



- **Medically Underserved Areas/Populations:** All but three counties in Region 1 are either wholly designated as Medically Underserved Areas/Populations (MUA/P) or have service areas within the county that are designated as MUA/P.<sup>4</sup>
- **Primary Medical Care Health Professional Shortage Areas:** 89.3% of counties in Region 1 have shortages in primary care professionals<sup>5</sup>. In some counties, the ratio of patients to primary care providers is five times the statewide average and nearly eight times the national benchmark.<sup>6</sup>
- **Mental/Behavioral Health Professional Shortage Areas:** Over 85% of counties in Northeast Texas have a shortage of mental health providers.<sup>7</sup> The ratio of patients to mental health providers in some communities of Northeast Texas is nearly 25,000 to one, seven times the state average.<sup>8</sup>
- **Health Factors & Outcomes:** Over half of counties in Region 1 are in the bottom quartile of Texas counties in health outcomes and over one third are in the bottom quartile of Texas counties in health factors.<sup>9</sup>
- **High Chronic Disease Burden:** The region has higher rates of high blood pressure, lower rates of cholesterol screening,<sup>10</sup> and higher age-adjusted invasive cancer incidence and mortality rates than the state average.<sup>11</sup>
- **High Rates of Potentially Preventable Hospitalizations:** The majority of counties in Region 1 have higher rates of potentially preventable hospitalizations than the state average.<sup>12</sup>

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<sup>4</sup> U.S. Department of Health and Human Services. (2012, October). *Find Shortage Areas: MUA/P by State and County*. Retrieved October 2012, from Health Resources and Services Administration: <http://muafind.hrsa.gov/>

<sup>5</sup> U.S. Department of Health and Human Services. (2012, October). *Find Shortage Areas: HPSA by State & County*. Retrieved October 2012, from Health Resources and Services Administration: <http://hpsafind.hrsa.gov/>

<sup>6</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

<sup>7</sup> U.S. Department of Health and Human Services. (2012, October). *Find Shortage Areas: HPSA by State & County*. Retrieved October 2012, from Health Resources and Services Administration: <http://hpsafind.hrsa.gov/>

<sup>8</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

<sup>9</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

<sup>10</sup> Texas Department of State Health Services. (2007). *East Texas Community Health Needs Assessment*. Austin: State of Texas.

<sup>11</sup> Texas Department of State Health Services. *Age Adjusted Invasive Cancer Incidence Rates in Texas, All Sites, 2005-2009*.

<sup>12</sup> Texas Department of State Health Services. (2012, October). *Preventable Hospitalizations - County Profiles*. Retrieved October 2012, from Texas Department of State Health Services: <http://www.dshs.state.tx.us/ph/county.shtm>

After considering the data available to the region, stakeholders agreed that the following six community needs represent the most pressing needs in Northeast Texas:

***Summary of Community Needs***

Identification Number	Brief Description of Community Needs Addressed through RHP Plan	Data Source for Identified Need
CN.1	Insufficient access to primary and specialty health care services.	<i>2012 County Health Rankings; Health Resources &amp; Services Administration (US Dept. of Health &amp; Human Services).</i>
CN.2	Insufficient access to mental and behavioral health services.	<i>Health Resources &amp; Services Administration (US Department of Health &amp; Human Services); Texas Department of State Health Services; Provider data.</i>
CN.3	High rates of chronic disease, including diabetes, heart disease, asthma, obesity, and cancer.	<i>Texas Department of State Health Services; 2012 Cancer Registry</i>
CN.4	High costs due to potentially preventable hospitalizations.	<i>Texas Department of State Health Services.</i>
CN.5	Inappropriate emergency department utilization.	<i>National Institute for Health Care Reform</i>
CN.6	Efficiency in and effectiveness of health care delivery.	<i>Centers for Medicare and Medicaid Services</i>

These community needs, while shown as six distinct needs, are interrelated. Access to care, for example, impacts rates for chronic disease, potentially preventable hospitalizations, emergency room utilization, and the overall efficiency in and effectiveness of our health care delivery system. As a result, the delivery system reform projects developed by the regional health partnership show an integration of individual community needs, with many projects addressing multiple community needs.

The following subsections will address demographic and healthcare related data specific to Northeast Texas.

***B. Demographics***

This section highlights basic demographic data for Region 1, including population, insurance coverage status, age, race/ethnicity/language, income, education, employment, and poverty. Demographic data is important to understanding the full array of factors contributing to disease and health.

