rate of chlamydia infections than the state overall (533.7 versus 467.3 per 100,000).

Ellis County had the Region's highest infection rates for syphilis, gonorrhea and chlamydia. Ellis and Tarrant Counties had the Region's highest syphilis infection rates (10 and 8.3 respectively). However, these rates are still significantly lower than the national average. Ellis, Navarro and Tarrant Counties have the Region's highest gonorrhea infection rates (504.1, 141.4 and 139.0,

respectively). Ellis County also had a chlamydia infection rate roughly five times higher than the rest of the Region.

Health Outcomes

As previously noted, county-specific health outcomes are difficult to assess because of small sample sizes in a few counties (Somervell and Navarro). However, the County Health Rankings data set indicates that Region 10's population self-reported having fewer poor or fair health days than the rest of the state (17% versus 19%). Johnson County has the Region's highest percentage of respondents reporting poor or fair health and the highest reported levels of poor mental health days. Hood County respondents have the Region's highest reported number of poor physical health days.

Health Behaviors

The Region's top identified health behaviors negatively impacting and influencing health outcomes are adult obesity (30%) and physical inactivity (28%). These behaviors are followed by smoking (19%) and excessive drinking (15%). Counties appeared to have fairly comparable levels for these behaviors. Johnson County had the Region's highest rates for nearly all harmful health behaviors: adult smoking, adult obesity, physical inactivity and excessive drinking. Navarro, Parker and Wise also had slightly higher adult obesity rates than the state (See County Health Rankings).

Access to Healthy Foods

The Region fares slightly better than the state overall in terms of access to healthy foods in poor communities (10% versus 12%). Residents in Ellis and Johnson counties have the worst access to healthy foods in poor communities, but their rates are still significantly better than the statewide average. Overall Region 10 has fast food restaurant access rates similar to the statewide average. Johnson County has the Region's highest percentage of fast food restaurants at 60%.

Conclusions

While on average Region 10 fares as well as or slightly better than the rest of the state on many health need indicators, the poorest and most vulnerable residents of Region 10 live in communities struggling with very significant levels of unmet health care need. Through DSRIP, Region 10 RHP is committed to a revitalized community-oriented Regional health care delivery system focused on the triple aims of improving the experience of care for all patients and their families, improving the health of the Region's population, and reducing the cost of care without compromising quality with a particular focus on the community health needs of our most vulnerable residents.

SUMMARY TABLE OF COMMUNITY NEEDS

The table below provides a concise summary of the community needs we have outlined in Section III. *(See Appendix D for additional detail and contextual data).* The DSRIP projects proposed by Region 10 RHP participating providers have been selected to address many of the health care challenges outlined in this CHNA and highlighted in the summary table below.

Identification Number	Brief Description of Community Needs Addressed Through RHP Plan	Data Source for Identified Need
CN.1	**Lack of provider capacity.** Patients find difficulty in navigating the system and have noted the difficulty in finding a provider, particularly Medicaid providers. Five counties are recognized as medically underserved areas.	Stakeholder Survey, Texas CHS, County 2010 Health Rankings, Providers Readiness Assessments, Health Professional Shortage Areas
CN.2	**Shortage of primary care services** (e.g., pediatric, prenatal, family care). Four counties have such shortages.	Health Professional Shortage Areas
CN.3	**Shortage of specialty care.** The Region is facing a 22-36% growth in provider demand, across all specialties. The specialties with the greatest growth in demand are obstetrics/gynecology**,** vascular health, urology, hematology/oncology, cardiology, and nephrology.	Health Professional Shortage Areas
CN.4	**Lack of access to mental health services.** All but one county in Region 10 are recognized as health professions shortage areas for mental health providers.	Health Resources County Comparison Tool, Health Indicators Warehouse, Texas Dept. of State Health Services
CN.5	**Insufficient integration of mental health care in the primary care medical care system.** Community stakeholders cite a need to achieve better integration of primary and behavioral health services in the primary care setting.	Stakeholder surveys
CN.6	**Lack of access to dental care.** Two of the 9 counties are nationally recognized with a shortage of dental providers.	Health Professional Shortage Areas.
CN.7	**Need to address geographic barriers that impede access to care**. There is a skewed distribution of providers in Region 10, with most located in the major urban centers, particularly Fort Worth, Tarrant County. Individuals from rural counties have difficulty with access to care, especially specialty care.	Health Resources County Comparison Tool, Health Indicators Warehouse, Texas Dept. of State Health Services
CN.8	**Lack of access to health care due to financial barriers (i.e., lack of affordable care).** Providers overwhelmingly list lack of coverage/financial hardship as a major barrier for low-income patients.	U.S. Census Bureau, County Health Rankings Survey
CN.9	**Need for increased geriatric, long-term, and home care resources (e.g., beds, Medicare providers).** Region 10's population is projected to grow 9% by 2016, with a 26% increase in the senior population (ages 65+). Three counties have senior populations of between 14-20% of total population.	Thomson Reuters, 2011
CN.10	**Overuse of emergency department (ED) services.** Demand for ED visits is on the rise and EDs are becoming overcrowded due to reduced inpatient capacity and impaired patient flow. As a Region, there were 1.1 million visits to hospital EDs in 2010, with a rate of 447.5 visits per 1,000 persons. The 2007 national ED visit rate was 390.5 per 1,000 persons, increasing 23% since 1997, but lower than the ED visit rate of Region 10.	Stakeholder Survey, Texas CHS, 2010 County Health Rankings, UCSF Trends and Characteristics of U.S. Emergency Department Visits, 1997-2007
CN.11	**Need for more care coordination.** All counties identified it as a system cap and need. Barriers include complexity of coordination, lack of staff, lack of financial integration, fragmented system service, and practicing in silos. Providers	Region 10 Stakeholder Survey