**Region 1 and Texas**

**Table 1: Demographic Summary**

	<b>RHP 1</b>	<b>Texas</b>
Population	1,289,873	25,145,561
Median Age	41	33.6
Per Capita Income	\$19,386	\$24,870
Bachelor’s Degree or Higher	13.2%	25.8%
Minority Population	24.8%	29.6%
Percentage Hispanic/Latino Origin	13.1%	37.6%
Percentage Living in Rural Area	53.9%	17.5%

Table 1 above shows a comparison of high-level demographic data for Region 1 compared with statewide averages. Region 1 represents slightly more than five percent of the state’s total population but is older, poorer, and is less well educated than the state average. While the overall minority population is comparable to the state average, only 13.1% of the region’s population identifies as Hispanic or Latino origin, compared to a state average of 37.6%. Over half of the region’s population lives in a rural area, compared to less than one fifth of the state’s population.

Various sources were used to determine health insurance coverage status, many of which rely on estimates. In addition, US Census Bureau data were unavailable for some rural counties, which further complicates estimations of private health insurance coverage. Table 2 reports available data on health insurance coverage types by county in Region 1:

**Table 2: Health Insurance Coverage Status**

<b>County</b>	<b>Population</b>	<b>Private Coverage<sup>13</sup></b>	<b>Public Coverage<sup>14</sup></b>	<b>Uninsured<sup>15</sup></b>
Anderson	57,001	47.5%	28.3%	25.4%
Bowie	93,964	56.2%	33.3%	20.1%
Camp	12,793	N/A	41.8%	23.2%
Cass	29,203	57.3%	40.9%	17.7%
Cherokee	48,473	52.5%	34.3%	23.2%
Delta	5,410	N/A	36.8%	20.1%
Fannin	32,999	56.4%	31.9%	22.0%
Franklin	10,841	N/A	27.5%	20.9%
Freestone	19,390	N/A	28.3%	21.2%
Gregg	119,637	59.7%	36.6%	20.6%
Harrison	64,795	60.6%	29.4%	21.3%
Henderson	78,921	52.3%	32.1%	22.0%
Hopkins	34,581	54.0%	32.5%	23.9%

<sup>13</sup> U.S. Census Bureau, 2008-2010 American Community Survey 3 Year Estimates

<sup>14</sup> Medicare Hospital and/or Supplemental Medical County Enrollment, Centers for Medicare and Medicaid Services (2010); Medicaid Enrollment by County, Point in Time, Health and Human Services Commission (February 2012); Texas Children’s Health Insurance Program Enrollment by County and Month, Health and Human Services Commission (February 2012).

<sup>15</sup> U.S. Census Bureau, *Health Insurance Coverage Status* (2009).

Houston	22,363	48.6%	38.1%	23.2%
Hunt	82,831	58.3%	31.6%	22.5%
Lamar	48,965	56.8%	37.8%	20.0%
Marion	10,306	N/A	35.7%	21.1%
Morris	12,635	N/A	44.5%	18.3%
Panola	23,310	65.1%	30.1%	18.5%
Rains	11,287	N/A	31.6%	22.6%
Red River	12,765	N/A	41.4%	21.8%
Rusk	49,180	54.5%	29.0%	21.1%
Smith	204,665	61.8%	32.7%	20.8%
Titus	30,206	55.5%	35.8%	26.2%
Trinity	13,897	N/A	43.3%	20.7%
Upshur	38,057	59.1%	32.7%	20.6%
Van Zandt	52,005	55.5%	32.1%	23.9%
Wood	43,136	55.2%	39.3%	20.4%

Taken as a whole, approximately 54% of residents in Region 1 are uninsured or on some form of publicly supported insurance (Medicare, Medicaid, or the Children’s Health Insurance Program). The highest private insurance coverage rates were found in Harrison, Smith, and Panola Counties.

**Table 3: Urbanization, Age and Race/Ethnicity/Language<sup>16</sup>**

County	Population	Rural Population	Population <18 Yrs	Population 65+ Yrs	African American	Hispanic	Not Proficient in English
Anderson	57,001	41.3%	20.2%	13.0%	22.5%	14.6%	4.1%
Bowie	93,964	32.9%	24.4%	13.7%	24.6%	6.1%	2.8%
Camp	12,793	60.5%	28.0%	15.4%	17.0%	22.9%	11.6%
Cass	29,203	81.3%	22.9%	19.4%	18.8%	2.8%	1.8%
Cherokee	48,473	60.8%	26.1%	14.5%	14.6%	19.5%	8.1%
Delta	5,410	100.0%	21.6%	18.6%	7.9%	5.4%	2.0%
Fannin	32,999	68.9%	22.6%	16.8%	7.6%	8.2%	3.6%
Franklin	10,841	93.9%	23.8%	18.1%	5.6%	14.2%	5.6%
Freestone	19,390	59.3%	23.4%	15.6%	17.8%	12.5%	3.7%
Gregg	119,637	19.8%	26.9%	13.7%	20.3%	14.1%	7.5%
Harrison	64,795	58.6%	25.4%	12.8%	22.4%	9.6%	4.7%
Henderson	78,921	54.4%	23.0%	18.7%	6.5%	10.3%	4.5%
Hopkins	34,581	59.1%	25.7%	14.8%	7.8%	14.6%	7.4%
Houston	22,363	70.9%	21.5%	18.7%	25.9%	10.5%	2.7%
Hunt	82,831	55.5%	25.0%	13.5%	8.8%	12.4%	4.6%
Lamar	48,965	46.1%	24.7%	16.2%	13.3%	5.9%	2.9%
Marion	10,306	100.0%	20.0%	21.2%	21.3%	3.7%	0.8%
Morris	12,635	80.0%	24.8%	19.0%	22.9%	6.4%	2.5%
Panola	23,310	74.5%	24.8%	15.8%	18.0%	7.1%	2.6%
Rains	11,287	100.0%	20.4%	20.5%	3.1%	9.0%	1.8%
Red River	12,765	74.6%	21.6%	19.5%	17.0%	5.9%	2.4%

<sup>16</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

Rusk	49,180	67.0%	24.1%	14.7%	18.1%	12.6%	4.6%
Smith	204,665	38.6%	25.8%	14.6%	18.0%	16.3%	7.2%
Titus	30,206	52.2%	31.5%	11.7%	10.1%	39.1%	19.4%
Trinity	13,897	100.0%	21.8%	22.5%	11.2%	7.4%	4.2%
Upshur	38,057	80.3%	25.5%	13.8%	9.6%	5.6%	2.1%
Van Zandt	52,005	79.0%	23.5%	17.7%	3.6%	10.0%	3.6%
Wood	43,136	79.7%	20.6%	23.4%	6.0%	8.4%	3.5%
<b>RHP 1</b>	<b>1,263,616</b>	<b>53.9%</b>	<b>24.6%</b>	<b>15.5%</b>	<b>15.4%</b>	<b>12.2%</b>	<b>5.3%</b>
<b>TEXAS</b>	<b>24,782,302</b>	<b>17.5%</b>	<b>27.8%</b>	<b>10.2%</b>	<b>11.5%</b>	<b>36.9%</b>	<b>14.4%</b>

Table 3 shows data related to urbanization, age, and race, ethnicity, and language demographic data for the region and each county within the region. As shown in the table, over half of the region’s residents live in a rural area, which contributes to challenges accessing primary care, specialty care, and mental health services.

**Table 4: Educational Attainment<sup>17</sup>**

County	High School Graduation	Some College
Anderson	92.9%	36.9%
Bowie	92.7%	51.9%
Camp	97.3%	38.2%
Cass	96.6%	51.4%
Cherokee	91.9%	34.9%
Delta	95.8%	46.3%
Fannin	94.0%	42.6%
Franklin	97.9%	46.7%
Freestone	94.8%	46.5%
Gregg	86.5%	55.4%
Harrison	90.2%	47.9%
Henderson	93.7%	46.9%
Hopkins	94.5%	49.0%
Houston	93.1%	38.7%
Hunt	88.1%	46.2%
Lamar	91.4%	51.8%
Marion	82.7%	42.4%
Morris	93.3%	57.4%
Panola	84.9%	49.7%
Rains	96.4%	40.8%
Red River	95.2%	39.0%
Rusk	94.0%	44.2%
Smith	87.8%	57.7%
Titus	97.8%	37.1%
Trinity	83.8%	32.3%
Upshur	94.2%	51.1%
Van Zandt	89.7%	43.8%
Wood	93.5%	41.9%

<sup>17</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

<b>RHP 1</b>	<b>91.1%</b>	<b>48.2%</b>
<b>TEXAS</b>	<b>84.3%</b>	<b>56.2%</b>

While the region has a higher high school graduation rate than the state average, it lags behind the state on college education. As shown in Table 4, only 48.2% of the regional population reported having “some college” compared to 56.2% of the state’s population. The percentage achieving at least a bachelor’s degree is even lower – 13.1% in region 1 compared to over 25% for the state.