Identification Number	Brief Description of Community Needs Addressed Through RHP Plan	Data Source for Identified Need
	did not feel there was strong care coordination between primary care providers, hospitals, and specialists.	
CN.12	**Need for more culturally competent care to address unmet needs (e.g., Latino-population need care, translators, translated-materials).** Over 40% of the Region's population is not Caucasian, and nearly one-quarter are Hispanic or Latino origin. Hispanic and minority populations have higher growth rates than the White population. Research shows that culturally competent care shows better health outcomes.	American Fact Finder 2010 Census Data, U.S. Census Bureau
CN.13	**Necessity of patient education programs.** Many community residents lack basic health literacy.	U.S. Census, National Adult Literacy Survey (NALS)
CN.14	**Lack of access to healthy foods.** The Region and the state has more than double the percentage of all restaurants that are fast food establishments compared to the nation.	Community Health Rankings
CN.15	**Need for more education, resources and promotion of healthy lifestyles (free and safe places to exercise, health screenings, health education, healthy environments, etc.).** Top identified health behaviors impacting and influencing health outcomes in Region 10 are adult obesity (30%) and physical activity (28%). Region had a lower rate of health screening rate than nation and state.	County Health Rankings, 2010
CN.16	**Higher incidence rates of syphilis and chlamydia.** Two counties have higher rates of syphilis than the state. One county had significantly higher rate of chlamydia, while entire Region 10 has higher rate than the state and nation.	Texas CHS
CN.17	**Incomplete management of varicella (chicken pox) cases.** Region 10 has poor rates of some chicken pox, with nearly a 50% higher rate than national average (with rate of 26.3 compared to 17.9 per 100,000, respectively).	Texas CHS, Centers for Disease Controls and Preventions
CN.18	**Incomplete management of pertussis (whooping cough) cases.** The Region has nearly a 50% higher rate than state, with rate of 10.3 compared to 5.54 per 100,000, respectively).	Texas CHS, Centers for Disease Controls and Preventions
CN.19	**Need for more and earlier onset of prenatal care.** Nearly 60% of Region 10 mothers access prenatal care within first trimester, compared with 71% national rate. Region 10 has higher teen birth rates than the national average, while also having a lower rate of low birth weight.	Texas CHS
CN.20	**Improved Public Health Surveillance to Promote Individual and Population Health.** West Nile and other disease outbreaks locally highlight areas in the local public health surveillance system that are unaddressed.	Texas DSHS and National Electronic Disease Surveillance System (CDC)
CN.21	**High tuberculosis (TB) prevalence** and low treatment completion rates of latent tuberculosis infection (LTBI) LTBI treatment	Healthy People 2020
CN.22	**Inadequate health IT infrastructure** and limited interoperability to support information sharing between providers hinders care coordination.	Region 10 RHP Community Health Needs Assessment, Regional Stakeholder Survey Summary, June 2012

[i] NHIS 2001-2005 Overcoming Obstacles to Health

[ii] The federal poverty level is $10,890 for an individual, or $22,350 for a family of four, in 2011.

[iii] Institute of Medicine, "Hidden Costs, Value Lost," Consequences of Uninsurance Series No. 5, June 2003; and Center for Studying Health System Change, "Triple Jeopardy: Low Income, Chronically Ill and Uninsured in America," Issue Brief No. 49, February 2002.

[iv] Region 10 Stakeholder Survey (Appendix D-2.2)