**Table 5: Income, Employment, and Poverty<sup>18</sup>**

<b>County</b>	<b>Median Household Income</b>	<b>Unemployment</b>	<b>Children in Poverty</b>	<b>Single-Parent Households</b>
Anderson	\$40,482	9.5%	27.2%	32.3%
Bowie	\$42,272	8.3%	27.8%	39.3%
Camp	\$37,704	8.8%	33.7%	41.1%
Cass	\$34,556	11.0%	32.4%	42.5%
Cherokee	\$34,910	9.1%	35.4%	32.1%
Delta	\$36,193	9.1%	27.8%	30.1%
Fannin	\$40,891	9.3%	24.1%	24.9%
Franklin	\$40,579	7.7%	25.3%	29.7%
Freestone	\$42,266	6.6%	23.7%	20.5%
Gregg	\$41,623	7.2%	29.8%	36.9%
Harrison	\$44,506	8.8%	25.6%	35.3%
Henderson	\$37,137	8.6%	30.7%	31.7%
Hopkins	\$40,446	6.8%	28.4%	26.0%
Houston	\$33,198	9.8%	32.7%	39.5%
Hunt	\$41,841	8.8%	28.0%	32.5%
Lamar	\$38,852	9.0%	27.4%	31.2%
Marion	\$32,173	10.3%	35.4%	43.6%
Morris	\$34,451	13.0%	31.7%	46.1%
Panola	\$48,621	7.3%	20.5%	31.2%
Rains	\$40,966	9.2%	28.1%	35.3%
Red River	\$32,128	11.0%	31.7%	35.2%
Rusk	\$43,318	7.6%	23.6%	27.1%
Smith	\$44,249	7.9%	21.7%	32.1%
Titus	\$37,818	7.8%	29.5%	30.0%
Trinity	\$34,045	8.8%	32.0%	36.9%
Upshur	\$42,508	7.8%	25.5%	31.8%
Van Zandt	\$41,476	7.6%	23.6%	25.5%
Wood	\$40,149	8.6%	33.9%	25.9%
<b>TEXAS</b>	<b>\$48,622</b>	<b>8.2%</b>	<b>25.7%</b>	<b>32.2%</b>

According to the World Health Organization, “people who are less well off have substantially shorter life expectancies and more illnesses than the rich” even in the most wealthy countries

<sup>18</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

in the world.<sup>19</sup> As shown in Table 5 above, median household income is less than the statewide average in every county in Region 1, with 11 of the 28 counties reporting median household incomes at least \$10,000 less than the statewide average. Over 27% of children live in poverty and 32.7% of households are single-parent households in the region.

### C. Healthcare Infrastructure

This subsection examines the existing healthcare environment in Region 1, including the number of healthcare professionals working in Northeast Texas and the hospital infrastructure in the region.

Research by the School of Rural Public Health at Texas A&M University reports that “access to timely and effective primary care is deemed critical to avoiding hospitalizations for ambulatory care sensitive conditions”<sup>20</sup> yet there is a significant provider shortage in Northeast Texas.

Table 6 below summarizes the health professionals by county in Region 1.

**Table 6: Health Professionals by County**

County	HPSA Designation <sup>21</sup>			Medically Underserved Area or Population <sup>22</sup>	Provider Ratios <sup>23</sup>		
	Primary Care	Dental	Mental Health		PCP	Dentist	Mental Health
Anderson	Yes	No	Yes	Yes	2268:1	3404:1	5155:1
Bowie	Yes	Yes	Yes	Yes	702:1	2010:1	4633:1
Camp	Yes	No	Yes	Yes	1056:1	4084:1	12673:0
Cass	Yes	No	Yes	Yes	1720:1	4310:1	29237:0
Cherokee	No	No	Yes	Yes	1786:1	4139:1	1786:1
Delta	Yes	Yes	Yes	Yes	2728:1	5199:1	5455:0
Fannin	Yes	Yes	Yes	Yes	4717:1	11214:1	16509:1
Franklin	Yes	No	Yes	Yes	1357:1	5399:1	10856:0
Freestone	Yes	No	Yes	Yes	3180:1	6387:1	19077:0
Gregg	Yes	Yes	Yes	Yes	829:1	1478:1	4707:1
Harrison	Yes	Yes	Yes	Yes	2199:1	4547:1	12755:1
Henderson	Yes	No	Yes	No	1432:1	4886:1	9845:1
Hopkins	No	No	No	Yes	1101:1	4291:1	17073:1
Houston	Yes	No	Yes	Yes	1609:1	2955:1	11266:1

<sup>19</sup> Wilkinson, Robert and Marmot, Michael, editors. *Social Determinants of Health: The Solid Facts*. 2<sup>nd</sup> Edition. The World Health Organization (2003).

<sup>20</sup> Gamm, Larry D., Hutchison Linna L., Dabney, Betty J. and Dorsey, Alicia M., eds. (2003). *Rural Healthy People 2010: A Companion Document to Healthy People 2010. Volume 1*. College Station, Texas: The Texas A&M University Health Science Center, School of Rural Public Health, Southwest Rural Health Research Center.

<sup>21</sup> U.S. Department of Health and Human Services. Health Resources and Services Administration. HPSA by State & County.

<sup>22</sup> U.S. Department of Health and Human Services. Health Resources and Services Administration. MUA/P by State & County.

<sup>23</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



Hunt	Yes	Yes	Yes	Yes	2165:1	3667:1	4839:1
Lamar	No	No	No	Yes	1749:1	1899:1	9792:1
Marion	Yes	No	Yes	Yes	N/A	10951:1	N/A
Morris	Yes	No	No	Yes	2564:1	2208:1	12821:1
Panola	Yes	Yes	Yes	Yes	2108:1	5837:1	11593:1
Rains	Yes	No	Yes	No	3756:1	10994:1	5635:1
Red River	Yes	No	Yes	Yes	3230:1	6536:1	12918:0
Rusk	Yes	Yes	Yes	Yes	1748:1	4273:1	24475:1
Smith	Yes	Yes	Yes	Yes	617:1	1999:1	2756:1
Titus	Yes	Yes	No	No	1411:1	2325:1	14819:1
Trinity	Yes	Yes	Yes	Yes	3484:1	7212:1	13934:0
Upshur	Yes	No	Yes	Yes	2228:1	7655:1	18941:1
Van Zandt	Yes	No	Yes	Yes	4739:1	3476:1	17377:1
Wood	Yes	Yes	Yes	Yes	1710:1	3764:1	21379:1
<b>RHP 1</b>	<b>89.3%</b>	<b>42.9%</b>	<b>85.7%</b>	<b>89.3%</b>			

As shown in the table above, access to care is a pressing need in Northeast Texas. Nearly 90% of counties in Region 1 are designated as health professional shortage areas for primary care, and slightly fewer (85.7%) are designated as shortage areas for mental health professionals. As a whole, 89.3% of counties (all but three) are listed as medically underserved areas or populations. The ratio of patients to providers (both for primary care and mental health) is significantly higher than statewide averages or national benchmarks. For example, in some communities, the ration of patients to primary care providers is nearly 5,000 to one, compared to statewide average of 1,050 to one and a national benchmark of 631 to one. The problem is even more serious in mental and behavioral health, where the ratio approaches 30,000 to one in one community, compared to a statewide average of 3,600 to one. Providers tend to be clustered in more populated areas (Smith, Gregg, and Bowie Counties), but the majority of residents in Northeast Texas live in rural areas. Even in the larger areas such as Smith, Gregg, and Bowie Counties, there is no city with a population greater than 100,000.

Like health professionals, hospital infrastructure tends to be clustered in larger communities of Region 1. Table 7 below shows data from the 2010 Department of State Health Services/American Hospital Association/Texas Hospital Association Annual Survey of Hospitals and Hospital Tracking Database.

Table 7: Hospital Infrastructure<sup>24</sup>

County	Acute Care Hospitals	Acute Care Staffed Beds	Behavioral Health Inpatient Beds <sup>25</sup>	Acute Care Inpatient Days			Uncompensated Care (UC)	
				Total Days	Medicare Days	Medicaid Days	Total Uncompensated Care Charges	UC as % of Gross Patient Revenue
Anderson	2	118	37	22,505	12,255	4,206	\$23,174,491	10.6%
Bowie	5	628	15	138,396	86,458	15,655	\$207,191,276	15.6%

<sup>24</sup> DSHS/AHA/THA Annual Survey of Hospitals and Hospital Tracking Database (2010).

<sup>25</sup> Provider survey conducted by Palestine Regional Medical Center (September 2012).

Camp	1	25	0	4,813	3,539	462	\$14,886,260	13.0%
Cass	2	62	0	10,213	7,007	768	\$9,161,202	14.4%
Cherokee	2	58	172	12,794	7,589	2,058	\$45,378,453	15.5%
Delta	0	0	0	0	0	0	\$0	0.0%
Fannin	1	25	0	3,180	2,234	179	\$2,486,668	4.8%
Franklin	1	30	0	2,120	1,576	118	\$2,673,723	11.5%
Freestone	1	20	0	2,682	2,143	118	\$8,754,013	16.4%
Gregg	4	612	122	132,842	74,355	22,187	\$199,549,150	10.7%
Harrison	1	122	41	13,494	7,055	3,385	\$41,575,108	17.9%
Henderson	1	117	0	27,382	16,247	3,793	\$69,969,387	16.2%
Hopkins	1	54	0	12,430	6,843	2,402	\$11,695,884	10.8%
Houston	1	49	0	8,024	4,241	1,383	\$10,461,568	11.6%
Hunt	2	192	22	30,019	13,315	3,493	\$30,442,626	11.6%
Lamar	2	251	37	41,917	24,268	5,185	\$28,741,371	7.2%
Marion	0	0	0	0	0	0	\$0	0.0%
Morris	0	0	0	0	0	0	\$0	0.0%
Panola	1	37	0	3,761	1,771	961	\$14,232,642	15.5%
Rains	0	0	0	0	0	0	\$0	0.0%
Red River	1	36	0	5,246	3,851	294	\$8,798,980	14.2%
Rusk	1	47	0	6,616	4,012	1,246	\$13,119,446	15.9%
Smith	8	1,175	75	308,857	186,089	35,494	\$467,898,836	9.9%
Titus	1	93	15	21,718	13,716	2,146	\$17,256,646	10.2%
Trinity	1	22	0	2,661	1,789	459	\$5,453,891	14.5%
Upshur	1	37	0	1,997	1,522	113	\$9,495,927	18.4%
Van Zandt	1	24	0	2,227	1,305	296	\$235,456	1.0%
Wood	2	25	0	4,141	2,757	238	\$9,658,066	14.1%
<b>RHP 1</b>	<b>44</b>	<b>3,859</b>	<b>536</b>	<b>820,035</b>	<b>485,937</b>	<b>106,639</b>	<b>\$1,252,291,070</b>	<b>11.5%</b>

Many of the region’s acute care hospitals are small hospitals located in rural communities. Because these same communities lack sufficient primary care physicians, residents must drive great distances to access primary health care services and acute health care services.

As mentioned previously, the demands on the region’s mental and behavioral health infrastructure is strained. At the community level, community mental health centers need additional providers and technology to meet the growing demand for services. Rusk State Hospital, the single psychiatric hospital located in the region, was on diversion for 213 of 365 days in state fiscal year 2012.<sup>26</sup>

#### **D. Health Challenges**

Many of the health challenges in Northeast Texas are related to chronic diseases and ambulatory care sensitive conditions. Below is a summary of health outcomes and challenges in Northeast Texas:

<sup>26</sup> Texas Department of State Health Services (2012). *Diversion Reports FY 2012 Summary*.

- **High Blood Pressure:** DSHS estimates that 43.1% of the African American population in East Texas has high blood pressure compared to 33.9% of the African American population in Texas. High blood pressure among Caucasians in East Texas is slightly higher (32.4%) compared to the state (28.2%)<sup>27</sup>.
- **Cholesterol Screenings:** DSHS estimates that the African American, Hispanic, and Caucasian population in East Texas have lower cholesterol screening rates than the state as a whole. According to DSHS, 83.5% of the Hispanic population in East Texas has not had their cholesterol checked within the last five years (compared to 57.5% of the statewide Hispanic population). For African Americans in East Texas, 45.3% have not had a cholesterol screening in the last five years (compared with 26.1% of the statewide African American population). 28.3% of Caucasians in East Texas had not had a cholesterol screening in five years (compared with 22.4% of the statewide Caucasian population).<sup>28</sup>
- **Mental/Behavioral Health:** An estimated 85,000 individuals in East Texas have a serious mental illness, and approximately 113,000 individuals need treatment for alcohol or drug abuse, but do not receive it. East Texas has a suicide rate 65% higher than the rate for Texas (18.2 per 100,000 in East Texas compared to 11.0 per 100,000 in Texas).<sup>29</sup>
- **Obesity:** The percentage of the adult population that is obese ranges from 25.5% to 34.1% in Region 1 counties. Statewide, the prevalence of adult obesity is estimated at 30.4%. Obesity is a costly condition. According to the Centers for Disease Control and Prevention, nationwide medical costs associated with obesity were estimated at \$147 billion in 2008. The medical costs for individuals who are obese were \$1,429 higher than those of normal weight.<sup>30</sup>
- **Diabetes:** The 2009 Texas Behavioral Risk Factor Surveillance System estimated that 9.3% of adults in Texas have been diagnosed with diabetes.<sup>31</sup> In Region 1, estimates of the adult diabetic population range between a low of 9.2% to a high of 13.0%.<sup>32</sup>

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<sup>27</sup> Texas Department of State Health Services. (2007). *East Texas Community Health Needs Assessment*. Austin: State of Texas.

<sup>28</sup> Texas Department of State Health Services. (2007). *East Texas Community Health Needs Assessment*. Austin: State of Texas.

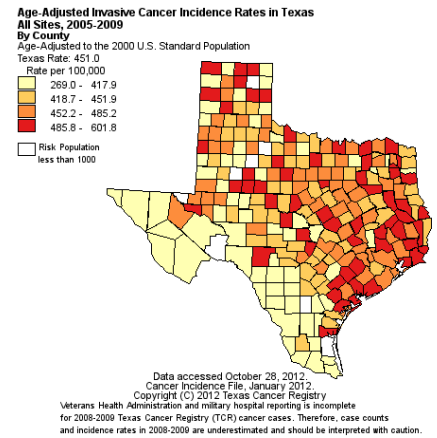
<sup>29</sup> Texas Department of State Health Services. (2007). *East Texas Community Health Needs Assessment*. Austin: State of Texas.

<sup>30</sup> Centers for Disease Control and Prevention. (2012, October). *Overweight and Obesity*. Retrieved October 2012, from Centers for Disease Control and Prevention: <http://www.cdc.gov/obesity/data/adult.html>

<sup>31</sup> Texas Department of State Health Services. *Texas Behavioral Risk Factor Surveillance System* (2009).

<sup>32</sup> University of Wisconsin Population Health Institute. (2012, July). *County Health Rankings 2012*. Retrieved July 2012, from County Health Rankings: [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

- **Cardiovascular Disease:** East Texas has a high proportion of counties where the age-adjusted mortality rates for congestive heart failure and ischemic heart disease were higher than the state rate.<sup>33</sup>
- **Cancer Incidence & Mortality:** The map (at right) shows that Northeast Texas has higher age-adjusted invasive cancer incidence rates (all sites) than the statewide average.<sup>34</sup> The mortality rates for men for all sites cancer is 246.3 per 100,000 in the Northeast Texas region compared to a statewide rate of 212.4, with lung, colorectal, and pancreatic cancer showing the greatest difference between regional and statewide rates. For women, the mortality rate is 154.2 per 100,000 in the region compared to a statewide rate of 142.8, with lung and ovarian cancer showing the greatest difference in regional and statewide mortality rates.<sup>35</sup>



## E. Healthcare Cost, Efficiency, and Effectiveness

An important factor in reforms to the healthcare delivery system is cost. Three major functions of cost – potentially preventable hospitalizations, emergency department utilization, and national health expenditures – are examined here.

### **Potentially Preventable Hospitalizations**

The Texas Department of State Health Services collects data on potentially preventable hospitalizations. Preventable hospitalization conditions were selected by the Agency for Healthcare Research and Quality, the lead federal agency responsible for research on health care quality, costs, outcomes, and patient safety. Table 7 below shows data from Region 1 on hospitalizations for ten conditions that are potentially preventable, meaning that “if the individual had access to and cooperated with appropriate outpatient healthcare, the hospitalization would likely not have occurred.”<sup>36</sup>

<sup>33</sup> Texas Department of State Health Services. *Texas Chronic Disease Report* (2010).

<sup>34</sup> Texas Department of State Health Services. *Age Adjusted Invasive Cancer Incidence Rates in Texas, All Sites, 2005-2009*.

<sup>35</sup> Texas Department of State Health Services. *2012 Texas Selected Cancer Facts for Health Service Region 4*.

<sup>36</sup> Texas Department of State Health Services. (2012, October). *Potentially Preventable Hospitalizations*. Retrieved October 2012, from Texas Department of State Health Services: <http://www.dshs.state.tx.us/ph/>

**Table 8: Potentially Preventable Hospitalizations and Cost<sup>37</sup>**

	<b>Number of Hospitalizations (2005-2010)</b>	<b>Total Hospital Charges (2005-2010)</b>	<b>Average Charge Per Hospitalization</b>
Angina (without procedures)	1,971	\$31,482,485	\$15,972.85
Asthma	5,989	\$124,053,064	\$20,713.49
Bacterial Pneumonia	27,902	\$723,511,223	\$25,930.44
Chronic Obstructive Pulmonary Disease	17,025	\$395,588,007	\$23,235.71
Congestive Heart Failure	30,968	\$796,053,057	\$25,705.67
Dehydration	8,831	\$141,924,306	\$16,071.15
Diabetes Long-term Complications	7,326	\$256,096,467	\$34,957.20
Diabetes Short-term Complications	3,288	\$69,719,456	\$21,204.21
Hypertension (High Blood Pressure)	4,276	\$81,579,895	\$19,078.55
Urinary Tract Infection	14,293	\$268,871,765	\$18,811.43
<b>RHP 1</b>	<b>121,869</b>	<b>\$2,888,879,725</b>	<b>\$23,704.80</b>

As noted in the table above, from 2005-2010, there were approximately 122,000 potentially preventable hospitalizations reported in Region 1 with over \$2.8 billion in hospital charges related to those admissions.

### ***Emergency Department Utilization***

Research by the Center for Studying Health System Change (HSC) shows that “emergency department use has increased substantially over the past 15 years” and that emergency rooms are a “major source of primary health care in the community, treating a broad range of health problems that include many visits for minor ailments and other ‘nonurgent’ conditions.”<sup>38</sup>

In addition, HSC notes that “two thirds of all emergency department visits occur outside normal business hours” and that “increasing the number of primary care providers in the community who are available after normal business hours is essential” to reducing primary care-related emergency department utilization.<sup>39</sup>

The data presented in previous sections of this community needs assessment shows that Region 1 has insufficient primary care access. Further, research by a number of sources, including the Center for Studying Health System Change, shows a connection between primary health care and emergency department use. Performing providers in Region 1 echo this finding

<sup>37</sup> Texas Department of State Health Services. (2012, October). *Preventable Hospitalizations - County Profiles*. Retrieved October 2012, from Texas Department of State Health Services: <http://www.dshs.state.tx.us/ph/county.shtm>

<sup>38</sup> Cunningham, Peter. *Nonurgent Use of Hospital Emergency Departments*. Testimony before the United States Senate Committee on Health, Education, Labor, and Pensions, Subcommittee on Primary Health and Aging (May 11, 2011).

<sup>39</sup> Cunningham, Peter. *Nonurgent Use of Hospital Emergency Departments*. Testimony before the United States Senate Committee on Health, Education, Labor, and Pensions, Subcommittee on Primary Health and Aging (May 11, 2011).

and have included data specific to their emergency departments in the narratives of delivery system reform projects.

**Trends in National Health Expenditures**

According to data from the Centers for Medicare and Medicaid Services, national health expenditures (NHE) continue to grow, straining resources at the state and federal levels.

**Table 9: National Health Expenditures (2009)<sup>40</sup>**

	Historic (2009)	
	Growth Rate	Relative Share
Total National Health Expenditure	4.0%	17.6% of GDP
Medicare Spending	7.9%	20% of NHE
Medicaid Spending	9.0%	15% of NHE
Private Health Insurance Spending	1.3%	32% of NHE
Out of Pocket Spending	0.4%	12%
Hospital Expenditures	5.1%	N/A
Physician and Clinical Services	4.0%	N/A

**F. Related Federal Initiatives**

A table showing related federal initiatives is available in the addendum.

Within project narratives, performing providers have detailed the nature of the relationship between the proposed DSRIP project and any related federal initiative, including a certification by the performing provider that the DSRIP project is not duplicative of any related federal initiative.

**G. Relevant Delivery System Reform Initiatives**

Addressing these community needs is a priority to the region. As a result, the delivery system reform projects developed by the regional health partnership show an integration of individual community needs, with many projects addressing multiple community needs. The table below summarizes the number of proposed Pass 1 projects that address the community needs outlined above.

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<sup>40</sup> Centers for Medicare and Medicaid Services. (2012, October). *NHE Fact Sheet*. Retrieved October 2012, from Centers for Medicare & Medicaid Services: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.html>

**Table 10: Proposed Pass 1 Projects by Community Need<sup>41</sup>**

Community Need Identifier	Number of Proposed Pass 1 Projects
CN.1 – Insufficient access to primary and specialty care services.	32
CN.2 – Insufficient access to mental and behavioral health services.	14
CN.3 – High rates of chronic disease, including diabetes, heart disease, asthma, obesity, and cancer.	10
CN.4 – High costs due to potentially preventable hospitalizations.	9
CN.5 – Inappropriate emergency room utilization.	18
CN.6 – Efficiency in and effectiveness of health care delivery.	9

As shown in Table 10, the clear focus of the region is on expanding access to care – both physical and mental/behavioral health care services. Because of the interrelatedness of access to care and other community needs, such as emergency room use, preventable hospitalizations, and cost, the regional emphasis on expanding access will have a significant impact on transformation in other community need domains.

#### **H. Projected Major Changes FFY 2012 – FFY 2016**

Texas is a growing state, and Northeast Texas is likewise expected to grow. As outlined in the ETCHNA report, the region’s population is projected to increase 24% by 2040, with significant growth (260%) in the Hispanic population.<sup>42</sup> Growth in the population will naturally increase demand on the healthcare infrastructure in Northeast Texas, especially as the region’s population is expected to remain older than the state average.

The Centers for Medicare and Medicaid Services anticipates that Medicare enrollment growth will be a “stronger influence on future spending growth than the changing age-mix of the Medicare population” a statistic that is an important regional consideration given the median age of Northeast Texas. More generally, in the short term, national health expenditures are projected to rise 7.4% by 2014. Medicaid spending growth is projected at 18.0%, while private health insurance growth of 7.9% is expected. A slight decline of 1.5% is expected for out of pocket health spending. Over the period of 2015-2021, health spending is projected to grow at an average rate of 6.2% annually.<sup>43</sup> Given this trend, efficiency in and effectiveness of our healthcare delivery system is an important community need in Northeast Texas.

The demands on the healthcare environment in Northeast Texas will remain strong for the foreseeable future. Addressing these demands in an efficient and effective way remains a core task for the regional healthcare partnership.

<sup>41</sup> At the time of submission of this community needs assessment, the number, type, and scope of projects have not been finalized. The data presented in Table 10 is the best available information as of October 31, 2012.

<sup>42</sup> Texas Department of State Health Services. (2007). *East Texas Community Health Needs Assessment*. Austin: State of Texas.

<sup>43</sup> Centers for Medicare and Medicaid Services. *National Health Expenditure Projections 2011-2021*.

<http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2011PDF.pdf>